House of Commons
Energy and Climate Change Committee

The proposals for national policy statements on energy

Third Report of Session 2009–10

Volume II
Oral and written evidence

Ordered by The House of Commons
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The Energy and Climate Change Committee

The Energy and Climate Change Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department of Energy and Climate Change and associated public bodies.

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Publication

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at www.parliament.uk/ecc. A list of Reports of the Committee in the present Parliament is at the back of this volume.

Committee staff

The current staff of the Committee are Tom Goldsmith (Clerk), Robert Cope (Second Clerk), Farrah Bhatti (Committee Specialist), Francene Graham (Senior Committee Assistant), Jonathan Olivier Wright (Committee Assistant), Steven Everett (Committee Support Assistant), Estelita Manalo (Office Support Assistant), and Hannah Pearce (Media Officer).

Contacts

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Witnesses

Wednesday 6 January 2009
Mr Hugh Ellis, Chief Planner, Town and Country Planning Association
Mr Graham Bocking, Royal Institution of Chartered Surveyors, and Mr Richard Coakley, Vice-President, Institution of Civil Engineers

Wednesday 13 January 2010 (morning)
Ms Jayne Ashley, Head of Sustainable Places, and Mr James Greenleaf, Senior Policy Analyst, Sustainable Development Commission
Ms Fiona Howie, Head of Planning and Regions, Campaign to Protect Rural England, Mr Phil Michaels, Head of Legal, and Ms Naomi Luhde-Thompson, Planning Coordinator, Friends of the Earth, Mr Simon Marsh, Head of Planning and Regional Policy, RSPB, and Ms Emmalene Gottwald, Senior Planning Adviser, WWF

Wednesday 13 January 2010 (afternoon)
Mr Simon Bullock, Economy Campaigner, Friends of the Earth, Mr Ben Ayliffe, Senior Climate and Energy Campaigner, and Ms Jean McSorley, Senior Nuclear Consultant, Greenpeace, Mr Keith Allott, Head of Climate Change, WWF, and Professor Andrew Blowers, Nuclear Consultation Group

Wednesday 20 January 2010 (morning)
Mr Robert Asquith, Planning Director of New Earth Energy, and Ms Gaynor Hartnell, Director of Policy, Renewable Energy Association, and Ms Gemma Grimes, Planning Advisor, and Mr Peter Madigan, Head of Offshore Renewables, British Wind Energy Association
Mr Nick Winser, Executive Director, National Grid, and Mr David Smith, Chief Executive, Energy Networks Association

Wednesday 20 January 2010 (afternoon)
Mr Keith Parker, Chief Executive, and Mr Simon James, Head of Public Affairs, Nuclear Industry Association, and Mr Richard Waite, Executive Director, and Mr Bruce McKirdy, Repository Technical Director, Nuclear Decommissioning Authority
Wednesday 27 January 2010 (morning)

Mr Brian Seabourne, Head of Regulation and Government Affairs, E.ON UK, Mr Paul Spence, Director of Strategy and Regulation, EDF Energy, Mr Simon Wells, Head of Planning and Environmental Law, RWE Npower, and Mr David Porter, Chief Executive, Association of Electricity Producers

Mr Sarwjit Sambhi, Director of the Power business Unit, Centrica, Dr Keith MacLean, Scottish and Southern Energy, Mr Rupert Steele, Director of Regulation, Scottish Power, and Ms Jane Smith, Planning Consultant, UK Business Council for Sustainable Energy

Wednesday 27 January 2010 (afternoon)

Dr Carl Clowes, Pobl Atal Wylfa B, and Mr Jim Duffy, Stop Hinkley

Ms Marianne Birkby, Radiation Free Lakeland, Ms Pauline Preston and Mr Imitaz Mohamed, Kirksanton Residents, and Ms Jenny Hawkes, Braystones Residents

Mr Peter Lanyon, Shut Down Sizewell Campaign and Communities Against Nuclear Expansion, and Ms Varrie Blowers and Mr Barry Turner, Blackwater Against New Nuclear Group

Wednesday 3 February 2010 (morning)

Mr David Brock, Chair, Planning and Environmental Law Committee, Law Society, and Mr Timothy Corner QC, Chair, Planning and Environment Bar Association

Dr Tony Grayling, Head of Climate Change and Sustainable Communities, and Dr Joe McHugh, Head of Radioactive Substances Regulation, Environment Agency, and Mr Rob Cooke, Director of Environmental Advice and Analysis, and Ms Rosie Manise, Principal Specialist, Energy & Climate Change, Natural England

Wednesday 3 February 2010 (afternoon)

Sir Michael Pitt, Chair, Dr Ian Gambles, Director of Strategy, and Dr Pauleen Lane CBE, Deputy Chair, Infrastructure Planning Commission

Mr Richard Kemp, Deputy Chair and Mr Phillip Mind, Senior Policy Consultant, Local Government Association

Wednesday 10 February 2010

Lord Hunt of Kings Heath OBE, Minister of State, Mr Adam Dawson, Head of New Nuclear, and Ms Anne Stuart, Head of Energy Planning Reform, Department of Energy and Climate Change
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Oral evidence

Taken before the Energy and Climate Change Committee
on Wednesday 6 January 2010

Members present:
Mr David Anderson John Robertson
Colin Challen Paddy Tipping
Charles Hendry Dr Desmond Turner
Judy Mallaber Mr Mike Weir

In the absence of the Chairman, Paddy Tipping was called to the Chair

Witness: Mr Hugh Ellis, Chief Planner, Town and Country Planning Association, gave evidence.

Q1 Paddy Tipping: A warm welcome to Hugh Ellis, the Chief Planner of the TCPA. Some of us know Hugh from previous posts and experience. Hugh comes from the north so snow is not an issue to him! I am afraid, Hugh, you are by yourself in that Matt Thomson from RTPI and Sue Percy from Planning Aid have been held up. That gives us the chance of a more relaxed discussion. Thank you very much for the written evidence which is still in draft form and which you are going to let us have in detail by our deadline of 15 January. Could I just start by asking you, these are draft energy National Policy Statements; are they in a shape that could be adopted by the Government?

Mr Ellis: We do not think they are without significant revision. It is absolutely plain that these documents are of critical importance. The principle of having them is vital. I think what we have tried to examine in our evidence is for reasons of process which are to do with consultation (and we might talk about that) and to do with critical issues around content, which is largely focused on the issue of carbon and need, they do not represent yet, in our view, the kind of framework on which the IPC could make effective decisions which was the whole rationale behind the new national planning framework.

Q2 Paddy Tipping: And do you think in the time available it is going to be possible to knock them into shape, if I can put it crudely like that?

Mr Ellis: I think there is again a process point. First of all, the whole issue of public engagement around the NPSs needs to be re-examined and thought out systematically and also properly resourced. In terms of the content I think the most significant issue would be that a local authority adopting a local plan is provided by government with a means of testing the soundness of that plan that allows plans to be tested across the country in a reasonably systematic way. That is what we need for NPS. We need detail from the relevant department on how the tests should be applied by this Committee. Both those things will take time but they are both essential. The risk is enormous because without public legitimacy behind the National Policy Statement series and without effective policy on climate change this could be a dreadful missed opportunity when in fact we really need this framework.

Q3 Paddy Tipping: So what would your recommendation be? If we do want to put them into good order what do we need to do?

Mr Ellis: I think there is again a process point. First of all, the whole issue of public engagement around the NPSs needs to be re-examined and thought out systematically and also properly resourced. In terms of the content I think the most significant issue would be that a local authority adopting a local plan is provided by government with a means of testing the soundness of that plan that allows plans to be tested across the country in a reasonably systematic way. That is what we need for NPS. We need detail from the relevant department on how the tests should be applied by this Committee. Both those things will take time but they are both essential. The risk is enormous because without public legitimacy behind the National Policy Statement series and without effective policy on climate change this could be a dreadful missed opportunity when in fact we really need this framework.

Q4 Paddy Tipping: What do you think the likelihood of judicial review is on this? You and others expressed concern about the then Planning Bill, now the Planning Act. Clearly if it is thought that there has not been proper consultation and proper process then there is a possibility of JR.

Mr Ellis: From the very beginning we did raise the issue and many organisations raised the issue of judicial review because it was not felt that significant consensus had been generated around the framework or there had been significant debate about key concerns. I think that was a mistake because what it has done is to create an environment of suspicion, but I would be extremely surprised if there were not four or five strategic challenges to the National Policy Statement series based on process. Whether they will be successful is not for me and TCPA is not in a position financially to challenge the documents, but for me on the issue of public voice and public consultation and engagement particularly that is where there have been omissions which warrant being tested in the courts. That is all good knock-about stuff but the real issue is whether or not communities have had a proper voice, and it seems very obvious that they have not as yet had a proper voice in the process, and that is the critical issue.
Paddy Tipping: We will talk about consultation in a moment but, Des, first?

Q5 Dr Turner: Hugh, how much of your institute’s objections are a reflection of the fact that the traditional British planning process is a very leisurely exercise, it takes donkey’s years, it goes through round after round of consultation, and at the end of the day the decision is not necessarily very different from what might have been achieved in a much shorter timescale? And the whole point of the Planning Act and the policy statements is a reflection of the fact that if we are going to have effective addressing of climate change we cannot afford the luxury of all that time, so are you not effectively saying that it simply cannot be done because it does not satisfy the requirements of the existing process?

Mr Ellis: There are many defects with the existing planning system. You perhaps would not be surprised to hear me say that I think planning is probably quite maligned. It remains for me a very important and world-changing activity but it has to deal with a mass of issues, some substantive policy issues but also critical governance issues. It has to mediate. One of the questions would be what would the world look like without the planning system? There would probably be land wars by other means. The planning system is crucial in mediating between the competing views that exist. The issue around NPS is not about whether or not there needs to be extra delay. One of the critical issues at the beginning of the Act was that no-one ever defined what “delay” meant. What is unnecessary time and what is necessary time. If we had defined delay in planning we would have made much more progress. There is for example no merit in pushing forward with National Policy Statements on a hurried timescale that effectively for example lock us into a carbon emissions profile of energy that will have a catastrophic effect on the public interest and the future of the nation and contribute globally to significant problems. There is no point at all in producing a National Policy Statement framework where there is not public legitimacy. I want to say something about that because it is critical. There are so many issues that National Policy Statements now deal with which cannot be re-opened by the decision makers, by the IPC. The issues of need, location and safety are all prohibited from being discussed by the public when the application comes in. Way back in the Planning White Paper it was made clear that National Policy Statements provided the absolute bedrock democratic legitimacy for the new framework. It seems to me that if you take the case of Hartlepoo—and this is nothing to do with the planning system, this is to do with how NPSs have been managed—where only three days’ notice was given of consultation, that is where forcing this through on a hurried timescale completely destroys any sense of public legitimacy around the process. So could this have been done more effectively? Yes, I think it could if there had been more open discussion between various sectors about the contents of the NPSs. They have been drafting them, as I understand it, for 18 months to two years so there has been time. The planning system has to deal with those complex issues and there is no easy route out of this. The imposition of a nuclear programme on the Great British public will not work without their consent, whether I like it in terms of climate change or not, so the planning system has flaws but it is the only way to deliver a low-carbon future and the elements that go with the planning system—legitimacy, democracy, people’s rights plus effectiveness—have to be there and there is no way that they can be sidelined.

Q6 Dr Turner: Are your objections specific to the nuclear proposals? They seem to be from the tenor of your remarks?

Mr Ellis: No they are not. It was simply that I was trying to read the Nuclear NPS again last night. It is an illustration of the issue of participation. In a general sense the NPS framework from my professional judgment as a planner does not provide the kind of framework, even after the length of time they have taken to develop, for the IPC to make important decisions in a timely way. The IPC has been given nine months but the NPS series because it is vague on some issues—extremely vague on the issue of need—means that people will want to raise and challenge those issues during the examination process, so my concern is across the board about the framework. The Government has created the most powerful planning framework since the War at a national level. It required proper consultation but it does not set that framework to work to deliver on a low-carbon future. In our judgment that is a lost opportunity.

Paddy Tipping: Let us talk about consultation in more detail, Colin?

Q7 Colin Challen: I was just wondering how successful in your mind any consultation with the public on practically any national framework could ever be because it seems to me that people generally—and I speak from my experience as an elected member at the national and local levels—only become interested when it affects their locality? Could you define what you think success is in terms of public consultation on the NPSs?

Mr Ellis: The ambition of the White Paper was that there would be a national public debate, so that is one ambition I guess that we needed to have for the National Policy Statement series. It is absolutely true that getting people’s engagement with higher level abstract documents is extremely difficult but it is still absolutely worthwhile making every possible effort to create the widest possible public debate. I think there is also a crucial difference between the non site-specific NPSs, which are perhaps hard for communities to get hold of, and the site-specific NPSs. Again this takes us back to the nuclear NPS where, hopefully, there are maps in the back that illustrate precisely where the site boundaries will be. Working back from that point, if we had wanted a public debate it would have been possible to mobilise organisations like ours and other NGOs to help use their membership to organise a public debate. It would have been possible to look at what the French
do. The French system is much maligned for being highly centralised. About half the cases that they run on major infrastructure are focused around a process of public democratic debate where they organise a series of democratic debates in the locality. When you match the kind of possibilities in best practice that could have been organised each of them needs to be properly resourced and that is important. When you match that framework against what we understand has happened around a particular community in Hartlepool that we have been looking at, it is staggering. It is wholly inadequate to organise a public consultation event on a three-day process. I know there is now discussion about whether or not they will go back and organise more consultation but the deadline for public consultation remains the same. I have to say in all my professional experience in local and regional planning that kind of approach would have been wholly unacceptable. One final critical point about the vast possibilities there would have been. Hartlepool Council has now set up a dedicated website. They have now set their own deadline for consultation at the end of this month which is a little bit confusing. Why would it not have been possible, like local authorities have to do, to publish a framework of how government would have worked with the local authorities affected so they could have talked effectively to their communities? It seems to me that all of this is obvious. There are probably less obvious and more innovative techniques. Finally, there is the new media which personally I do not understand but it is there. In terms of new media and new ways of communicating, there is on-line debate, and there are all those mechanisms that could have been used. As it is, I can find no-one who is aware that we are about to approve one of the most significant programmes of new infrastructure that the country has seen for 40 years. It is a programme that we have to have and largely need and but one that will pass through the public without any proper consultation. That leaves the level of public protest that we can expect at the sharp end when applications come in, I suspect, to be extremely high.

Q8 Colin Challen: I get the impression you feel that the Government has gone for a tick box consultation exercise and it may well lead to some of the judicial review questions later on, but I wonder if you could say what you would have as a benchmark for success. Let us take the wider issues not just the nuclear ones as well because they are very site specific. People will come to a meeting because they know they are going to talk about their area. Let us be general as well in terms of the NPSs. What benchmarks? Would it be for example how many people were engaged, how many members of the public, et cetera? Is that one benchmark and if you fail that benchmark what then should happen? Should it go back out to try and spend more money on publicity, to engage more with the public, using new media for example?

Mr Ellis: I would have used the parallel—and it is not easy to know what the benchmark should be—of what a local authority has to do for local planning which is that government should have published its equivalent of a statement of community involvement. It should have set out its ambitions and benchmarks for consultation around the NPS process in detail, which is what every local authority in England has to do, and then it would have been possible to judge progress against that kind of framework. I think it is about how many people in particular local communities have been reached. There are some qualitative indicators that you would need to crack. For example, it really is not just about the usual suspects. You will hear from a range of organisations including ours that have an interest in community involvement, the question is how many members of communities will come before a process where these NPSs are fully tested with their concerns bearing in mind that if we are involved in a local development framework that right is there in law to turn up and say, “I do not want that there; I would want this there”. For something wholly more significant for many communities, in this case the location of a nuclear power station, that opportunity is not there, so it is a mixture of quantitative tests. Yes, sure, how many people are we reaching? It is qualitative in terms of particularly hard to reach groups. Obviously Planning Aid has some resource and a remit to talk to those groups but it is certainly about trying to break down the barriers of the usual suspects and talk to a much wider audience. That is about communicating and having a communications strategy, which is really tough in planning given that everyone assumes it is very boring. It is not of course; it is a desperately exciting practice. The important issue around that is having something that is transparent. When there were campaigns around the Planning Act and the Planning Bill it was possible to get somewhere in the region of 30,000 responses to a government national consultation around the White Paper. I would be really interested to see how many responses come in on NPSs. Why? Because there have been no public national adverts for example which indicate the significance of the NPS series.

Q9 Colin Challen: Do you think there are any circumstances at all in which the Government would say that this consultation process has been a failure?

Mr Ellis: Other than them being challenged through the courts, no, because they have not established a test for themselves that we could hold them to account over.

Q10 Colin Challen: Do you think it falls short of their own published guidelines on public consultations?

Mr Ellis: The Cabinet Office rules are fairly broadly drawn. It seems to us at the moment that it is unlikely that there has been a breach of the law, although I am not a lawyer so they may advise me differently, but what is really interesting is that the National Policy Statement series there is no mention of one crucial document that the Planning White Paper empowers as a standard, and that is a publication from what was then ODPM in 2004
called Community Involvement in Planning. The White Paper in relation to NPS consultation talks about how this document is particularly important and when you read that document that document talks about people being involved early in the process at a time when there is opportunity for the proposals to be modified and changed. It also talks about the need for feedback to communities so they can understand that their input has been worthwhile. If you take that test—it is a very short document—it seems there is no doubt in my mind at all that this process fails the test set out in that document.

Q11 Colin Challen: Have you made these concerns known to the Government and, if so, what has been their response?

Mr Ellis: We have had a long dialogue and when I was in a different post with Friends of the Earth an even longer dialogue with government about the consultation standards. It was always made clear to us that we should not worry about the IPC process not being democratically accountable because issues around consultation and accountability would be dealt with in the National Policy Statement series. The difficulty that we have is that we have had that dialogue with CLG forcibly and constructively over the years but we have not had that dialogue yet with DECC. I am sure we will and we would look forward to a response but we have not had one yet.

Q12 Mr Anderson: Colin has asked most of the questions that I wanted to ask. On the specifics around Hartlepool, I have lived within 20 miles of Hartlepool Power Station since it was built. You mentioned about turnout and numbers and I accept what you are saying, I do not think three days is anywhere near sufficient notice, but the history of Hartlepool has been relatively positive and the only concerns that I have had expressed to me from people that live in that area was that it was not going to get redeveloped and the thought that there was not going to be a new station. If there is not a groundswell of opposition against the site then you probably are not going to get many people turning up, using in the word you said, protesting, so in a sense does having a longer lead-in time or more publicity actually create a bigger turnout? You say you should judge it on the turnout but what if there is not anything to which people are opposed?

Mr Ellis: My point would be that turnout is one test. As I said, there is the issue of a qualitative test about whether you are reaching people not normally involved, but in relation to Hartlepool it would not be a point about whether or not there is opposition or whether there is a pro-lobby about the case. I am not making a point either way on whether Hartlepool gets a new station. My point about it is if you are going to take a decision of that significance with a lifetime of 160 years, politically and morally, it seems to me, you are obliged to make every attempt to allow people to be involved. If you give people three days’ notice then that starts to look farcical. You cannot make people participate but you can fulfil for example the ambitions of things like the Aarhus Convention by saying to people let us have a dialogue rather than us rushing up with a fixed proposal and shoving it on a community and saying, “There you are; what do you think?” What would have been so wrong in saying to Hartlepool and other communities directly affected let us have a year long dialogue running up to this. That could have begun two years ago when we all knew this framework was being produced. It could have been dovetailed more with things like the site assessment. There was one consultation over nine months ago about site assessment. That could have been joined up perhaps into a longer process because if you are going to try and reach hard-to-reach groups you are talking about community development, you are talking about somebody working in a community and being around to have a dialogue and not simply arriving, dumping a proposal and saying, “Here you go,” and away. I am sure there will be widespread support in Hartlepool for the reason of economic development and jobs but there will also be some opposition. All we are talking about is making sure that is fully reflected and fully considered.

Q13 Paddy Tipping: It is interesting that we have talked mainly about nuclear and in a sense it is easier because it is site specific. There is an argument to say that the other NPSs need to be more site specific than they are. Let me give an example—carbon capture and storage and a network of transmission systems that requires—that cannot be delivered just by the market, can it?

Mr Ellis: I think our biggest concern about the issue of energy need and about these networks was our conclusion that it cannot solely be delivered by the market. The Low Carbon Transition Plan and its lead scenario talks about the Government providing a strategic framework to deliver the lead scenario. Our view is that that strategic framework is not present in the National Policy Statements for precisely the reasons you have outlined. It seems to me that if NPSs were properly tested—let us accept that they were—and there were proper rights expressed by individuals and community participation, then the logic from a planning perspective is that they do become more prescriptive. Even if they do not become site specific in every instance they would provide more guidance to the IPC and they would provide more prescription. That would provide a more effective system. So long as accountability and citizens’ rights are preserved in that process then that is the logical consequence. What we have at the moment in relation to the overarching Energy NPS is simply a statement for example that there is a need for all types of energy and that the IPC need not consider need. That really is not planning at all. That is simply letting the market bring forward applications of all varieties and of all carbon intensities and the IPC cannot consider which one of those is more or less acceptable in relation to the Low Carbon Transition Plan because the NPSs have effectively prohibited it from carrying out that role. That is illogical in planning terms. It is not planning, if you like.
Q14 Paddy Tipping: So you would advocate a more strategic approach? It may not be site specific but it would give greater guidance and clarity around policy and process and priorities that the IPC can agree to.

Mr Ellis: We certainly would and I think this gets to the heart of a much bigger issue about whether or not our energy policy is purely shaped by market regulation or whether it is shaped by traditional land use planning. Traditional land use planning has a better record when we are talking about hard infrastructure built on the ground than market regulation in delivering what we need. The historical record is absolutely clear about that. When we want to build a grid, when we want to construct critical parts of our infrastructure, leaving it solely to market regulation, particularly to EU Emissions Trading is not a framework that is going to deliver for us so, yes, we would argue for a more joined-up, more integrated but more prescriptive framework, as I say, so long as that framework is legitimate.

Q15 Paddy Tipping: Remind me because I have read a lot about this but I am getting old and I do not remember where it all comes from, but in your paper you talk about the growth of reliance on gas and you also talk about the opportunities of small micro generation. Those are not covered in these policy documents, are they?

Mr Ellis: What we looked at in our evidence was in the overarching Energy NPS there is a breakdown although we are not delivering that mix. This is the confusion in my own mind about why NPSs want to break down the mix which government anticipates, which would seem logical. Our concern about it is this: only this forum can test those need assumptions. We believe that there is bigger scope for renewable decentralised energy than the policy indicates. If we are not careful, the outcome of the IPC not considering need will be, for example, much more gas in the system than is anticipated. Either the NPS has to solve the need problem, it has to be fully tested here and a decision made about what the mix is or the IPC has to have some remit to consider it. Other organisations and other NGOs can provide a lot more expertise and detail on this, but looking at the figures there seems to be much more gas approved and much more gas under consideration in the old framework coming through than has been anticipated. If that trend were to continue with the IPC not considering need, then the carbon intensity of our infrastructure increases.

Q16 Dr Turner: I was fascinated by your assertion that the planning system had a very much better record for instance with regard to grid infrastructure than the market. I would agree with you on the question of the market but I am sure you cannot have forgotten the enormous length of time that the current planning process has taken to approve grid lines. In the context of climate change and the drastic need to restructure the grid, can we afford such luxury? That is one of the prime reasons behind the whole Planning Act. You seem to want to turn the clock back.

Mr Ellis: No I do not. I agree with you that if we are going to deal with climate change we are between a rock and a hard place given the desperate timescales involved. My argument is this: those issues that we have talked about—public legitimacy and coherent policy—are ones that will make the system work. My fear at the moment is that although this package is billed as being one that will increase the speed of delivery of major infrastructure, the fact that there will be very significant public protest (which there need not be) and the fact that there will be significant legal challenge and the fact that the IPC is left with a framework where it does not understand how to deliver the energy mix we might require for a low carbon economy (because that is left solely to private sector investment decisions), this is not the right framework. I am willing to accept all sorts of compromises in relation to the professionals. Professional planners and professionals in general can do much better in delivering speedier decisions. Punishing the public however is always a mistake in terms of their involvement. We can certainly do much better but this framework, unless it is significantly reviewed and reformed, will not provide the kind of blueprint for a low-carbon future that we so desperately need. It is not that I do not accept that there are deep flaws—there plainly are—but what I suppose I am saying is that this only unlocks through planning. There is no other quick fix around the corner. Unless we move to a wartime situation, which in relation to climate change perhaps we will, we have to make the system work. My concern is that it does not work as billed.

Q17 Dr Turner: We are in a sort of halfway house I suppose as far as climate change between the regular historical situation and the war situation, as I see it. I think you are suggesting that these policy statements which are guidance to the IPC should actually make the policy. You are inferring they should make policy which has already been made through primary legislation?

Mr Ellis: I am suggesting that the IPC has to be sentient to a range of issues. It has to understand and be able to think about a range of issues on the ground effectively if NPSs will not resolve them for them. In relation to the overall energy mix—I have used that example before—if the NPSs will not prescribe what the broad energy mix is going to be for the future (the IPC as the critical decision-maker with the unified consent) then where is that located in the framework? What I think many people were persuaded of in the 2008 Act was that NPSs would provide the IPC with that framework that they could then deliver.

Q18 Dr Turner: You expect the NPSs to set out what the energy mix should be. I do not think that was ever part of the intention.

Mr Ellis: It seems to me that it is fair to say that NPSs were intended to reflect existing energy policy. It is fair at my own expense to say that when we have probed into that debate what we have found is that
there are lead scenarios rather than clear prescriptive policy. However, there is one very devastating footnote in the overarching Energy NPS which says this: the lead scenario of the Low Carbon Transition Plan should not be taken as a sector specific target for any of the energy sectors for the private sector bringing forward applications. In other words, it almost disempowers what policy we have in the Low Carbon Transition Plan by saying very specifically that it is for the private sector to determine the energy mix. You may be right that that is an issue for higher level energy policy. Certainly for decision making where it leaves me as a planner on the ground if I was making a decision for the IPC—and that I extremely doubt—is in a situation where I do not know how to consider need. In every other part of planning I can tell you how to consider need for aggregates, I can tell you for other energy minerals, for housing. In all other places in planning we consider need all the time, that is what we do, but not for some of the most significant decisions about our future. The simplest form of planning regulation would be to agree the lead scenario—and I am sure there will be criticism from energy experts that the lead scenario perhaps is not quite right—in the Low Carbon Transition Plan and then ask the IPC to deliver it, and when more gas comes through the system than is desirable in terms of carbon and climate change that gas is refused.

Paddy Tipping: Let us move on and talk about one of the other issues that you raised right at the beginning which was accounting for carbon emissions. There do seem to be issues around that. Mike?

Q19 Mr Weir: You are very critical of the failure to account for the cumulative carbon emissions in the planning system. What do you think is the Government’s rationale for not making explicit reference to the carbon profile of new energy infrastructure within the NPS?

Mr Ellis: The argument presented to us forcibly is that the IPC and NPSs need not consider carbon because other policy mechanisms will deal with that issue. It is worth taking a very quick step back to say that during the passage of the Bill there was very strong interest in the insertion of a clause to make sure that NPSs consider climate change. The arguments around that and the debate that took place in both Houses was very much about this is very significant infrastructure, it has a potential high carbon profile so NPSs should have a duty to consider climate change. What we find is that what that duty amounts to is government saying the IPC and the NPSs need not concern themselves with the carbon profile of development because the EU Emissions Trading Scheme will deal with it so it is not for them to consider. Our concern about that is two-fold. One is an area that I am not sure I am qualified to get into in detail which is whether or not EU ETS works or not. I am sure the Committee has considered those issues in detail. In our evidence what we have done is simply look at the Committee on Climate Change’s implementation report from October and drawn out of that their profound concern about whether or not that will deliver the right kind of electricity energy mix, for example, that is desirable. So there are plainly major problems around whether that is a safe assumption. The second part is that there are all sorts of other bits of carbon not yet covered by the EU ETS and then there is the life cycle issue, the whole life cycle of a development. Again for nuclear that is a long time—200 years’ worth-plus but for all sorts of other development that is significant in terms of the life cycle of the building process. If the IPC and NPSs do not account for carbon who is going to understand what carbon emissions we are producing? If the EU ETS does not work effectively and there is no consideration of need, you end up in this extraordinary position where we can quite lawfully and, apparently, sensibly commit the UK to a high carbon-intensive energy mix going forward which will make it almost impossible for us to deliver our mid-century targets, and that is apparently perfectly logical through the framework that is established at the moment. What we are suggesting—and I have to say this is new and complex territory—is that the IPC at least is able to account for the carbon it approves, not that necessarily the IPC is the body that goes away and reflects on all of those issues but for the 50 MW and above energy projects it accounts for that carbon and has a memorandum of understanding with the Committee on Climate Change, who after all are a statutory consultee on NPSs, in order that the carbon profile can be worked out.

Q20 Mr Weir: The alternative viewpoint, is it not, is if you give the IPC this power you are in effect setting up yet another organisation to monitor carbon emissions. The Government is setting targets for carbon emissions, presumably setting down what it considers to be the proper energy mix, and it is for the Government to determine, through the Climate Change Committee or whatever, whether these targets are being met and to monitor that, and the IPC’s role is to look at specific issues relating to planning not to carbon emissions and by giving them this power you are simply duplicating what DECC and the Climate Change Committee should be doing in any event?

Mr Ellis: I think that would be right if the NPSs set out a clear framework for an energy mix that delivered on the target. That is not the case so we are back into this position where there is an accumulation of problems and it is for the private sector to determine our energy mix and the IPC cannot consider need so it cannot refuse any application that comes forward on the basis of need. If there is more gas in the system that is nothing to do with the IPC because the NPSs make it clear that that is a private sector-led initiative.

Q21 Mr Weir: It is for the Government and the Climate Change Committee in terms of our targets for carbon emissions. It is up to them to say this is not right the way forward for energy, we do not need more gas, we need more renewables, nuclear,
Mr Ellis: This is the difficulty. At the highest level the accounting process certainly is a matter for the Committee on Climate Change, but the IPC has new and extraordinary power to grant the development consent that generates the carbon. The Committee has no involvement in that process. Perhaps it should. The Committee has an involvement in the preparation of National Policy Statements and presumably they will produce a response as a statutory consultee (and we are not aware of where that response is going) but they have no involvement with the IPC at the decision-making stage at the point where emissions will begin to be generated, and because there is no connection between that, there is potential for huge carbon leakage in the system. There is a delivery problem is what I am trying to say.

Q22 Mr Weir: You have talked about decentralisation of energy and there will be a lot of energy that is less than 50 MW that will not fall within the IPC system, so if the IPC have the power that you are looking for in respect of carbon emissions then is there not a huge black hole because of decentralisation because of the growth of smaller generators, and is it not more sensible to have the power either with DECC or with the Climate Change Committee to set the overall limits? Is it not right that the IPC merely looks at the development rather than the carbon emissions of the particular development?

Mr Ellis: There are difficulties. There is quite a lot there. It is certainly the case that the rest of the planning system has strong obligations in policy to consider climate change but it does not have any relationship with the accounting mechanism that the Committee has at the moment, and that is a problem, absolutely. For me it is absolutely vital if we are to make forward progress on climate change that from the point of view of the front-line in terms of detailed planning decisions, the sum total of all planning decisions taken—and let us just stick with energy for a second—needs to be accounted for effectively if we are to deliver below the curve by mid-century. There cannot be a sector where we make a huge predictions about the energy profile without understanding in detail what those profiles would be. It seems to me that at the point of decision, and particularly with the IPC because the energy projects are so big they need to understand the carbon profile, even if they pass that information instantly on to another body to deal with like the Committee that would be perfectly acceptable. It is also the case that the environmental impact assessment regulations require applicants to submit evidence on atmospheric emissions already, so we are already in a position where applicants are having to deal with producing the carbon profile of their developments. Whether that has been tested at law I do not think it has yet, but it certainly would be a challenge if for example a major new gas-fired power station came along that did not contain a carbon profile of the life cycle of that development in the application. If that is the case, the information is being generated at the point of application for the benefit of the IPC. All we are arguing is that the IPC then needs to do something with that information whereas at the moment the Government is saying it cannot. It needs either to pass it on to the Committee or to make its own judgment or report annually on the level of emissions it has approved.

Q23 Mr Weir: Given the ways things are moving, dealing with carbon capture and storage for example where we are talking about once it is approved fitting it to new stations as they are built, surely that information is being developed at an earlier stage because anybody going forward for example with a new coal-fired power station within the next few years will have to take into account the carbon emissions from that, the efforts of carbon capture and storage or whatever to clean up these emissions, so that would be developed presumably at an early stage before the application gets before the IPC because that will have to be an integral part of any application for a future power station under the rules being developed?

Mr Ellis: Again there is some complexity there but there are two responses. The first one is that if you give the IPC a metric to understand carbon, a system to understand carbon, that works both ways. Those applications coming forward that decarbonise our energy supply should expect to have positive treatment in the system. They are meeting the policy requirements and that clearly makes them move through the process faster. However, for a carbon intensive project, and just to pick up the point about carbon capture, my understanding is that we have a carbon capture regime for coal and we have carbon readiness for gas but not any ambition at the moment in the immediate future to fit gas.

Q24 Mr Weir: I think those are Energy Bill arguments coming through.

Mr Ellis: My only point from a planning perspective about it is that that means there is still a potential for carbon-intensive energy development to come through the system. What has worried me personally about it is to see the level of gas being approved under the old regime. That is my concern. That reflects back on whether or not the IPC needs to consider carbon because if carbon capture solved all our problems, which we hope in an ideal world it would, that would be fine, but it does not seem that is going to happen in the immediate future and particularly not for gas, and it seems that gas is going to be one of our lead fossil fuel alternatives. Given all of that we are still in the position where the IPC needs to have a role on carbon. After all, just taking a step back, it has a role thinking about almost everything else in detail but not carbon. It has been given the information so there is no greater burden on the private sector because they have to generate the information anyway in relation to environmental
impact assessments, so in our view in that sense it
does seem almost perverse that the IPC cannot at
least be able to say to government, “You do realise
that we are approving a lot more gas in the
framework than you anticipated?” and a
memorandum of understanding with the Climate
Change Committee would be a start. Ultimately,
in the case of NPSs it should be in strategic policy
where this issue is resolved. If there were an agreed
energy mix probably NPSs could make more
progress on the framework for a low carbon energy
system for the future.

Paddy Tipping: Let us change the focus and move
away from carbon and talk about the energy mix and
the need for an energy mix and needs and issues that
you have talked about quite a lot. John, are you
going to pursue this?

Q25 Mr Anderson: The TCPA was concerned that
the NPSs do not allow the IPC to consider need.
Why would they need to consider the need?
Mr Ellis: This relates back to the worries that we
have about reaching the right energy mix and the
Low Carbon Transition Plan lead scenario. It is
simply an issue that the argument presented to us is
that market mechanisms will influence what
applications come forward and therefore, as we have
already debated, the IPC need not think about it, but
the IPC needs to be able to understand need to
ensure that we do not end up with a very highly
carbon intensive energy mix.

Q26 Mr Anderson: Are you saying then that the IPC
should dictate what the mix should be?
Mr Ellis: No, I think that the right framework would
be that the National Policy Statements should
provide more prescription on the delivery of the lead
scenario in the Low Carbon Transition Plan. Having
created that prescription it is for the IPC to deliver
it. To give a practical example, if that amounted,
cruelly, to four gas stations and not five, when the
fifth application came forward it would be for the
IPC to say, “Actually we cannot see that there is the
need for this application.” That seems to us to be
very powerful and perfectly reasonable. Again it is
something that happens in the rest of the
planning framework.

Q27 Mr Anderson: You talk a lot about gas and the
Government’s policy of course is to try and steer
away from gas. You never talk about security of
supply and yet that surely is part of why we are going
towards a mix? There is an obvious anti-nuclear
supply and yet that surely is part of why we are going
away from gas. You never talk about security of
Government’s policy of course is to try and steer

Q28 Mr Anderson: Would you not accept then that
is precisely the problem we have had in years gone by
in getting planning permission for renewables in
particular, and it has been not very helpful, to say the
very least, and that the hold-ups in the planning
process have in effect caused the problems that you
are talking about?
Mr Ellis: The problems about onshore renewables
worry me deeply. It has to be said that we still
await—and it is about to be published—the new PPS
on climate change which we hope will provide even
stronger policy. Most of the programmes of course
are under 50 MW in the local planning framework
and it is absolutely clear that we have need to have a
much stronger sense that the planning programme is
committed to delivering on climate change. The
CLG’s own research on that over the summer
suggested that climate change only featured in about
ten per cent of planning applications as an issue.
There is a massive problem with the profession,
frankly, and with the culture of planning. I put my
hands up to the immense progress that we need to
make inside planning on climate change, but that
does not change the fact that we need to have an
effective delivery mechanism and effective policy,
and at 50 MW and above that requires biting the
bullet about how much ambition we want for
renewables. I would never set a limit on the amount
of renewables, you cannot really have enough, but I
would want to understand in detail before the IPC
NPS is published whether the heavy commitment to
approving gas under the current system may or may
not compromise our ability to build the amount of
renewables that we need. That is my worry.
Q29 Mr Anderson: Let us talk specifically about the needs of the nation and what we need in relation to a baseload electricity power supply. You have put a lot of emphasis on renewables and how much you would like to see it, and we all would love to see a lot more renewables, but at the end of the day we do have to have that baseload that keeps the country ticking over. Due to our commitment to the EU that will necessitate either carbon capture and storage being developed or the building of new nuclear plants or the reliance on gas coming from international markets. Do you accept then that there is a need for these new plants to be built to maintain the baseload for the nation and that the planning process cannot be used as a stopgap to stop these plants being built?

Mr Ellis: I certainly accept that there is clearly a role for fossil fuels in the mix in the immediate future and going forward. There is certainly huge potential for renewables and the idea of a smart European grid for renewables was talked about yesterday in the media. I am also quite clear though looking at the issue of security of supply that we have approved under the old system either under construction or consented to construct somewhere in the region of 20 MW which replaces what is being decommissioned. This is in the useful diagram in the overarching Energy NPS and repeated in the Low Carbon Transition Plan. That is all under the old system, a system that was not meant to work and that does not include a figure for those applications for gas currently under consideration in the old framework. I am not making in any sense a ridiculous point that there should be no fossil fuels in the mix. My point is that if we establish a mix we should then try and deliver it coherently. If we are going to say, as the NPS does, that it is for the private sector to determine the mix, that is what the overarching Energy NPS says, and then we say to the IPC that means you do not need to think about need because there is need for all energy projects, need is just established—

Q30 Mr Anderson: Would not the planning process guarantee what your graphs are showing that that would have been committed and successfully achieved under the present planning processes?

Mr Ellis: Not necessarily because the current planning process needed reform. I am not trying to suggest that there is not a need for a new framework. What I am suggesting is very simple: once we have established what the mix should be—and that is not for TCPA to determine—then the NPS in policy and the IPC in its decisions should deliver that mix. That is essentially what the ambition for private sector-led energy development inside a strategic policy framework amounts to. That is not what the overarching Energy NPS delivers for the nation. The overarching Energy NPS delivers a market-led view with an organisation making a decision unable to think about need, and that is not sensible.

Paddy Tipping: That is a powerful point. Des, you want to pursue this?

Q31 Dr Turner: Of course it is a sad reflection of life that most of this gas capacity that you are worried about has already been consented by the existing process and is likely to be consented by the existing process even to come. Would your fears—and there is a certain legitimacy to your fears, I agree—be addressed if the overarching NPS were slightly modified to indicate a hierarchy of preferred mixes, so starting with renewables, nuclear, down to fossil fuel as needed for security of supply? Would some sort of change of wording—it only needs a paragraph or two—satisfy your concerns?

Mr Ellis: They would go some way to addressing it if we could see that there was this framework which exists in almost every other aspect of planning policy, particularly the waste hierarchy, which provides proper guidance for planners on the ground, yes. Whether it goes all the way to meeting the ambition of a National Policy Statement that could provide very clear guidance about an energy mix, I am not sure. However, if I we move to that system—and I agree there is merit in it—it requires the IPC to be able to employ judgment and to think about the relative issues of need. For example, when an application came in for gas which was perhaps at the bottom of the hierarchy, how would it make a judgment because it would have to consider all the other applications presumably? NPS would need to provide, as it really should, more guidance around that issue. I would just make this comment about planning policy. There is a strong feeling—and it will no doubt be said that planning policy always needs to be streamlined; it is one of the great myths that exists—that planning policy needs to be effective. Effective planning policy is rarely short precisely because the issues are so complex, so moving to a hierarchy would be very powerful but it would need to contain sufficient guidance to the IPC for them to be able to apply it effectively.

Q32 Dr Turner: That guidance would presumably be received through its statutory consultee, the Committee on Climate Change?

Mr Ellis: All I can say is I look forward to the Committee on Climate Change’s submission on the NPS series.

Q33 Dr Turner: That is the purpose of having such an arrangement, I would have thought.

Mr Ellis: It is, but can I make one very important point which personally worries me from a planning perspective. Spatial planning is an important and separate and distinct discipline. The statutory consultees and the Climate Change Committee have expertise in carbon accounting and many other aspects of climate change, but not necessarily any expertise in spatial planning. The IPC and this forum has to judge very carefully whether the advice coming from statutory consultees is the right advice. It cannot always be taken as read.
Q34 Dr Turner: But the particular case of a gas-fired power station application is not really a fundamental spatial planning issue surely because it does not really matter to the system, within limits, where it is put; the question is whether it is put anywhere.

Mr Ellis: I think it is crucial because the devil is always in the detail spatially. We can make a judgment that we need X amount of new capacity in energy, but the really tough part is where it goes, whether that is the best place, how many local communities are affected, how many biodiversity interests are affected, and whether it actually works on the ground. That discipline is a hard discipline. We may want to go at planning, but it is hard discipline. Unless you crack that at strategic level by providing sufficient detail, investigation and proper assessment, or unless you allow the decision-maker to be able to fully consider it at the local level then you have a problem. My fear is that you have neither of those two things in the current NPS framework.

Paddy Tipping: We are running towards the end of our time, you will be pleased to know. You have worked hard for us. One of the things that is interesting and has not had a lot of discussion and deserves more is the relationship between the NPS, that hard discipline, and, let me put it like this, the remainder of the planning system. Again, you have had interesting things to say about that.

Q35 Charles Hendry: I have just an observation first. I wonder whether you are expecting too much of the planning system. That is clearly one element in the fight. However, there is one other very final, quick point and that is the coherence between the two regimes. That relates to one other very final, quick point and that is the status and importance of local government in the consultation process on NPSs. After all, local and regional bodies have to take onboard the impacts, which are significant, in National Policy Statements for the whole of renewables, 50 MW below and above, is contained in a statement that is intended for a different legislative framework it will be tested at law and will result in significant delay. It is crucial for onshore renewables that the framework is made clear in Planning Policy Statements and in National Policy Statements and not one or the other if we want to have delivery. There is inevitable and quite understandable bedding down when new legislation arrives at the national level, I completely understand that, but there is certainly an urgent need to make sure there is coherence between the two regimes. That relates to one other very final, quick point and that is the status and importance of local government in the consultation process on NPSs. After all, local and regional bodies have to take onboard the impacts, which are significant, in National Policy Statements for their planning process. At the moment we are not necessarily getting great feedback that that process is going on and it is critical they are involved in NPS development so that the plans dovetail together. This should be ideally one narrative from national to regional to local and at the moment it is not.

Q36 Charles Hendry: Do you think we are doing enough to get popular buy-in to support local developments of energy infrastructure? Very often local communities feel they are being imposed upon them and they do not see they are getting a benefit from them. Could more be done which would create greater acceptance through financial arrangements, reducing the electricity prices, community ownership of wind turbines, aspects like that which you think would start to change the debate about this and where the community would start to see they get a real benefit out of this rather than simply hosting something which is of a wider national benefit?
Mr Ellis: Absolutely. We need an absolute cultural transformation about the way the debate on climate and energy takes place including, as you rightly say, the kinds of benefits that accrue to local communities from energy projects. There is absolute determined resistance to onshore wind and it is getting worse. Why? Because the argument about climate is not presented with the argument on energy in a mechanism which is effective. It is crucial that all of us in the professions get out there and talk to communities about the benefits. It is also crucial to have one more critical issue identified. People are not a problem but sometimes the system solely regards communities about the benefits. It is also crucial to have one more critical issue identified. People are not a problem but sometimes the system solely regards communities as a problem to get round, to persuade, not to include in the process of planning. Planning will only work if people are at the heart of it because you cannot build without consent. What terrifies me is if we engineer conflict into the national planning framework by not consulting then our ability to deliver major onshore wind proposals, which we desperately need, is going to be ten times, 100 times more difficult.

Paddy Tipping: That is a very good point to finish on. Thank you for coming and spending so much time with us. I am sorry you have been by yourself, I know it feels a bit lonely out there. If, as you are going back, there are one or two things where you think, “I should have told them that”, do not hesitate to drop us a note. Thank you very much indeed.

Witnesses: Mr Graham Bocking, Royal Institution of Chartered Surveyors, and Mr Richard Coakley, Vice-President, Institution of Civil Engineers, gave evidence.

Q37 Paddy Tipping: We are joined by Richard Coakley, the Vice-President of the Institution of Civil Engineers, and Graham Bocking from RICS. You have had the benefit, although I am not sure it is a benefit, of hearing our previous discussion, so I think you will be clear about the themes we want to pursue with you. Let me ask you straightforwardly, as we started with the last witnesses, about the National Policy Statements. Are they in a fit purpose for the Government to adopt them?

Mr Coakley: Good morning, ladies and gentlemen. We, as the Institution of Civil Engineers, believe this is a very good way forward. We have aspects that we do not see as quite right in the NPSs, and we can go into those in more detail, but one has to start from a certain position and I think this moves the country on very much to where we need to be. We have a massive challenge ahead of us and this is a great opportunity.

Mr Bocking: I would tend to support the view of Mr Coakley. In contrast to the first witness this morning, we take a rather more pragmatic attitude and recognise that the NPSs are part of a wider policy framework, there are some issues which quite clearly do not fall within them, there are issues which are necessary to achieve carbon reduction which are not relevant to major planning applications for new energy plant, for example energy saving measures, energy efficiency measures, which are nevertheless critical to achieving the targets. They do not form part of the NPSs, but that is not wrong. We can go into that in a little more detail if you wish. There are other mechanisms in place to deal with some of the points that have been mentioned, not least the mechanisms which the planning system offers, such as environmental assessment of the projects which will address in much more detail the local issues. It is perhaps somewhat confusing, or at least slightly inconsistent, that on the nuclear proposals there are site specific details in the relevant document which do not exist for other technologies, and that is understandable. You may have seen from my papers that I come from a renewable background, but I have some understanding of other technologies, so you would not expect me to be promoting nuclear particularly, but recognise that it is being put forward as part of the mix. Local issues specific to proposals at local sites can be addressed under mechanisms. There are other policy mechanisms, policy documents, and reference has been made to them, to the Transition Plan, the Emission Trading Scheme and so on.

Q38 Paddy Tipping: Both organisations have welcomed the setting up of the IPC and they operate in the context of the NPSs. Are the NPSs sufficiently clear and robust to allow them to do their work?

Mr Coakley: Our view is that they are not—we use the word—holistic. They do not actually bring the whole of the energy problems together as one, they are looked at independently. Maybe that is the way in which they have been produced and the overarching view of them. They do not incorporate the real problems we have with transport and heat, for example. These are particular areas where I find them wanting. The IPC has got a good challenge to work with these documents and deliver the right outcome. I do not think we can actually have everything in the NPS documents at this stage. It is possible that they can be brought in and reviewed in the future as indeed new technology, like CCS, develops. I think we have got to be careful that we are not saying, “Let’s complete this as a perfect group at this stage”, let us see what we can work with. I am saying I support these documents but I think there is a lot to do to actually make them perfect.

Mr Bocking: There is clearly more which can be added in relation to other issues: transport infrastructure has just been mentioned and land use planning is clearly another. It does not necessarily have to be within the NPS but as part of the overall planning policy it is clearly very relevant if you have a land use planning policy which tends in the longer term to reduce the need for commuting, for example, that would have effects which are beneficial. There are things which could be added in here, but it is also important to note that if we are talking about
priorities, a priority is to do something. We are going to have existing power plant which comes to the end of its life and we have a climate change situation which, despite the weather outside, demands attention and these documents are part of the framework to enable that attention to be given and to enable the markets to bring forward proposals and for some of them to be approved so that new installations can take place. Whilst one could spend whatever amount of time was available trying to perfect these documents, there is also a priority to get something in place to enable the development process to continue. There are other mechanisms available to Government which then enable priorities in terms of, for example, different technologies to be adjusted according to how the market is seen to be responding. As an example, there is the situation at the moment on CCS where the response to the invitation to come forward with prototype proposals seems not to meet the objectives that have been set. Maybe there will need to be some further initiatives taken to ensure that changes. Because the timescale for CCS is quite important. We are talking of having prototypes in place by 2020 but retrofitting of a massive amount of plant by 2025 and something does not quite add up there. CCS needs to be implemented as quickly as possible. It is not necessarily for the NPS alone to achieve that, but if it is not sufficient alone then other policy mechanisms need to be used.

Q39 Paddy Tipping: We will come back and talk about the points you were making, Richard, about transport and heat and links to the wider infrastructure in a moment or two. Let me ask you this: ultimately, despite the NPSs, our energy policy is going to be implemented by the market and my impression, Richard, is that your institute has advocated a more strategic approach. Is that right? Should there be greater Government intervention to deliver our energy policy?

Mr Coakley: The points that were made earlier in the morning were important points with regard to our energy mix. For me, the important aspect is security of supply and it is very important that we do not rely on gas. There are vested interests in gas and there is a lot of gas around the world, but the important thing is security of supply for this country and that will give us a commercial basis for working with the rest of the world. It always comes back to this security and in my view that has to be set out as a strategy at the top for the country because, in a marketplace, as the number of people working in the marketplace reduces the marketplace can be controlled. You have to make sure that they are in charge of the strategy that the country and society needs in the UK rather than private interests. For me, a strategy is important.

Q40 Paddy Tipping: Graham, do you want to comment on that point?

Mr Bocking: Yes. In relation to gas, I think apart from security of supply it is also important to think in terms of economic availability of supply. There has not been very much mention as yet of gas prices but that will also play a role, particularly at times when there are peaks in gas demand and limits on short-term supply, and we need to take that into account. Gas prices, apart from any government policies, will also deliver a very powerful message to the market as to which direction they should be moving, in the same way as I think one of the Members mentioned earlier on, that there are other factors which give a pointer to what should be done in terms of carbon pricing, for example.

Paddy Tipping: Topical as it is, I am going to resist the temptation to get into gas availability and gas prices today. We are going to go on to that exact point, the notion of carbon and carbon emissions being taken into by the IPC.

Q41 Dr Turner: You no doubt heard the comments on behalf of the TCPA decrying the fact that the NPSs are not specific about the carbon intensity of projects that should be consented. What is your feeling on that?

Mr Coakley: I believe that you cannot give the IPC everything to do looking after everything. The job of the IPC is to work with others to actually deliver the proper planning. To work with others is the bit in the overview that a number of people in the consultation process might be missing and it is important that is said. Recently Infrastructure UK—

Q42 Paddy Tipping: Tell us a bit more about Infrastructure UK.

Mr Coakley: Nobody knows enough about Infrastructure UK.

Q43 Paddy Tipping: You know more than me!

Mr Coakley: The opportunity here is to actually have Infrastructure UK as almost a corresponding member of IPC and the Low Carbon Group as well so that the IPC is continually working with these particular groups to get the best of what is a moving picture as we go forward delivering this massive challenge we have got to continue to deliver energy to the people of the UK. It is not a one-size-fits-all answer. I believe that IPC have got a massive challenge to undertake it correctly, but they will be corresponding and discussing with these other people. To have Infrastructure UK there as the potential to discuss and develop ideas with and to get value from the marketplace as well for information to be coming out is very important for me.

Q44 Dr Turner: You have not actually addressed the question I was asking; perhaps I should have been more specific about it. The fear is that guidance as it seems at face value at the moment does not prevent the possibility of future generating capacity being consented which is excessively carbon intensive. Do you think that the NPSs as currently framed give sufficient weight to the desirability of non-carbon or low carbon generating capacity in preference to carbon intensive capacity?

Mr Coakley: The documents do not give that intent. Again, it goes back to the commercial aspects, that people are open to submit different ideas of projects to IPC which have different carbon contents. There
is a lot to be said for someone actually looking after that overall carbon budget within the UK. It is important if IPC is not looking after it, somebody very close to the workings of IPC that can actually deliver that into their collective thought is.

Q45 Dr Turner: As it is the IPC will have a statutory consultee in the form of the Committee on Climate Change and one would expect the Committee on Climate Change to be in a position to do precisely what you have just said.

Mr Coakley: That is what I refer to as being a web of information going into IPC and it being used in this way.

Q46 Dr Turner: In principle, do you think it would be useful to indicate just as a principal heading, if you like, in the overarching NPS a preference for a hierarchy of energy generating sources within the mix?

Mr Coakley: Yes, I do think that it would be useful to talk this through but we have got to be aware that as time moves on that hierarchy might change depending on the overall marketplace we are dealing in.

Mr Bocking: If I could address the Member’s question for a moment. Yes, there are the other policy mechanisms which will tend to place greater or lesser emphasis on particular technology options so that it is not purely the NPS series which is determining that. I would agree that it is difficult to expect the IPC to deal with this aspect as well as carbon emissions and the priority of technologies to reduce them. You need to look at the other mechanisms as well, I believe.

Paddy Tipping: In your evidence and here today you have both made wider points about the energy NPSs and the link to the wider infrastructure. Mike, do you want to pursue that at this point?

Q47 Mr Weir: Obviously a lot of major developments will need related infrastructure, particularly roads and rail for major power stations. Does the proposed framework provide adequate consideration of the additional infrastructure for these developments?

Mr Coakley: I do not think they do at the moment and that is because we have different NPSs in different forms. Yes, the harbours and ports NPS is out as a draft but I do not think there is this spatial link between them at the moment. Also, I believe that where we have the interface with town and country planning processes where you might have different transportation aspects going through a different process that could actually create a challenge for the successful delivery of what we need in this country. I am not sure that we have got that right yet.

Mr Bocking: Nevertheless, I do not think that should be seen as a reason for in any way holding up the introduction of these NPSs until the others are in place, bearing in mind they are all based on the same policy objectives. Given that you have a framework in these NPSs which addresses the electricity generation facilities, clearly those facilities will then need a transport infrastructure to support them but that transport infrastructure will always tend to follow where the location is. That is not to say that on a site specific level there may not be within the context of the environmental assessment of an individual proposal issues which need to be addressed if, for example, there were difficulties in gaining sufficient access to an individual site, such that the proposal for that site itself came into question. At a local site specific level that may obviously be the case, however in general and strategic terms one might assume one has a policy or series of policies here which help to determine the development that takes place and then the infrastructure which is necessary for that development. People affected by it at a local level need to be respected and the issues dealt with at a local level, but in strategic terms the NPS for ports or other transport infrastructure, I would have thought, could follow from these and these do not need to be held up until the others are there.

Q48 Mr Weir: How do you get around the risk of the associated infrastructure falling into different consenting procedures from the main project? You can imagine a situation where the IPC perhaps says, “This new nuclear power station” or whatever type station, “is necessary” and gives consent to that, but there then is a problem about access, road access or whatever, which falls under a different planning system and effectively could be used to try and scupper such a major development. Does there not need to be a link-up between the two to ensure that if the IPC determines this is a national development that is required to go ahead that is not scuppered by lack of infrastructure allowing access to it?

Mr Coakley: This was where I was coming from. This is not yet joined-up. I agree with you that there is a potential for real delay in that area and that is something that should be looked at during this consultation, not to delay the process of delivery of this but small movements in the process of what is going on in the overarching aspects of these documents to be corrected.

Q49 Mr Weir: How do you get over it? Is there a case for saying that if the IPC determines that a project, whether it be carbon capture and storage, nuclear or whatever, is a national project then the associated infrastructure automatically becomes the same and falls under the IPC? Is that what you would envisage happening?

Mr Coakley: At this stage it is definitely not. This is what we need to get right. As we have a priority in the country to create that energy source, and IPC has looked at it in that priority process, whatever hangs around that and determines the delivery of that priority also takes the same.

Mr Bocking: Clearly transport infrastructure or grid infrastructure are important issues in themselves and one does not want to get into a controversial
situation of putting forward a particular proposal which then is not necessary because the power plant it is due to serve is not put together. Just to take an example: looking at Scotland there is generally accepted to be vast potential for renewables in the northern part of Scotland and there is a proposal for a line upgrading Beauty-Denny which would then facilitate a lot of that development. The point you have made is very valid, that some people who have opposed Beauty-Denny have no doubt done so because they see also the opportunity indirectly to prevent some of these developments taking place which for their own reasons they would wish to do. In a strategic sense the Government, or relevant government and bodies, have put forward proposals for an upgrading of a line to enable developments in total to take place without necessarily prejudging whether a particular development here or there or somewhere else should be the one that is eventually connected or one of those which is eventually connected. There does need to be some general upgrading of infrastructure based on a more broad approach to where that infrastructure needs to connect, for example, offshore wind in the North Sea or the Irish Sea or wherever.

Q50 Mr Weir: I take your point but carbon capture and storage is a classic example. If there are to be pipes taking it from power stations to feed it into North Sea aquifers or whatever, those pipes could travel for considerable distances which is going to be a national infrastructure project that needs to be developed, but it needs to be developed in conjunction with the power stations that are producing the carbon in the first instance. It seems to me that there is a real danger of a disconnect between the two unless they are linked up to ensure that they are done at the same time.

Mr Bocking: Without wishing to be naively optimistic, nonetheless that has not really been the experience up until now in relation to gas supplies to gas-fired plant which has been built so far. Whether it is so much more difficult in terms of taking CO$_2$ in the other direction remains to be seen, but I think the indications are it does not have to be as difficult as one might possibly fear.

Mr Weir: That from the man who mentioned Beauty-Denny a few minutes ago!

Paddy Tipping: I think you were making the point with regard to nuclear plant application, but there is a whole range of other things which should quite rightly provide accommodation for the workforce, and service that, the new housing which might be built to provide accommodation for the workforce, and some of those things which should quite rightly remain at a local level, and if the local community feel that they are losing all their say in all the related matters then they are going to feel very ostracised indeed. Clearly the grid connections are part of the plant application, but there is a whole range of other things which are very local and should they not continue to be determined at a local level?

Q51 Mr Anderson: This is hypothetical to an extent. If the UK Government decided, despite opposition in Scotland, that we had to have a nuclear power plant in Scotland, a new one, we could go ahead with that and then the local authorities or Scottish Government would say, “Fine, we will have to live with that but we are not going to pass the planning permission for the new railway or road infrastructure”, so the company that was building it would say, “There’s no future in it so we’ll walk away”. Are we in that scenario potentially or not?

Mr Coakley: I would not express it in the same way as you have just expressed it with regard to nuclear and over the border, there are much more practical aspects on a station in England.

Q52 Mr Anderson: I am only giving that as an example.

Mr Coakley: I do believe that could be the case. Although it may be that does not happen, I think there is a potential for that to happen and more should be done about that. As I say, it is fundamental to get energy sources into this country and we cannot stand any delay of this sort of puerile nature of one having a priority and that priority being usurped by a minor technical challenge.

Q53 Mr Anderson: Is Infrastructure UK the body that can identify those problems?

Mr Coakley: We would be delighted to work with this panel on this area on whatever we can do to smooth these processes.

Q54 Charles Hendry: Can I take a rather different perspective on this. Is there not a balance to be struck between the national and the local aspects? We have moved significantly through the introduction of National Policy Statements to saying, “Look, there is a national need and there has got to be a national structure for how that is going to be implemented”. There is also a fairly natural distinction between those things which are national, for example a nuclear power station which is going to have a national significance, and the roads which service that, the new housing which might be built to provide accommodation for the workforce, and some of those things which should quite rightly remain at a local level, and if the local community feel that they are losing all their say in all the related matters then they are going to feel very ostracised indeed. Clearly the grid connections are part of the plant application, but there is a whole range of other things which are very local and should they not continue to be determined at a local level?

Mr Coakley: Yes, you have a very good point there and it is a national policy that we are putting forward in these statements. You are quite right, we are getting into minor details, but it is an opportunity that can delay the process and it would be good to see some form in which this is prioritised into the local community somehow.

Q55 Charles Hendry: Particularly for the nuclear power stations, overwhelmingly these are communities which are keen to be host communities, they are looking to be constructive, but they will have a strong view about how the road infrastructure should be there, what screening might be done—okay, it is slightly hard to screen a nuclear power station—where housing should go so, therefore, should we not try to work with that to involve the local community rather than saying, “Look, we
Mr Coakley: I am not talking about those as exceptions, those will flow through. By far the large numbers of communities that I work with on nuclear power in their vicinity are very supportive of this process and, therefore, I cannot see a big challenge in that area. We are not talking about just nuclear power, we are talking about the whole planning process and infrastructure here. By exception, yes, I agree but that will just naturally happen.

Mr Bocking: I think the market itself will also recognise this. If a developer is looking at proposals for a particular large power plant development, whether it is nuclear or some other kind, it will want to know that that proposal is going to be able to go into operation, not just receive consent for the proposal on site but also that the remaining infrastructure which is necessary will be provided. Yes, there needs to be a sufficiently positive framework put in place to ensure that is the case. It is quite likely, and in the case of nuclear that has been demonstrated in relation to the sites that are being put forward, that if that development goes ahead, and I am not particularly advocating it, there will need to be a grid infrastructure and a road network to those sites, for example, most of which are already in use for the same purpose or in communities which are already in the vicinity of such sites so that the need for new infrastructure off-site but connecting to the centres of demand or sources of fuel supply is at least substantially already there.

Paddy Tipping: Richard, you made some interesting points about heat and transport earlier on and I think Judy is going to pursue those with you.

Q56 Judy Mallaber: As I understand it, in your evidence you were talking about the big shift there would be towards the electrification of heat and transport as we move towards a low carbon economy. Do you think the NPSs give sufficient consideration to the role of heat?

Mr Coakley: No, I do not think they give sufficient consideration to the role of heat. Do you think the NPSs give sufficient capacity in the system and flexibility to provide it where it is needed.

Q57 Judy Mallaber: So what should they be saying? Can you give us any idea about, for example, what the impact of the electrification of heating will be on our demand for electricity in the long run? What are the projections we should be making? What would you like to see within the NPSs to deal with that?

Mr Coakley: Again, it is the prioritisation, but it is a programming of prioritisation. It is getting to the point we want to and for the IPC to understand the implications of their approvals in that long-term process, for example looking at the use of heat from power stations and how that is incorporated in the NPSs, but the way in which that is incorporated in the design of new infrastructure is not incorporated, it is not tied together. I feel as though there should be more work done on that in the NPSs.

Mr Bocking: The CCC’s report from last autumn did, however, express the view that the impact of electrification of heating and even of vehicles to 2020 was not expected to present any major problem, and even thereafter the staging, if you like, of peak demand or the relative timing of peak demand for charging of vehicles or charging of heat storage units was likely to avoid much of the conflict with peak demand for other purposes in the early mornings, late afternoons and early evenings. There does not have to be a problem. Clearly the more need there is for intermediate charging of vehicles during the day the more likely there is then to be a conflict with, say, industrial demand, but that should be manageable given sufficient capacity in the system and flexibility to provide it where it is needed.

Q58 Judy Mallaber: So you are saying electric fires, for example, will not create a particular problem in terms of managing our energy needs? Are you saying that we do not need to have anything else within the NPSs that we have got at the moment because it will sort itself out?

Mr Bocking: I am not sure that it necessarily belongs in the NPSs given the nature of urban development in the UK as compared with the Continent where you have much more dense populations in multi-storey dwellings compared with the UK with rows of houses or smaller units. Clearly the potential for schemes such as are going to be referred to the IPC to contribute significantly to improving the use of surplus heat from this plant is not going to be as great and, therefore, maybe the schemes which can contribute most in terms of heat supply are going to be of a smaller nature. Important in total, hopefully, but the individual schemes may not be those which are then referred to the IPC, particularly give that some of these larger schemes are going to be situated around the periphery, say closer to fuel sources, closer to the coast for cooling water or whatever the sitting criteria are.

Mr Coakley: What I was referring to in particular was the fact that we need to be looking at 30/40 years into the future on the design horizon and if we are saying we are going to have a carbon emission in this country of a certain amount and are going to decrease it to that amount we cannot be using gas-fired stations to deliver the electricity to deliver what we are saying the community will look like because the delivery process of that electricity will not deliver the carbon emission statements that we have made.
so far and, therefore, we need to be thinking of what particular generation capacity we are using for that design horizon.

Q59 Judy Mallaber: Is the requirement that developers consider the potential for combined heat and power within their applications strong enough? Would you like to see that strengthened or is that adequate as it stands?

Mr Coakley: That is a particular case in point to which I referred at the start in passing. I do not think it is strong enough at this point and, again, that is the spatial aspect of what these NPSs are omitting at the moment, it is not joined-up enough to require the developers and CHP potential for new plant to be all there at this stage. There are a few sentences about it but at this stage it is not joined-up.

Q60 Judy Mallaber: What would you like the requirement on them to be? How would you like that to be phrased?

Mr Coakley: More importance in the development of new infrastructure when we are looking at the positions of new electricity generating plants and how CHP can be used there.

Q61 Judy Mallaber: At what point would they be told they could not go ahead? When they are told they have to consider the potential, what would the criteria be that you would lay down that might stop it going ahead if it was not taken account of in an application?

Mr Coakley: I would actually put in the document that it was for the IPC to not allow that process to go ahead unless that waste heat has been used in that new infrastructure. CHP, for me, is a massive opportunity for us in new plant and new infrastructure around that plant. We have got to be careful that in existing areas it is a massive cost and burden on the community and the experience in Southampton is a case in point. The knowledge is there to incorporate what we have found out over the recent past on putting new CHP systems in place into these documents.

Paddy Tipping: Let us finish talking on carbon capture and storage.

Q62 Mr Anderson: In terms of carbon capture and storage, do you think that the Government has got it right in the fossil fuel NPS?

Mr Coakley: I believe that we should be saying more in the NPSs with regard to carbon capture and storage. I think it should be a document that looks more like the nuclear document. This is an opportunity to put more in here. There is an uncertainty about CCS and there is a lot of research and development still to be done. It has been done in bits in different parts of the world. We consider that it is there as an operable system but it is not, there is a lot to learn. I think that the NPSs could be used as a more fundamental guidance note for people to learn from and for the IPC to use and hit the developments with on submission. I think we are missing a point there.

Q63 Mr Anderson: Do you think there is more that could be done now because the whole point is this is a demonstration process?

Mr Coakley: Yes.

Q64 Mr Anderson: Obviously we will learn from the demonstrations, but are you saying there is enough information now to strengthen them already?

Mr Coakley: I do believe there is more that we can do with that part of the NPSs, yes, and this is an opportunity to do it as long as we do not delay the process of getting these NPSs into position because, I say again, the challenge we have got as a country is to start delivering some of these projects before we see the lights going off.

Mr Bocking: However, the priority is not only in terms of the NPSs but also other mechanisms to get the CCS proposals built. We need the prototypes and we need to test the technology, particularly if the UK wishes to have a role in supplying this technology. We had better all hope it gets built in some other places because if the Chinese, the Indians and others do not install CCS on their coal-fired plant, which makes anything we are likely to build look very small in comparison, we are going to have very little hope of achieving any global climate targets. There is clearly a significant need there and there is even significant market potential outside the UK. If we can get prototypes built here in the foreseeable future, preferably even alternative prototypes to assist in making sure that capacity is available, to assist in pricing and so on, that is likely to be very positive for us and the environment. If we do not then we lose out but others are going to be carrying on with it anyway.

Q65 Mr Anderson: Can you be more specific on what could be done now in terms of the NPS, or could you give us a note on that?

Mr Coakley: I would like to suggest that we work with you and give you a note on that outside of this particular meeting, if that is okay.

Q66 Paddy Tipping: That would be helpful.

Mr Coakley: If I can say one last thing with regard to the NPSs and CCS. For me, the NPSs are there to allow us to put these pilots in place. In China, for example, they have just gone ahead and started to build a CCS unit rather than going through all of the processes, so they are way ahead of us in the practical understanding and appreciation of this because their system allows them to do that. We need a system that allows these sorts of processes, but be supportive of developers.

Mr Anderson: Nationalisation!

Q67 Mr Weir: On the question of biofuel, you made the point that there does not seem to be any role in IPC in considering where the biofuel comes from. Do you think they should consider this in looking at the development of biofuel stations?

Mr Coakley: I do believe it is important that we do know where the biofuel comes from. It is all part of the cradle to grave process that we have put in place in our thinking processes. We must know where our
original energy source is emanating and what implications that has. We can talk about a number of faux pas that people have made in the past with not understanding that. Somebody recently told me that, for example, a 50 MW biomass unit running on timber, for it to be a sustainable forest needs to be the size of the Forest of Kielder and we do not have many Forests of Kielder in the UK and, therefore, we need to know where all of this material is coming from and the carbon implications of that process. Again, it is a holistic process. I would put it to you as an example in that way.

Q68 Mr Weir: That does seem to slightly go against what you said at the outset about the role of the IPC in considering carbon emissions.
Mr Coakley: Yes, I can stand to be corrected in that area.
Mr Bocking: The IPC will be considering generally environmental implications of such proposals and clearly it is going to be critical where the biomass is coming from because if you are carting it over unnecessarily large distances then the environmental effects are going to be unnecessarily adverse. You really need to be looking at proposals which are drawing the biomass from an immediate catchment area as far as possible, rather than further afield. If that is not happening, and that seems unlikely for market reasons because the cost of transporting over large distances is much higher, but if someone should be proposing it then it does sound like something which the IPC, if they are considering the application, should question.

Q69 Paddy Tipping: Thank you both very much indeed. Richard, I think you have promised us a note on CCS and what more needs to be done.
Mr Coakley: We will also come back with further partly detailed, partly supplementary comments.
Paddy Tipping: It is good of you to get here on such a difficult day. Something about the infrastructure must be right! Thank you very much indeed.
**Wednesday 13 January 2010 (morning)**

Members present:

Mr David Anderson  
Charles Hendry  
Miss Julie Kirkbride  
Anne Main  
Judy Mallaber  
John Robertson  
Sir Robert Smith  
Dr Desmond Turner  
Mr Mike Weir  
Judy Mallaber  
Dr Alan Whitehead  

In the absence of the Chairman, Dr Alan Whitehead took the Chair

*Witnesses:* Ms Jayne Ashley, Head of Sustainable Places, and Mr James Greenleaf, Senior Policy Analyst, Sustainable Development Commission, gave evidence.

**Q70 Dr Whitehead:** Good morning and welcome to our second session on National Policy Statements on energy. We have created a programme in the next few weeks, taking evidence and considering the six energy National Policy Statements that have recently been published, and it is a pleasure today that we have in front of us as witnesses the Sustainable Development Commission. I do appreciate, Ms Ashley, that you have very kindly agreed to come in place of an original witness and we are very grateful to you, and we welcome also James Greenleaf, giving evidence to us this morning. Perhaps you could formally identify yourselves for the record.

**Ms Ashley:** Jayne Ashley, Head of Sustainable Places at the Sustainable Development Commission.

**Q71 Dr Whitehead:** Well, we will have an opportunity to talk in more detail about some of those particular issues later on this morning, but I would understand from that immediate answer that you would not consider that the Infrastructure Planning Commission, therefore, would have the full information it needs from those NPSs in order to reach decisions as to whether to grant consent or not. Is that the criticism?

**Ms Ashley:** Yes.

**Q73 Dr Whitehead:** Do you think that at least the overarching Energy Policy Statement provides sufficient information to the IPC on overall Government energy and climate policy, or are there concerns in that area?

**Mr Greenleaf:** My name is James Greenleaf and I am an energy analyst for the Sustainable Development Commission.

**Ms Ashley:** Jayne Ashley, Head of Sustainable Places at the Sustainable Development Commission.

**Q74 Dr Turner:** You are clearly worried that the NPSs fall short in this regard and you obviously do not feel that they deal adequately on the face of the statements with the carbon reduction targets and the energy needs.

**Mr Greenleaf:** The overarching NPS is quite explicit in that the IPC should not consider CO2 emissions from the proposed developments because it will not affect compliance per se with the carbon budgets, but that is more of a technicality in terms of the carbon budget accounting in that the Government will look at actual emissions from projects covered under the EU ETS and compare that with the nominal allocation of allowances for the UK and, say, if emissions are greater than their allocation, then the participants are assumed to have purchased credits and, if they are lower, they are assumed to have sold them, and that portion of the carbon budget will be adjusted accordingly, so there will not be a compliance issue. The overarching point of the Climate Act is the 80 per cent reduction by 2050 and helping the UK to make a transformation to that with all the structural and technological changes that will need to happen to achieve that.

**Dr Whitehead:** Perhaps we could move to the question of establishing national need.
Q75 Dr Turner: Do you think it necessary that the NPSs, or at least the overarching NPS, should make an explicit statement about energy needs in relation to carbon reduction, and should it say anything in terms of the hierarchy of desirable technologies?

Mr Greenleaf: On the first point, at the moment the assumption is that the EU ETS will be the overarching mechanism and that is sufficient, but, given the work of the Committee on Climate Change recently, looking at what the UK needs to deliver the 2050 target, they have come back quite clearly and said that the decarbonisation of the electricity system will need to be paramount and needs to happen relatively quickly to achieve the long-term targets and also to allow emissions reductions in other sectors, so to actually achieve that the policy would need to be tightened.

Q76 Dr Turner: How great a problem do you think it is that the NPSs do not state this explicitly? Of course a key statutory consultee of the IPC will be the Climate Change Committee, so there is no reason to suspect that the IPC will be deficient in information at the time of considering an application.

Mr Greenleaf: Well, I think the issue is because there is no requirement on them to make the link to CO₂ emissions. They could not reject a project on the grounds of need because the CO₂ emissions would be considered. They could not reject a project on the basis because it is explicitly within the NPS that they should not consider that.

Q77 Dr Turner: So do you really feel that the IPC would be unable to do that because they lack information, because we know how many gas-fired stations have already been approved and are already seeking approval through the existing procedure, so these are known quantities?

Mr Greenleaf: I do not think it is a lack of consideration. It is more that the NPS says explicitly that they do not need to take this into account, so they could not reject it on that basis, even if they wanted to, and they have only information to hand.

Q78 Dr Turner: So you would be content then if the NPS made it explicit that a legitimate reason for refusal would be a conflict with the carbon reduction policy?

Mr Greenleaf: I think that would be more helpful and then I think there is then a need to define what we actually want to do in the UK as opposed to accepting the sort of EU ETS as the overarching instrument because, to me, what the CCC is saying is that we would need to tighten policy further and it may be in five years’ time that the policy framework in the UK and the EU is radically changed, but within the five-year period, if the NPSs were accepted as they are, you can have consent for an extremely large number of plants, even if they are not fully constructed, which would be in place for 20 to 50 years and would then make life far more difficult for the UK to meet its emissions targets.

Q79 Dr Turner: They have not done so, but it would be possible for the Government to counter that by arguing that, by not making it explicit on the face of the NPS, they allow the IPC to be much more flexible and responsive to changing circumstances?

Mr Greenleaf: But I think that the premise that the IPC use the NPS as their foundation for making the decision on it explicitly says that you are not allowed to consider CO₂ in the link to the carbon budgets, which means that they cannot bring that into their decision-making.

Q80 Mr Weir: There is just one point, that you mentioned specifically gas-fired stations. The overarching Energy Policy Statement makes it clear that any new applications for gas or coal stations have to be carbon capture-ready or they cannot be granted by the IPC. Does that give any solace that these will not go ahead without having carbon capture and storage and reducing the emissions?

Mr Greenleaf: I do not think that is a provision for gas at the moment, apart from the carbon capture readiness. For coal, as part of the Government’s demonstration scheme, they have mandatory CCS on a portion of it, but I think it is 400 megawatts at the moment, so perhaps a quarter of a typical coal plant.

Q81 Mr Weir: But my recollection of the statement says that the IPC cannot grant a new gas station unless it can be demonstrated that CCS can be fitted to it. In that case, if there is no technology, there will be no future gas-fired stations until it is demonstrated as being feasible.

Mr Greenleaf: Well, I think the carbon capture readiness constraints, as I understand it, they are more about, for example, having suitable land so that, if you wanted to retrofit a capture plant to a gas plant in later life, you would have the space to do it. It is less about the technology being approved at the moment because that is what the current demonstration scheme is for, to actually test the technology, but you could have a situation where, with the current demonstration scheme, CCS does not prove workable and then you are basically stuck ten years down the line with partially abated coal and partially abated gas.

Mr Weir: I think it goes further than that, from memory.

Dr Whitehead: Mike, perhaps you would like to take us through to discussing an issue that has already been raised, the question of spatial approach, in essence.
Q82 Mr Weir: You mentioned that, apart from in the nuclear NPSs, they did not deal with spatial issues. Could you expand on that and tell us in which way you feel that they should deal with spatial issues?

Ms Ashley: These infrastructures obviously are going to have to take up some kind of locality in the UK and we have limited land and we have limited space. Also, the different infrastructures need to fit together and will need their own supplementary supporting infrastructure which will fall outside the National Policy Statement process and fall into the town and country planning process, so, to make sense of the National Policy Statements as a suite, we believe there needs to be a spatial element to them. People will need some guidance as to where particular applications may be appropriate and then that will also help with the community engagement so that local communities who will be affected by these particular developments will be able to have some say and there will be an open and transparent engagement process with the community to gain support for this infrastructure being put forward.

Q83 Mr Weir: But is that not difficult to do at present? With nuclear, it is relatively easy in that it will probably be on existing sites if new stations are built, if they are ever built, whereas with other stations it is much more difficult to say at this stage where they are liable to be built. Would not putting any spatial element into these NPSs at this stage possibly undermine developments in the future?

Ms Ashley: I think that, without having any spatial element, it is very hard to engage people in this whole process and that is one of the critical weaknesses, we think from the SDC’s perspective, that there is in the National Policy Statements in the way they have been developed to date. With the nuclear, regardless of the policy, we think that is a better National Policy Statement because it has that spatial element. We know where this infrastructure is going to be produced and where it is going to be put down, so they engage in that whole process, and it will also help them to understand, so local authorities, for example, who are going to have to provide the supporting lower-scale infrastructure into that, they would have a clearer idea of the expectations on them, whereas at the moment nobody has a clue what may be put forward where.

Q84 Mr Weir: I understand what you are saying, that it is very difficult to engage people in any discussion when they are not sure where things are going to go, but, for example, with CCS plant, the spatial element will be very large because, if you have got a plant and you have got pipes taking it to somewhere that pumps it offshore, wherever, it is going to be very difficult to have a spatial element that makes sense, will it not, because these pipes could go over quite a substantial area?

Ms Ashley: I think that with some of the infrastructure it is more difficult than with others, but, if you are talking about renewables, there are certain areas where it would be inappropriate to put onshore wind, for example, but there are others where it would make perfect sense. It would just give people a clearer idea of what the national Government policy was, and it would also help developers. I think it would give them more reassurance that this had been thought of strategically. It is that element which is missing, we think, at the moment.

Q85 Mr Weir: The Royal Town Planning Institute and others have suggested that the NPSs should be tied to a national spatial planning framework. Do you agree with that, and what would be the benefit of that approach?

Ms Ashley: We have consistently supported the idea of a national spatial plan. One of the issues we think this would support is particularly around the biodiversity issue and probably environmental issues more widely. At the moment, a lot of these things are considered at a very local scale by the IPC when individual applications come in, but, if you think about some of the biodiversity issues, such as the Natura 2000 network, these are internationally important networks and they are nationally spatial for the country, so it is inappropriate, we believe, for the IPC to just look at the local impacts of a particular planning application on a nationally important network, but this has to be considered at the national strategic scale because it all links together to be able to function effectively.

Q86 Mr Weir: But how much detail on locations for infrastructure should be in the spatial network and how practical is it, given that you can see this beginning to move out and basically take in all planning because, if you are talking about the framework and the infrastructure, any development would need roads infrastructure, water infrastructure, whatever, which are currently under local planning and you can see this taking it away from local planning altogether if you take it to its logical extreme?

Ms Ashley: We appreciate that it is a difficult issue to know where to draw the line, but we still believe that it is important, even if it is some kind of very general zoning or something of different types of technologies across the UK. At the moment, it does not give anybody any further advice than they had before other than reading existing policy, so we think that is a missed opportunity.

Q87 Mr Weir: But, if you do general zoning, is that not going to rebound on the local impact just the same because, if people see a large zone, they are going to assume that that plant is in their area, where it might not be, so it could end up being counterproductive?

Ms Ashley: It has the potential to do that, but it also has the potential to encourage public debate which at the moment, we think, is very lacking from this whole process.
Q88 Sir Robert Smith: Just following on, does the Government have the resources in information to actually set in stone now the spatial aspect of these planning policies? Would that not be second-guessing where are all the applicants and how the market is going to develop?

Ms Ashley: I do not know if it has that information. I do not think that it is the role of the National Policy Statements to set things in stone, but you can always have fuzzy boundaries with these things and say, “It is appropriate to have this kind of infrastructure in this locality”, and it may be because it already links with existing infrastructure. It is not as if we have a blank sheet of paper here; we have existing infrastructure at the moment and we want to provide new infrastructure which, we understand and appreciate, is critically needed, but it does need to link up with what is already existing as well.

Q89 Anne Main: I would just like to probe those fuzzy boundaries because I was thinking of particularly my constituency where there is a railfreight terminal, a strategic one. Whilst I respect Mr Weir’s comments about taking everything down to the local level, I am assuming you are talking about more strategic direction, the integration of all the strategic ambitions for various large pieces of site or buildings or plants.

Ms Ashley: Yes.

Q90 Anne Main: If that were the case, do you think it would be then appropriate because, since you are looking at integration with other technologies and other strategic infrastructure, this could then be a common phraseology which could run through the National Policy Statements? Would you agree to something like that and, as you say, there is a sort of fuzziness there, so a common phraseology to consider spatial direction?

Ms Ashley: Absolutely, yes. One of the problems that we have now with the NPSs that are coming through, and it is just a fact of life because they are written by different departments and different teams in different departments, we have lost that integration and, for us, that was the great benefit of National Policy Statements. This is a huge opportunity to deliver critically needed infrastructure in an integrated way, using sustainable development principles and meeting carbon reduction targets and, without that interconnection between them, we have kind of lost that opportunity at the moment and we would like to see that brought back in.

Q91 Dr Whitehead: Bearing in mind the question of integration, how do you think the National Policy Statements should relate to other parts of the planning system, in particular, existing planning policy statements, regional local plans and so on?

Ms Ashley: This is something we have really struggled with, and I think it is part of the issue with the process at the moment in that it is very unclear how these all link together. In an ideal world, you would have a National Policy Statement which would set out your needs and then at the regional and local level, because you have set out that these are critically needed, you would then put in an application which tried to be compliant with the regional and local plans, but on the understanding that the critical need would override it on occasion, and then you would have to mitigate if it were overridden. At the moment, it is very unclear how these things all fit together. You could have the potential where the IPC approves some national infrastructure and then, when it gets down to the local authority level with the local plan, the essential infrastructure and the supporting infrastructure that is needed is non-compliant with the local plan and, therefore, does not go through. I think what Government needs to do is very clearly set out that relationship, and again that is currently missing.

Q92 Dr Whitehead: That would be in the form of a procedural note attached to the documents or integrated within the documents?

Ms Ashley: I am not too clear on that process. I am afraid, but yes, I think any guidance from DCLG which would explain to the planning profession and, particularly, to members when they are making their decisions at local and regional level how these things integrate.

Dr Whitehead: You mentioned the question of integrating the plans in terms of environmental policy and carbon reduction et al, and we would like to turn to that now, if we may.

Q93 Mr Weir: In your submissions, you have expressed concerns about how the carbon budgets are dealt with. Could you tell us how you think the NPSs deal with the carbon budgets and how should they deal with them?

Mr Greenleaf: As I mentioned before, at the moment there is an explicit assumption that they will not deal with them and that is written into the NPS. A preference would be to move away from the technicalities of the carbon accounting and to actually perhaps then take a view of what the power sector, given that it is the focus of the energy infrastructure NPSs, would be expected to deliver to achieve our 2050 targets. Again, there is a question here about whether Government accepts the CCC’s current recommendations or not about the speed of decarbonisation and, if they do, that would mean that the policy framework would need to be adapted. As part of that and linked to that, the IPC could then, for example, look at the cumulative emissions from a number of project proposals, ideally lifecycle emissions, taking that information from the information submitted by the developers in their environmental impact assessments and then, with the input of the CCC, look at how the trends from these new developments match with the overarching trends for the UK specifically with the power generation sector and see to what extent they either help us to move towards our longer-term goals or move away from them. That is what we would prefer to see.
Q94 Mr Weir: But is that really the role of the IPC? Are you not, in a sense, having two or three organisations doing the same work? Should that not be the role of DECC or the Climate Change Committee to show what our goals are and how we are meeting them? The role of the IPC is in planning matters, not specifically in carbon reduction. They should be looking at individual applications within it, but it should be up to the CCC or DECC to decide the overarching carbon emissions and how we are meeting these targets.

Mr Greenleaf: It is true, the IPC do have to look at cumulative effects, but it comes down to who has the decision-making power on applications. The CCC has separate budgets and they provide a monitoring role, but they then would not have the power to reject a set of applications if it meant that our long-term trajectory moved far away from our carbon budgets. They would, at the moment, be able to advise the IPC, but then the IPC would have to take that on board in terms of their own decision-making.

Q95 Mr Weir: Surely DECC and the CCC will be in discussion with the power companies as to what is necessary for these before the application gets to the stage of going to the IPC? No power company is going to put forward an application that is clearly going to be. I would guess, at serious variation with the targets for climate reduction.

Mr Greenleaf: It depends on the policy framework and the uncertainty going forwards. The investment risk for the power companies means that they will invest primarily in safer bets, so gas-fired generation rather than massive amounts of new renewables. I think it is just partly putting in the safety mechanism so that the IPC is specifically tasked, with the support of the CCC, to think about the link to carbon budgets.

Q96 Mr Weir: But would you then like to see a ground for refusing for the IPC, that it would lead to an increase in carbon emissions?

Mr Greenleaf: I think so. On a cumulative basis, they would need to take it into account because, if they do not take it into account and make that decision, you are relying on then the interests of developers individually for all that summing up cumulatively to actually meet our carbon targets, whereas developers are looking at their own roles within this and it is not the developers acting in harmony and putting forward their proposals together. It is the IPC’s role to sum all those up and put the cumulative effect across multiple project proposals.

Q97 Sir Robert Smith: Would that be summing it up across projects that went before the IPC and also other projects that were not in their remit?

Mr Greenleaf: Well, looking perhaps at the power sector, the majority of the emissions, because it is over 50 megawatts, will be related to what the IPC is dealing with. Obviously, there is a question about the sub-50 megawatts projects as well, but it is a smaller portion of that part of the emissions.

Q98 Dr Turner: You suggest a requirement for a carbon assessment of any individual project. Well, of course you would expect an environmental assessment in any event, and one logically would expect an environmental assessment to include an assessment of the carbon impact, so what actually is it that you are demanding in addition?

Mr Greenleaf: Well, I think it is for the IPC actually to do something based on that carbon assessment information because at the moment the information is provided, but they will not be able to use it on any basis because they are asked not to consider it.

Q99 Dr Turner: And, provided it was clear that they were able to make use of evidence of adverse carbon impact, would that satisfy you?

Mr Greenleaf: Yes.

Q100 Charles Hendry: Are you not opening up the whole process to a much greater risk of judicial review when you have not got an opportunity for people to say, “Look, you’ve made your decision, but, as the IPC, you’ve decided that it is not too serious in terms of cumulative emissions and, therefore, you’re going to consent it” and, therefore, there is a much greater risk that others will come in and say, “Well, actually we think it is”? There is a subjective element in here which could actually get the whole lot back into the courts, which is what we are trying to avoid.

Mr Greenleaf: I suppose the one way round it would be to look at the way you account for the power generation carbon budget explicitly. At the moment, because of the technicalities of the accounting rules and the link to the EU Emissions Trading Scheme and crediting and debiting accordingly, it means that it is a non-issue for compliance, but you could perhaps then state a path or upper and lower boundaries for what you want the power sector to deliver in line with the CCC’s recommendations and those would form a boundary for what the IPC takes into account.

Q101 Charles Hendry: But why do you think this is better than having an approach where you have got an IPC which does not look at those issues in the same way as you are suggesting? Do you not have a robust carbon price and then, if people build too many gas-fired power stations where the emissions are going to be above a level which is deemed to be sustainable, they will simply be unaffordable to run because the carbon price will mean that they cannot be operated? Why do you not use that and allow the market to decide how one then reaches the carbon goals?

Mr Greenleaf: In an ideal world, yes, the EU ETS in a more robust, stringent implementation could do that job to a large extent, but we do not have that at the moment. The UK has decided where it needs to go and it is much more rapidly in the policy framework at the moment, so it is actually using the IPC as a mechanism to help deliver that and that perhaps acts as a sort of protection barrier to prevent us moving away from that path.
Q102 Charles Hendry: But, if one had a floor price on carbon and there was, therefore, some degree of certainty about the robustness, that might help to provide that?

Ms Ashley: Yes, and we are not going to meet that if we just provide more infrastructure, so that almost, in some ways, makes it even more important that there is a big focus on retrofitting existing homes, so we are looking at heat and electrical demand within homes.

Q107 John Robertson: Can I move on to one of my pet subjects, nuclear. The nuclear NPS states that the plan has potential to have an adverse effect on the integrity of Natura 2000 sites, but states that this is outweighed by overriding public interest. What are your feelings on that, and do you feel that this demonstrates the right balance being struck between the environment and obviously considerations of need?

Ms Ashley: I think with some of these issues it depends on spatial location and this comes back to this issue where, in a lot of the cases, the environmental impacts of some of these infrastructure applications are focused far too locally when they need to be looked at strategically and because they are a national plan, so in the Natura 2000 it covers the whole of the UK.

Q108 John Robertson: You said that there is a variant and I got alarm bells ringing at that point. Are you saying that the local element is taken out or do you put the local element in? The strategic national term is for obviously the need to continue, to keep the lights on, say, so I am not quite sure exactly what you are saying here. Are you wanting to learn from the process so that we never actually get to decisions being made?

Ms Ashley: No, I think what we are worried about is that the environmental impact of a particular application is only considered as a local impact and it misses the strategic issue of, in particular, the Natura 2000 sites because it is an internationally important process and you cannot just look at it and say, “Oh, we’re going to impact on that one particular site” because that has a further impact on the integrity of the entire network.

Q105 John Robertson: Has the Government not really tried to reduce demand by trying to improve homes and the use of power? Do you not feel there has been enough done there? Is that what you are talking about, or do you think that maybe we should just cut off power occasionally and let people get on with it?

Ms Ashley: For one particular issue, I do not think there has been enough investment in reducing demand, even down to something as simple as retrofitting existing homes. If we could have a significant investment in retrofitting homes and reducing demand, that could have a more significant impact on our energy needs and may actually mean that we do not need as much infrastructure as we are currently planning to put forward.

Q106 John Robertson: Yet the forecast for electricity usage is on the increase, not decrease, in the years ahead.

Ms Ashley: Yes, of the appraisal of sustainability and its compliance with strategic environmental assessments. John?
Q112 Miss Kirkbride: Can I just take you back to what you were talking about with regard to demand for energy and just what your assessment is on that. Is it your assessment that, if we were to make the big gains that could be achieved in retrofitting houses and other easy hits on energy, the economy could then grow at the rate that the Government would like to see it, all of us would like to see it, growing at in the future, or do you also think that we have to look at economic growth as well as the easy domestic hits for sustainable energy in the future? I would like some kind of idea of where you are coming from on this.

Ms Ashley: If you take the nuclear power stations at the moment that are going through decommissioning, we understand that a lot of the infrastructure that we have is getting old and there is an assumption that some of this infrastructure will be replaced, but I think our position is that we are concerned that the automatic assumption that you get through reading the NPSs is we just need lots more infrastructure, whereas in fact we need perhaps to step back and say, “Okay, what is the need? How much energy do we need and are there other ways of meeting that need?”

Q113 Miss Kirkbride: And what is your assessment of that? How much energy do we need? Do we need as much as we have got already? Will we need more? How much will we get out of, as I say, the easy hits on housing? From your perspective, we need to know what you are really saying. Are you really saying that we have to cut the demand for energy and then we can really knock down on this NPS stuff, or do you accept that the economy should be allowed to grow and that we can get the benefits of energy reduction from other things other than the economy growing? That is where I want to have a feeling of where you are coming from on this.

Ms Ashley: I am not sure I am qualified to answer that one from my perspective within the organisation. We might have to come back to you with a written response on that.

Mr Greenleaf: In the case of overall need, it is being demand-driven which will then lead to projects being proposed, talking here about a new particular mix of technologies that meet that demand which are slightly separate issues. If we achieve greater energy efficiency gains than we expect in the shorter term, obviously the demand for energy will drop and the projects coming through will be far fewer. Then there is still a question within that of what mix of technologies should we use to meet that demand, so I think there are two slightly separate things there.

Q114 Dr Whitehead: We would be happy if you wished to provide an additional note to the Committee on that particular issue.

Ms Ashley: Yes, we could provide some further input to that particular question.

Q115 Mr Anderson: Can I ask just for clarification, within the NPS it states that the Government acknowledges that the plan has the potential for an adverse effect on the integrity of Natura 2000 sites, but that the overriding public interest takes precedence. Can you explain to me just the process of how you think the Government will have come to that decision, and is that challengeable in any way?

Ms Ashley: We were concerned, when we read that, that it was a very sweeping statement that all the nuclear sites were essential and, therefore, we could claim IROPI for all of them. We are not legal advisers, but I think that would need to be tested and I think that will be tested. That is quite a dangerous statement to make, I think, and a robust case to meet that statement is not made in the NPS at the moment.

Q116 Mr Anderson: If the case is not made, which it plainly is not, within the NPS, do you know if any real work is being done to justify this?

Ms Ashley: Not that I am aware of, no, and I think that needs challenging, if only just to draw that evidence out if it is there.

Q117 Anne Main: Just going back to what you were saying about managing need and knowing how much energy we have and we may not need as many plants as are being considered, do you think then, crossing your departments, that it would be appropriate for other strategic pieces of infrastructure to show how much they may be generating in renewables because, if other pieces had an obligation to show not only carbon footprints, but a carbon reduction strategy or an energy strategy, then they may be contributing to your energy management and, therefore, you will not need as many strategic gas plants or coal-fired plants as has potentially been thought about? Do you think that this idea that other strategic pieces of infrastructure should show essentially how much they have got in renewables on site, who has gone for solar photovoltaics on large pieces of roofs, do you think that that may be a way forward to ensure that not all the energy needs are being dealt with just simply through coal, nuclear and gas?

Mr Greenleaf: To clarify the question, you are talking about within the other pieces of infrastructure, ports and rail and so on, to integrate them in terms of actually putting energy on sites?

Q118 Anne Main: Yes, because you are saying you are not going to know how much energy you need and, if it is all going to be delivered all by energy plants, should they be part of the Policy Statements we talked about earlier, the fact that each big piece of strategic infrastructure or each major development has to show that it may be contributing to our energy generation and, therefore, the need would then decrease for more power stations?

Mr Greenleaf: I think that might be helpful, but I think that with probably the size of the infrastructure we are talking about in terms of incorporating some onsite power generation on the gas storage sites, that would be fairly small in comparison to large-scale generation.
Q119 Anne Main: I am just picking up on the retrofitting where you might say that each little bit might be more helpful than thinking of big pieces. I do not know where you are coming from on this.

Ms Ashley: We picked up on the combined heat and power, for example, which is mentioned in one of the NPSs and we would really like to see that strengthened so that with any major infrastructure that is taken forward it has a commitment that it has to have combined heat and power onsite, because it just seems a crazy—

Q120 Anne Main: That is what I am saying, so you would say for any major infrastructure, not just these?

Ms Ashley: Yes.

Mr Greenleaf: Maybe that would link to the sort of spatial and zoning element. At the moment, I think there is a requirement to look at CHP, but obviously, if it is not practicable, the IPC cannot reject it because you have not implemented CHP, but defining what that really means because of the difficulty—

Q121 Anne Main: But actively considered it, not just not done it.

Mr Greenleaf: Yes, of course, so then, if you link that to zoning where you would actually be locating it closer to sources of heat demand, then you might get some useful co-benefits there.

Q122 Dr Whitehead: Do you think any of these issues might be further clarified by being more specific in terms of both the overarching document and other documents about the aim for energy mix that the Government may wish to pursue, and is it perhaps not the case that the failure to provide such an aim could have implications for more specific elements as far as NPSs are concerned?

Mr Greenleaf: I think so. I think that is one of the central points. Obviously, we are not saying specifically you go down to X per cent of this and Y per cent of that, but actually to provide greater guidance and boundaries on perhaps the mix you are expecting. You are not going to have 100 per cent gas or 100 per cent coal, but there will be certain boundaries where you try for 10 per cent in each of them, an energy mix which would be more appropriate and allow you to meet your various targets and provide sufficient diversity in supply, rather than at the moment just leaving it to the other end which is that the market will deliver once we have some overarching targets for renewables, but that is renewable energy across the board, transport, heat, electricity and, even within that, we do not specify what we are expecting the electricity sector to deliver and, specifically, the Government has a lead scenario, but that should not be considered in what we are aiming for, but actually perhaps look at that and be a bit more specific about following that scenario with some boundaries, saying, “This is what might happen if we go either side of this”, and give a certainty to it.

Ms Ashley: That is what we were expecting from the NPS, much more strategic guidance on the energy mix, which would help us and developers as well.

Q123 Dr Whitehead: Would you, on the other hand, think that perhaps fairly prescriptive guidance on energy mix could produce problems in terms of how individual applications then might be progressed?

Ms Ashley: It is always a difficult balance, but, as it currently stands, the NPS just does not provide any guidance at all on the mix, and we think that is again a missed opportunity.

Dr Whitehead: Well, we have mentioned the question of the relationship of guidance and consultation and the extent to which the two sit well together. Perhaps we could turn to that.

Q124 Judy Mallaber: You have acknowledged in your evidence to the Committee, and you have said that you have pointed this out before, the difficulties of engaging the wider community, particularly because I think you have used the phrase, “with what may seem to many to be fairly abstract policy documents”, but, given that, do you feel that there has been as good an effort as possible to engage people through the consultation process? Has it been a genuine attempt to engage the public, given the difficulties that you have pointed out?

Ms Ashley: I think there has been a very traditional approach to community engagement, which we think is a disappointment. I am not aware of the details of how many people have attended various events and I know there has been a series of workshops across the country, but certainly I have been told that they have not been particularly well-attended. I just think it is perhaps not even the function of, say, a government department to go out and try and engage a community in a particular policy area such as this, but there are other organisations who are much more effective at doing that, and government departments have perhaps missed an opportunity in using those and mobilising them in order to engage with wider communities.

Mr Greenleaf: I think it is highlighted in the TCPA’s evidence that it effectively created one of the strongest planning regimes since the Second World War and the level of consultation and engagement to discuss that and approve it should be appropriate, but the difficulty at the moment is the level of documentation and the timescales and the limited amount of engagement that is planned by Government. I think they have got ten half-day workshops and a specific sustainable workshop, so it is very difficult, given the timescales, to effectively assess what is a very significant change.

Q125 Judy Mallaber: Do you think though that, if there were a broader, longer timetable, more people would have turned up? You have just said that maybe the traditional way of doing it is not the right way and maybe Government is not the best way of doing it. Does that mean they should have engaged some of these consultants and spent a fortune on people who know how to engage the community? How would you suggest they should have gone
about it and, if there had been a longer timescale and not the overlapping problems that you have talked about, do you think it would have made a blind bit of difference in terms of how many people turned up and got engaged?

Ms Ashley: Potentially, I think, it could have done. We have a very strong focus, as an organisation, on this idea of a participatory approach to engagement, very open and transparent. National Policy Statements have been in a drafting stage or have been thought of as a concept for around two years, so there has been a long time, whereas what we have done is a very traditional approach where departments have drafted documents, there have been iterations of those documents and it is only now that we are having a 12-week public consultation, whereas, if we had engaged with wider communities over that entire two-year period, we could have had much stronger and more robust documents which people would have bought into.

Q126 Judy Mallaber: And, in practical terms, what would that have meant doing because government departments are traditionally operating in certain ways? What would your process have involved, and do you think that the failure to do that means that they are not complying with the Aarhus Convention?

Ms Ashley: I think there is a genuine risk that they are not compliant with that. This is not something we have tested out and we are not in a position to say whether they are compliant or not, but we think there are risks around that particular Convention. It is not necessary to pay a lot of money to a big consultancy to do a huge national campaign, but they could even have just picked out little pockets of people and used some of the NGOs who are very passionate and active in this area and have very passionate and active membership and, I am sure, would have been very happy to engage in some discussion on these topics which could have been incredibly low-cost.

Mr Greenleaf: I think the RTPI suggested in their evidence that they could have engaged directly and indirectly by their networks of 35,000 around the country to start with to actually stimulate the conversation and engagement on this issue, if they had been given enough time to be able to do that.

Q127 Judy Mallaber: Those organisations themselves have known that these have taken place and, given that they themselves are actively engaged, could they not themselves anyway have started that process within their own organisations?

Ms Ashley: I do not think it is fair to say they have been actively engaged in what the NPSs were going to say. The NPSs themselves, the actual contents of those NPSs, most of these organisations have been excluded from that process until they have been produced for the 12-week public consultation, so it has been too late for that, whereas, if some of the concepts had been discussed at a much earlier stage, that is where they could have engaged and you would have had some useful input from them.

Q128 Judy Mallaber: What do you think are going to be the consequences of that?

Ms Ashley: Potentially, you are not going to get the public engaged until specific applications come forward. If the IPC are constrained where they have to approve the application because it meets the National Policy Statement as it currently stands, I think again you are going to have a direct action impact and you could have a public backlash on that. That is where not just your judicial review, but, as I say, the direct action would come in which would delay the whole process, whereas, if we had engaged all the way along, we could have overcome that. I think that is a genuine concern on some of these applications.

Q129 Sir Robert Smith: Earlier you said that obviously, if there had been a more spatial aspect to this, then they might have woken communities to the need to get engaged, but, in the absence of the spatial side, could the consultation try and come up with examples of the kinds of things that might be getting permission to try and stimulate people?

Ms Ashley: I think something like that would be useful because it is very hard unless you are really, really into this. Not many people are going to sit down and read the whole of the paperwork of the National Policy Statements; it is a massive amount of documentation. People need practical examples that they can understand, and it would help all of us, I think, to work through an application so that we can all understand how the IPC will work and what issues they will take on board, and none of that currently exists, as far as I am aware, so that is where you get into this abstract concept where people do not really understand what this process is going to bring about.

Q130 Sir Robert Smith: Also, is the timing a bit disastrous at the very tail end of a Parliament with its committees having to compress their own scrutiny because of the knowledge that Parliament is about to face an election and then with the whole hiatus of the new Parliament not being up and running?

Ms Ashley: It is another difficulty in that you are taking this evidence when the public consultation has not completed, so you have not got the full information from what might come forward, so that is another issue that you are going to have to grapple with.

Q131 Mr Anderson: Can I go back to the point which was raised earlier about the Aarhus Convention. What specifically do you think the NPSs may be in breach of?

Ms Ashley: Sorry?

Q132 Mr Anderson: Are there any specifics on what, you think, they may be in breach of?

Ms Ashley: The Convention requires active participation and access to environmental information. I am not convinced, and this is a very personal response, but I am not convinced that you could stand up and say that the correct
environmental information has been made available to people and that people have had an ability to participate in the development of this policy.

**Mr Greenleaf:** I think the main basis where you have the comparison is with the nuclear consultations where Greenpeace brought forward a judicial review and then DTI approached the SDC about an engagement process which would actually meet the Aarhus Convention requirements, but that was not imposed or was not taken forward or the full recommendations were not taken forward and the second judicial review was brought forward again by Greenpeace. I think that is probably something we would have to provide you with a bit more information on to understand exactly where it fell down the first time and the second time and how far DTI would have had to implement the SDC’s recommendations on engagement to not have reached that second judicial review.

Q133 **Mr Anderson:** On a similar line, the Government also has a cross-government code of practice on consultation. Do you think that this process fits in with that?

**Mr Greenleaf:** In one of the other pieces of evidence submitted by, I think it is, the Town & Country Planning Agency, they highlighted, is it, DCLG’s or then ODPM’s consultation documents or guidance that should be followed as part of this process, but it raised the fact that it was completely ignored, just did not come into play.

**Ms Ashley:** It was highlighted as a key issue in, I am not sure if it was the White Paper or the Climate Act, but it has not been followed through as the National Policy Statement, so there could be risks there.

Q134 **Dr Whitehead:** We would welcome a note, if you wished to send us one, on the question of the previous discussions and arguments about consultation on the nuclear White Paper, which it was precisely.

**Ms Ashley:** Yes, we set out a process which would have taken six months and the DTI said there was not time.

**Dr Whitehead:** Perhaps we could return briefly to the considerations in the nuclear NPS and particularly the question of nuclear waste.

Q135 **Mr Anderson:** In the White Paper, the Government said that, before development consents could happen, the Government would need to be satisfied that effective arrangements existed, and then in the NPS it says, “Having considered this issue, the Government is satisfied that effective arrangements will exist and, therefore, the IPC need not consider this question”. What do you feel about that?

**Mr Greenleaf:** I think we are very sceptical about that. In 2006, the SDC published quite a detailed review on the role of nuclear and the two biggest barriers with regards to that were the question of economics and also the nuclear waste question. We have not been able to look at that again in more detail since the waste White Paper, but we are not really aware of any substantial additional information to that. I think the issue at the moment is about what you would consider is tangible progress in terms of having a waste repository in place. At the moment, we have the *Managing Radioactive Waste Safely* White Paper and that is quoted within the nuclear NPS itself. It says the Government does not have a fixed delivery timetable. We could have a waste repository operational by 2040 and various other timescales with final disposal of legacy waste by 2130, but the report itself we do not think is sufficient tangible progress if you compare that to countries, such as Finland, where they have identified the sites, started the construction of a research laboratory, got three years’ worth of testing and they expect to be operational by 2020. Of course, there may be delays and that may not occur, but, taking a precautionary principle, you would want to be sure you are starting your way practically on the process that a repository would be in place, and we do not think that just having documentation in a White Paper at the moment really cuts the mustard on that. We would perhaps prefer that the Government had actually identified the sites. I know they are exploring the possibilities with local communities at the moment, but they have not actually identified a site and started some degree of geological testing because there is still a question about whether the sites that are selected would actually be suitable for the waste. I think, for us, at the moment we do not seem to be far enough down the road in terms of tangible progress to make the assumption that the waste repositories will be in place.

Q136 **Mr Anderson:** Do you think that the IPC should have a role in this?

**Mr Greenleaf:** I think so; it is another centrally important issue. If they do not take it into account at the moment, then where else would it be considered in terms of approving or not new nuclear plants?

Q137 **Mr Anderson:** So is there a doubt between what the Government said in 2008 and what the NPS is now saying that no real work is being done, or is it that there is no evidence that the work is being done?

**Mr Greenleaf:** I think it is more the evidence. The nuclear NPS almost quotes verbatim the White Paper, and the *Managing Radioactive Waste Safely* White Paper set out that there is not a fixed delivery timetable. We may have something operational by 2040, but there is just a question of whether that represents tangible enough progress to actually have a repository operating in a suitable timescale and, in comparison to other countries, we do not think that is necessarily the case.

Q138 **John Robertson:** You talked about the dates and such, and it would appear that you have some problem with the interim storage. Would that be correct?

**Mr Greenleaf:** With the?
Mr Greenleaf: I think the issue of interim storage, as it always has been, is a temporary solution. We are looking for a long-term, permanent solution and that has to happen at some point.

Q139 John Robertson: The interim storage of nuclear waste at the moment.

Ms Ashley: No, we are not saying that at all. What we are saying is that, as yet, we do not have one community that has volunteered to take this where the Government has said, “That locality is sensible and safe to put it there” and which has been tested, so we are just not far enough down the road, we do not believe, at the moment.

Q140 John Robertson: The Government have said that there is going to be a statement on this, and it was supposed to be before the winter and now they are saying it will be soon. When they make this statement, what would you like them to say in that statement?

Mr Greenleaf: As a starting point, to set out some kind of at least fixed timetable for the various stages, a point by which they would like to have engaged communities, identified the sites, a point by which they would like to have set up testing facilities and a point by which they have at least identified that the site would be technically suitable to develop a long-term repository there.

Q141 John Robertson: Do they really need to have testing facilities where these things have been tested in various countries, and really what we should be doing is rather taking something that has been proven to work and doing the same thing here? We do not have to reprove the technical aspects of storage, do we?

Mr Greenleaf: It is the testing of the local geology that would be different across different countries rather than perhaps the concept of sealing nuclear waste.

Q142 John Robertson: But that would be done anyway and there are sites which are volunteering already to have repositories within them. It is not like they are new sites; they are sites which are already being used.

Ms Ashley: Well, we do not have either at the moment.

Q143 John Robertson: But they would do that anyway. You would expect that.

Ms Ashley: But, as far as I am aware, all we have got are expressions of interest from a number of communities and those communities are represented by their local authorities. I am not aware of any particular engagement with the people who actually live in those areas, so we are still in a very vague position as to where these sites may be, and what we are saying from a precautionary principle approach is that it is inaccurate for the Government to say that this issue is dealt with, so, until we see some further evidence that it is being dealt with and there is a process for dealing with it—

Q144 John Robertson: So you do not accept that the Government has dealt with the issue and, even though they said that CoRWM has already put its recommendations up and that there are sites which, we know, will be coming forward for the repositories and that the Government will make a statement on them, you do not think, because they have not started the geological testing, that these sites exist or that they should exist?

Ms Ashley: No, the Government have said, so, unless a community comes forward to volunteer—

Q145 John Robertson: And is that not good?

Ms Ashley: No, I am not blaming the approach, but that is the approach that the Government has. That is Plan A and there is no Plan B and that is what the Government says, so, until a community comes forward to volunteer—

Q146 John Robertson: So you do not want volunteers?

Ms Ashley: No, we are not saying that.

Q147 John Robertson: You want the Government to impose it somewhere?

Ms Ashley: No, we are not saying that at all. What we are saying is that, as yet, we do not have one community that has volunteered to take this where the Government has said, “That locality is sensible and safe to put it there” and which has been tested, so we are just not far enough down the road, we do not believe, at the moment.

Q148 John Robertson: It sounds a bit like the chicken or the egg first. What comes first, the community or the site?

Ms Ashley: Well, we do not have either at the moment.

Q149 John Robertson: But we know there are areas that want to be involved in it and we do know that certain people have come forward to do it. Your argument, I think, is the point that it is geologically safe to do the repository in that place and have the communities been approached. Now, I have a different understanding about the communities in these areas, that they have been approached.

Ms Ashley: But the Government’s approach is that people volunteer and then they do the geological testing. Now, we just have not got to that stage yet.

Q150 John Robertson: Well, how do you do it in reverse?

Ms Ashley: No, I am not saying that there is a problem with the approach. I am just saying that the Government has not gone far enough down the line of its agreed approach yet to be able to say it can deal with it.

Q151 John Robertson: So the approach is right, but it is just not far enough down the road?

Mr Greenleaf: I think the important point to make for the NPS itself is that we are talking about new nuclear plants and new nuclear waste, separating this from existing legacy waste. Whilst there is an argument that it will add a relatively limited amount of additional waste where, over a fleet of 10 gigawatts, it may be adding ten per cent to the existing legacy waste, if we have not gone far enough down the line of actually constructing a process to
deal with the legacy waste, should we be adding to the problem already by commissioning new reactors?

Q152 John Robertson: That is a spurious argument. Waste is waste and we have to deal with it, and there will always be additional waste, no matter what, whether we build another nuclear power station or not, so it is not really much of an argument, is it?

Ms Ashley: Well, anything that you deliver using sustainable development principles, which is what we advocate as the SDC, would involve the precautionary principle and it would not meet sustainable development principles if you approved an infrastructure development that cannot deal with its waste.

Q153 John Robertson: But they will.

Ms Ashley: We have not seen evidence—

Q154 John Robertson: But they have to. We have not got a choice as we have waste which we have to deal with and, therefore, we have to deal with it, no matter what happens. Were we to close every nuclear power station tomorrow, we would still have to deal with the waste and the additional waste that will come from other areas.

Mr Greenleaf: Of course, but the complexity and cost of dealing with that is really still quite unknown at the moment. If we find out that even dealing with the legacy waste is so costly that we would not want to do that for a new fleet of nuclear reactors, that is part of the issue. The whole point of the NPS is that the Government assumes the issues will be dealt with, but we do not have enough evidence yet to show that.

Q155 Charles Hendry: Can I be clear about what you are actually advocating. Are you saying that no new nuclear plant should be approved unless a site has been identified and geological tests have been carried out on it?

Mr Greenleaf: I think it is about deciding how far down the process you want to go to show tangible progress and have a better understanding of how we deal with the waste and the associated costs. That is an initial suggestion, identifying the site and having done some geological testing which actually says, “This site is sound”, and we do not come back and go, “Oh no, there’s a problem. We’ll have to go and find somewhere else”.

Q156 Charles Hendry: But that is years of work, is it not? We are talking about burying things hundreds of metres underground. The sheer process of tunnelling that deep, if you look at the Swedish repository that has been proposed, the model repository there, that took them a decade to build. Are you, therefore, not just trying to knock the nuclear debate a long way off into the future by saying, “Look, we are setting a goalpost which is so high that you can’t possibly meet it”?

Mr Greenleaf: I do not think we have done enough on where the goalposts should be to actually specify it now. I think it would need to be somewhere beyond having a piece of paper and a report which says, “We are going to do this”, but to actually have some progress towards doing it. If you compare it to the situation in other countries, they are much further ahead.

Q157 Charles Hendry: Are you also looking at the potential for reprocessing because that reduces by 90 per cent the volume of the high-level waste? If that was to happen, then that dramatically changes the extent to the size of the repository. Is that something which you would take account of too?

Mr Greenleaf: Yes, of course you would need to take that into account. As I say, we have not done the work on that since the previous nuclear report.

Q158 Charles Hendry: I think we need something more definitive from you. It is quite vague how you have left it. You are saying that nuclear ones should not be approved until certain things have been met, but I think we are not clear exactly what needs to be met, so I think it would be very helpful to have a further note as to exactly what you are suggesting.

Ms Ashley: We can do that. I think overall our point is that in the statement in the NPS we do not see any evidence to support that statement and we would like to see that from Government.

Q159 Mr Anderson: It may be there. The evidence may be there, but you have not seen it.

Ms Ashley: It may be, but yes, we have not seen it.

Dr Whitehead: Well, Jayne Ashley and James Greenleaf, thank you very much for your evidence this morning. It will be very useful to the Committee in its deliberations, and we look forward to receiving those extra notes which you have kindly agreed to provide to us. Thank you very much.
Q160 Dr Whitehead: We are ready to undertake our second witness session. Welcome to our witnesses this morning. In the evidence session this morning we intend to focus on the planning framework, participation and environmental assessment because Friends of the Earth and WWF are also giving evidence in this afternoon’s session and that session will particularly look at energy strategy and technology-specific issues. That is what I hope we will be able to concentrate on this morning, but that should not of course constrain what you have to say to us this morning. So welcome to our witnesses and could you please, for the record, identify yourselves.

Ms Howie: I am Fiona Howie. I am Head of Planning and Regions, at the Campaign to Protect Rural England.

Ms Gottwald: I am Emmalene Gottwald, Senior Planning Adviser at WWF UK.

Mr Marsh: I am Simon Marsh, Head of Planning and Regional Policy with the RSPB.

Ms Luhde-Thompson: I am Naomi Luhde-Thompson, Planning Coordinator at Friends of the Earth.

Mr Michaels: I am Phil Michaels, Head of Legal at Friends of the Earth.

Dr Whitehead: Before proceeding I should mention, for the record, that I am a member of Friends of the Earth. I believe, Judy, you wish to say something.

Judy Mallaber: I am a member of Friends of the Earth. I may be a member of RSPB; I cannot remember. Everybody else in the country is, though!

Anne Main: I must declare that I am a member of CPRE and have been a supporter of Greenpeace.

John Robertson: Can I declare that I am nothing!

Q161 Dr Whitehead: Could I start with a very general process, and this is really for everyone to consider a response. Obviously, there is a process at which we are looking at the moment, an important part of the process, of examining the draft energy National Policy Statements before approval. Do you think, in general, that the Government should now formally approve those statements?

Mr Marsh: If I may speak on behalf of all of us, I think we would all agree that the National Policy Statements in their current form are not suitable for approval and we have particular issues about the inadequate consultation, scrutiny and environmental appraisal as well as the content of the NPSs, which I am sure we can discuss in more detail. It may just be worth saying that we have been working together on these issues for at least two years, since the Planning White Paper and before, and I think all of us would agree, in principle, that NPSs are a good thing and that there was a general consensus that that was so when the idea was initially raised and that by providing that proper strategic framework for the decision-maker, that by itself would achieve a lot of the time savings that were a criticism of the old system. I think we now find ourselves in the position that, having seen the draft NPSs, we are deeply disappointed with them both as planning documents and in terms of compliance with environmental law.

Q162 Dr Whitehead: Is that everyone’s view? Yes. Could I perhaps draw brief attention to the overarching Energy National Policy Statement, which I assume comes within the category of “disappointed” since you have mentioned all the NPSs, but perhaps you could reflect on the extent to which you consider that that does relate to other policies on energy and climate change and how that document then may or may not give the information to the IPC that it requires about those policies.

Ms Luhde-Thompson: We think that the NPS basically is failing to deliver on the aspirations of the Climate Change Act, so there is a risk that the NPS is going to lock the UK into high carbon infrastructure, and we are going to look at that in more detail, particularly on the Low Carbon Transition Plan and the assumptions that the Government makes about the EU ETS in the afternoon session when my colleagues Simon and Philip will speak a bit more about that, so I do not know if that is possible to discuss that then.

Dr Whitehead: Yes, we will raise a number of these issues a little later on. Indeed, perhaps I could turn to the nature of the NPSs as planning policy documents as particularly you have mentioned that.

Q163 Mr Weir: We had a long discussion with our previous witnesses about the spatial element of this and this is something that the Campaign to Protect Rural England has also raised. You have said that the NPSs have failed to outline the spatial planning approach which delivers sustainable development. Could you tell us what you mean by this and how they might be improved to take account of that concern?

Ms Howie: Absolutely. The role we see for spatial planning is to set out aspirations for place-shaping in the future, so over 15/20 years into the future, and it should set a framework for more coherent development to build towards that vision, and we feel that the NPSs, in their current form, have not achieved that. We are not saying that they should be site-specific necessarily, but what we feel needs to be improved is that there need to be more criteria to guide the decision-makers in ensuring that development is located in the most appropriate locations that are beneficial for economic, social and environmental reasons and away from areas that are seen, and are judged to be likely to be most damaging. Generally, the spatial planning approach certainly at the regional level, so the regional spatial strategies, soon to be regional strategies, set that kind of vision and are worked up over a couple of years. Working closely with local communities to understand what the local impact might be of the development that is believed to be needed over that time period and to try and work with them to get some degree, and of course you will never get total
agreement on where things should be located, but to understand what the concerns are and to weigh those against each other to try and ensure that development that is going to be there for decades into the future is in the best locations possible.

Q164 Mr Weir: But how far do you take that because, in earlier discussion with witnesses as well, with any development, they are not sure what type of development would be required in the future for energy in particular. All energy projects have a lot of infrastructure attached to them and are not necessarily covered by the NPS. The example of CCS, we do not know what pipes are required and how far they would have to go. In any other generation, there are always problems with power lines, as we all know. As to all of these problems, should they be covered by the NPS, or how do these fit in with other parts of the planning system?

Ms Howie: Certainly what we want the NPSs to do, more than they currently do, is to provide more of a linkage between them. For example, where someone is coming forward with a proposal that will require transmission lines, it needs to be judged, to as far an extent as it possibly can, holistically. Whilst we recognise that in EN5 they say, ideally, these plans should come forward with the transmission lines included in the application but it might not always be possible, there should be still a very clear steer in the documents that it does need to be considered, part of the implication of those transmission lines, even if they are not included in the application; it does need to be considered when the application is going through the IPC. Therefore, something we would like as a criterion, for example, should be that all power stations that will require transmission lines should, wherever possible, ensure that those transmission lines will not need to go through designated areas. We recognise that the documents do say that we should avoid it going through designated areas, but I think there still needs to be a much clearer steer that the most appropriate locations should ensure that that does not happen, and where an applicant brings forward a proposal that does not meet that criterion, they should be required to justify why that was not possible on this occasion to the IPC, and that should all be part of the consideration process.

Q165 Mr Weir: How does that fit in with the zoning approach because you could see a lot of developments where a power line or a CCS pipe, or whatever, will cover several zones travelling very long distances, and I am not quite sure how we link these all together without having a series of decisions by the IPC?

Ms Howie: Absolutely, things that cut across the country are of course going to be difficult to ensure that the full implications of them are considered, but I think what we are advocating is that the IPC at least tries to take that into consideration. Zoning of the transmission lines is of course difficult and that is where the idea of criteria and saying that, as far as possible, they should not be located here or they should avoid these designated areas, for example, so it is trying to give that national steer without going into the detail which of course makes it far more difficult to get a consensus on at the national level.

Mr Marsh: I think this relates back to the question of the spatial expression in the National Policy Statements, that actually, if you adopt a purely criteria-based approach and you have no spatial awareness, you run a much greater risk that developers will bring forward schemes in inappropriate locations or inappropriate routes that will just get refused by the IPC, and that does not really serve anyone. Having a greater spatial expression in the plan gives developers a degree of certainty about what is going to be appropriate and, we think, would be very helpful.

Q166 Mr Weir: The nuclear plan has a spatial element because we are fairly certain where the new nuclear plant is likely to go. It is much less certain with other generating capacities, and I wonder how, at this stage of developing the plans, we can introduce that spatial element without the Government effectively saying, “We will designate an area as being the area for CCS” or the area for gas stations, or whatever.

Mr Marsh: Yes, I think that is so. We are not saying that the National Policy Statement should be prescriptive, it would have to be relatively broad-brush, but I think we already have a certain amount of information about the types of developments which are likely to come forward and we know that people are already talking to the Infrastructure Planning Commission about schemes which they wish to bring forward, so I think, as the SDC said, we are not starting with a blank sheet of paper; we actually have quite a lot of information about what is likely to come forward.

Q167 Mr Weir: So you would see the Government, for example, saying that the areas that are likely to be for CCS will be developed and will be set out in the planning framework within the NPS? Is that the position you would like to see, effectively, saying now where these developments are likely to go?

Mr Marsh: I think for any infrastructure type, and obviously it has happened with nuclear because sites have been identified, but for other infrastructure types, the NPSs could give a greater steer on the kinds of locations in maybe different parts of the country where those would be most suitable.

Q168 Mr Weir: From the planning perspective, what is the impact of the NPS assertion that there is an unlimited need for new generating capacity?

Ms Howie: I think it makes planning fairly difficult. I know that you have covered it quite a lot with the SDC before us, but, because it creates a strong presumption in favour of development because there is a national need and, therefore, the national benefit is very great, we fear that it is effectively saying to the IPC. “You should do this unless there are really, really strong other issues, and even those”, based on what is currently said in the NPSs, “we think you
should not give much weight to anyway because there is the national need that we have already proved in the EN1”. Certainly, we are concerned that the balance, and this is really an important job for the IPC, that needs to be given to looking at the national benefits and weighing them against the local impacts, it is a really tough job and at the moment, with the current focus, the assertion of unlimited need, we think that that is just going to be steam-rollered through and it would be very difficult for the IPC to actually say, based on these criteria, “We are not going to approve this development”. Mr Marsh: If I may say, it is a very unsophisticated approach to need. It simply says, “We need more of everything pretty much anywhere now”, without attempting to say, “How much do we need and what parts of the country might we need it in and in what particular sectors would it be needed”? That, would be, I think, more helpful.

Q169 Mr Weir: I take it from that that you do not think there is sufficient clarity in the role of the local impact assessments in the whole process and you feel that the national need is just going to steam-roller over everything?

Ms Howie: We certainly feel that there is not enough clarity at the moment in the role of the local impact assessments, both in the National Policy Statements and more generally. We are disappointed that the Government have not brought forward more guidance on what should be covered to help the local authorities understand what they should be putting in those documents and how that should be weighed against things, and we certainly feel that those should be critical. The IPC is about to start actually considering applications in March and we still do not have guidance on that, and we really think that is a huge worry, to be honest, the kinds of infrastructure that you mentioned just now, so, through guidelines in terms of the closeness to existing transport infrastructure might be an example, to try and minimise the associated development that is needed for a new site”. No, I think directing it towards the most appropriate location does not necessarily mean that everyone will think it is a free-for-all. I think that at the moment it is a free-for-all for the developers to bring forward proposals.

Q170 Mr Weir: I can guess the answer to my last question. Are the NPSs fit for purpose as planning documents?

Ms Howie: No. In the light of our concern about both the guidance they give to the IPC, the guidance they give to local authorities and the guidance they give to applicants, no, we do not feel that they are currently fit for purpose.

Ms Luhde-Thompson: Can I just add a bit to that. Essentially, they are not fit for purpose as planning documents because neither have they been tested or examined as a planning document which has been in the existing planning system. The point on the future pathways for carbon emissions is also very unclear. There are no safeguards in these documents in terms of planning, they do not require the carbon assessment of projects, and we also feel that, because they have not been properly subject to Strategic Environmental Assessment, obviously they are not fit for purpose at the moment.

Q171 Charles Hendry: Can I explore a bit further on the spatial issues. Is there not a risk of planning blight as a result of developing this further? On the nuclear plants, we know that there is only going to be a relatively small number and it is pretty clear where those are going to be, but would it not be necessary to identify huge parts of the country as being potentially suitable for large wind developments and large parts of the country for CCS or for gas facilities, and is there not, therefore, a risk that you would blight huge parts of the country where there may never be a real intention to develop?

Ms Howie: I think at the moment, because the documents do not give any steer on appropriate locations, but do assert a severe need, then that is almost the situation we are in at the moment. We feel that the benefit is to give a steer towards appropriate locations. It does not necessarily have to be zones and it might just be, “These are things which must be avoided and these are the things, ideally, near to existing transport infrastructure might be an example, to try and minimise the associated development that is needed for a new site”. No, I think directing it towards the most appropriate location does not necessarily mean that everyone will think it is a free-for-all. I think that at the moment it is a free-for-all for the developers to bring forward proposals.

Q172 Charles Hendry: Could you do that more through guidelines in terms of the closeness to infrastructure that you mentioned just now, so, rather than actually having a map of the country where you say, “These are areas where we think they should be considered”, to go more to the guidelines?

Ms Howie: I think guidelines and guidance, certainly the CPRE feels, might be the best approach in light of the fact that zoning may be incredibly controversial and take a huge amount of time, but yes, I do think that the NPSs are the right place to have that guidance and that steer for those making the decisions.

Mr Marsh: But I think we would feel that maps may be helpful in some circumstances and that some developers find them helpful because they give them certainty about where investment is likely to be appropriate.

Q173 Dr Whitehead: Could I clarify the nature of your views on the question of unlimited new generating capacity. You have mentioned that it would be a good idea to have some view of constraint on capacity and what capacity is needed in the NPSs. Does that include the question of a concept of energy mix and how that might then feed down into the planning system, so would you have two axes of the total requirement likely to be needed as far as energy is concerned and then, within that, the mix of energy that might be preferred?

Ms Luhde-Thompson: Simon is going to talk more about this this afternoon, but just briefly, we think that there are three ways that the NPS could have a
look at the climate change issue in more detail to give better guidance. One is the future pathways issue, so where we are going and how we are going to meet the aspirations of the Climate Change Act. The second thing is to have some policy safeguards in, so these are where there are right mixes of technologies that will deliver what we need to do in terms of reducing carbon emissions and there are going to be some wrong mixes. If the IPC has clearer guidance on what the right mixes could be, then they have a much better basis and ground on which to make decisions, which is obviously helping them at the moment, but I feel that they are not really being helped at all in terms of guidance and which projects to approve and which not to approve. In order for the Government to have an idea of the Committee on Climate Change to keep track of what is actually happening in terms of carbon emissions, you would need to have a carbon assessment for each project, and that would be information that the IPC could then give to the Committee on Climate Change and there would be a method of finding out what is happening.

In terms of timing, the really important issue is that the IPC. I think, has 55 applications before it at the moment and some of these applications are going to be around for 20/30 years. We have an issue with that in that the NPS is only looking at certain timeframes and the timeframes do not match up with how long the lifetimes are of the projects that are being approved, so you have to look at that in much more detail, I think, because the implications of the IPC’s decisions are otherwise going to draw us away from where the Government might want to go in terms of reducing emissions.

Dr Whitehead: We have not particularly touched on this so far, but certainly in evidence the RSPB raised issues about the timing of the consultation period and indeed the whole process of consultation within these proposals.

Q174 Sir Robert Smith: I wondered if you could maybe outline your main concerns about the way that DECC have handled the consultation on the Energy NPSs.

Mr Marsh: I will defer to my colleagues on this one!

Ms Luhrde-Thompson: Well, we have a couple of issues about the consultation process. I can use the example of Hartlepool, if you do not mind, which is that the NPSs were published on the Monday and the consultation was then happening on the Thursday, so that is not really enough notice for people. It had been published in the local authority magazine in November, but of course 9 November was when it was published. You need to give people notice, people are working and you have to have time to go to an event like this. That is what resulted in not a lot of people going and, having spoken to some people there, there is quite a lot of concern about that and how the local authorities responded, but essentially we are just running out of time to have a good consultation process. People are very concerned that they might be inputting into the consultation process, but you are not going to look at what they are saying, so those things are not going to be considered when you make your recommendations in your Report. The other issue is, does the Government have enough time to consider these consultation responses and actually think about them properly and make a difference or change parts of the NPS, because otherwise it just looks like it is lip service and it is not that actually people are being listened to about their concerns about what might be in the NPS. The General Election obviously and the timings have made it quite difficult, but, I think as the SDC mentioned earlier, these have been in drafting for a long time, but basically they have been drafted without public input and without people discussing it at any point. I think with the site-specific NPS, it is even more problematic because essentially you are deciding on a site, but you are just asking people to write to an email address saying what they think, whereas normally you would have some kind of hearing and people would be able to come along, say their piece and discuss why it is going to be there and feel that they have actually had some input into that decision. We really feel that there should have been some sort of consideration of that and some kind of arrangement made for that, particularly on that site, but again, with all planning documents, not PPSs, but local development frameworks, local development plans, regional spatial strategies, you have an examination where people can come and object and that sort of thing.

Q175 Anne Main: You said previously that, if this were any other form of application, people could go along and have their say. Are you concerned that maybe under the new proposals there is not enough rigour being put on the system to ensure that, if alternative sites were more appropriate, that could be challenged? It seems to me at the moment that you have not got a lot of criteria on which to judge a site, maybe even the number of the workforce that can get there in a green fashion or the availability of workforce. It seems that, if you have not got a list, if the specifics are not there, it may be that you cannot argue that one site is not the most appropriate because another site might be more appropriate. I do not know how specific you would like this to become now.

Ms Luhrde-Thompson: The thing is that the NPS puts a lot of issues in and it says, “Right, these can no longer be discussed at inquiry because we have talked about this in the National Policy Statement”, but how much talk has there been about the National Policy Statement if you have had a very limited consultation period and parliamentary scrutiny rather than an examination which a planning document might usually be subject to. I think that is a real concern because then do your documents have credibility, is there public legitimacy, have the issues been properly tested; all these questions are then raised.

Ms Howie: I think it is also worth mentioning, and the SDC mentioned it and we feel it, that time and time again of course, because planning is seen as a
Ms Howie: and what do you think could be done now to engage your own members in this limited period, campaigning groups, so how have you tried to Q177 Sir Robert Smith: Obviously, you are likely to lead to legal challenges on that issue. There is a range of other legal di
station on their site, and that certainly, in my view, is on whether or not there should be a nuclear power processes. I do think that these are national debates, so lots of people will not feel the need to engage until local applications come forward, but I really think that there must be an emphasis on trying to get these NPSs right and trying to get local people to buy into these national policies, and that will hopefully reduce the numbers of problems that happen further down the line when applications come in and the number of objections to the specific schemes so that people believe that this is the right national strategy for shifting us towards a low-carbon future and delivering the energy infrastructure that we do need in the future.

Q176 Sir Robert Smith: Mr Michaels, you are on the legal side of the Friends of the Earth. If there is not a proper consultation, do you see any legal challenges coming forward?

Mr Michaels: I think I can see a range of legal challenges arising both out of the designation of the NPSs themselves at this stage, and then further down the line in terms of the nationally significant infrastructure projects that come forward. I think that some of those legal challenges will come out of the inadequacy or the inability of people to test whether the location is the correct one at a stage when they can be meaningfully involved in the process because, as Naomi said just now, what we have is a situation where the key decisions as to where nuclear power stations are going to be are being made now by the Secretary of State following parliamentary scrutiny, but without any opportunity for those who are going to be very directly affected by a power station on their doorstep having the chance to be engaged. Then, when they are given the chance to engage, they will be able to comment on questions of insect infestation, for instance, but not on whether or not there should be a nuclear power station on their site, and that certainly, in my view, is likely to lead to legal challenges on that issue. There is a range of other legal difficulties, but I think we might come on to them later in these questions.

Q177 Sir Robert Smith: Obviously, you are campaigning groups, so how have you tried to engage your own members in this limited period, and what do you think could be done now to improve the process even at this late stage?

Ms Howie: At CPRE, we have 43 county branches, so we would normally communicate to them and then they filter back, so we have circulated summaries of the NPSs and asked for feedback. We also held a seminar to get our members to come in to discuss it, where unfortunately, due to the snow, we had slightly fewer than we had hoped. Also, it is worth mentioning that to fit it in with the timing of the consultation process, we had to hold it on 6 January which of course is never going to be hugely popular timing, so, although we had a 12-week Government consultation running across Christmas, which made it more difficult as well, we have tried to get certain technical input to our evidence and to our more detailed response which is going to DECC from our members. From the point of view of improving it, I do not know the details of the nuclear events, but I believe that the five half-day seminars that DECC have run have all been in the day, and just simple things like perhaps holding some in the evening so that people that are at work could come and attend. The idea that people are going to take half a day off work, I think, is slim to come to one of these meetings, and certainly at the London one there were a lot of policy people from lobbying organisations, but perhaps not some of the people that we are really trying to engage in this process, so I just think more thought needs to be given to engaging people rather than just stakeholders.

Q178 Judy Mallaber: Just following up directly on that, do you think it is actually possible to involve people outside the lobbying organisations and the interest groups which are already focused on it. I know that, even when you have had a consultation on a local plan in the past which might have more specific points in it, more concrete than this, it has been difficult to get engagement until the point at which there is actually something on your doorstep. Is that a feasible objective?

Ms Howie: I think that, in order to get ‘normal’ people, if I can use that term, rather than people that are from interest groups and active members of those interest groups perhaps to engage in the process, what we and the Government need to do is clearly articulate the long-term implications of these policies. I certainly know that CPRE could do that better, but I think also that there is a role for Government in doing that, in actually explaining that, once designated, these NPSs will set a framework for our energy policy for the future and actually that, I think, will certainly encourage more people to sit up and take notice and actually try and understand what the implications might be. I think it would be difficult. I certainly agree, because some people will not be interested until local specific applications come forward, but I think that, if we could explain what these documents are aiming to achieve and what the framework they will create is and certainly with regards to the Planning Act if we were able to generate a lot more interest amongst the public by explaining the new planning system which will decide where power stations are going in the future: more people sit up and do try and understand the intricacies of what is being proposed.

Q179 Judy Mallaber: Government departments tend to be terribly traditional on how they go about doing things and talking to the public. Do you not
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think there might be a danger that, if they engaged in a more pizzazzzy process that did grab people, they would then be immediately subject to criticism from political opponents as to why they had wasted a lot of money on advertising and promotion?

**Ms Howie:** I think there certainly needs to be a balance. I do not think people should throw money at it to try and achieve that aim, but I think there are clever ways of doing it. I know that there is work in planning aid to try and reach some traditionally harder-to-reach communities there, but I do think that there would certainly be an argument that the Government could use to say, “This is a really critical important policy. It will reduce the costs to the Government if it cuts down on opposition to local plans and, therefore, we did this analysis so that we could justify spending this much money on ensuring that we get this document right, and part of getting it right is engaging with communities”.

**Mr Michaels:** I think it is worth saying that everyone accepts that this is a difficult issue, engaging people on something that is at a pretty high level and, to some extent, a level of abstraction, but the Government has done it in other cases. If one looks at, for instance, the GM debate that was organised a few years ago, I am not saying for a second that that was a perfect process, but what the Government did there was it took a major environmental policy that did not have immediate direct effects in specific locations, so you would not get people automatically involved, and arranged a series of fairly creative ways of bringing people into a debate so that they could get involved in hearing views on different sides, sharing their ideas and helping to shape the process going forward. It took some time, not a huge amount of time, and it resulted in a pretty powerful piece of analysis that helped the Government shape its policy. That is the sort of thing which I think could be a model for the type of engagement that could happen with National Policy Statements on energy now.

Q180 Miss Kirkbride: I do not disagree with your desire to engage the public and I happen to think it is more difficult than perhaps we are getting into the detail of here. For example, I suspect the 35,000 responses on the Southwest was because they could see that houses were going to block their view, and that really motivates people in a way where with broader national statements, you can forget it because they are too busy and they have got other things to do. I was wondering really whether, even amongst the panel, the reality of real engagement might cause some disagreement because I would hazard to say that the location of a power station will be less controversial than the location of a wind farm, which will really wind up your members big time. Therefore, if you were more specific about what was really going to go on and what really the implications of these National Policy Statements are, then presumably your members would be going mad. I am not sure about the RSPB, I am not sure where we are on wind farms with RSPB, but our friends from Friends of the Earth will be going, “Yes, that is great, that is fine. The whole of Wiltshire, Surrey, Suffolk, Yorkshire, whatever, that is how we are going to make a clean energy statement”. Would you really want this revolt from the shires that you are going to get if you go down the road you are talking about?

**Mr Marsh:** I think we would all agree that getting the public engaged in any form of development, whether pro or anti, has to be a good thing and that clearly to generate the debate and interest and to have that discussion is a very positive thing. I think our positions on wind farms are probably not as far apart as you might think, but maybe that is another subject.

Q181 Miss Kirkbride: Really?

**Ms Howie:** Absolutely. Yes, quite often, certainly for the CPRE, the location of renewables is a controversial issue, but that is why I think in the national guidance there should be criteria for locating them towards generally the best and the most appropriate locations, so away from designated areas would be something that we would like to see and to where they can link sensibly to the grid and things like that. Actually having that debate would, I do believe, hopefully reduce the general controversy around that issue. I do not know if people will have seen it and I can pass on the reference if you would like to look at it, but the University of Manchester did a report called Beyond Nimbyism which they published last year, it was funded by the ESRC, and they actually concluded from that that, through a variety of methods, they engaged over 3,000 people and found that only two per cent were classic Nimbys, i.e. they, in principle, supported renewables, but refused to locate them anywhere. Actually what they found was that a perception that developers had listened to people actually made people far less likely to oppose the scheme. They just wanted to feel that they had been engaged in the debate and that actually the overriding decisions were taken into consideration, but were still to locate whatever technology it was in that location. I think it is very easy to say, “We should not discuss it because we will never get agreement”—

Q182 Miss Kirkbride: I am not saying that.

**Ms Howie:** I do think that is quite often said, so people avoid trying to set out this energy mix, but I do think that the majority of people are coming round to this idea that we need to move to a low-carbon future and we need to have this very tough debate of, “If you do not want that technology in your area, what technology will you have?” and to have that discussion in a more open manner than I think the NPSs have done to date.

Q183 John Robertson: I am a Member of Parliament for an inner city seat and it covers various kinds of people, mainly on, shall we say, the poorish side of
Ms Luhde-Thompson: Friends of the Earth’s opinion is that the planning system is a way to mediate these really important decisions that affect a lot of people and—

Q187 John Robertson: For five years, six years, seven years?
Ms Luhde-Thompson: No, it is not about time necessarily.

Q188 John Robertson: With the best of wills, if we are asking companies to invest billions of pounds of money into the infrastructure of this nation, then five, six or seven years is a long time for these people because they will go somewhere else and spend their money.
Ms Luhde-Thompson: Of course, so what we are saying is that the NPS process of consultation, we do think there should be a time limit, it is not an open-ended process.

Q189 John Robertson: We accept that.
Ms Luhde-Thompson: So that is fine and we are all agreed on that. We just think that there should be good consultation so that people have the proper amount of time, they are given enough notice, so four days is not really enough, to be able to say, “Okay, this is what I think about this, that and the other.” The second thing is that, when you go into a public inquiry, the new public inquiry system under the Planning Act reduces the rights of people to participate; it is a different system. We met with Sir Michael Pitt recently, in December, and we took community representatives, and they have all been involved in public inquiries, so somebody who had been involved in Thames Gateway Bridge, Birmingham Northern Relief Road, Terminal 5, dare I mention it, and Mersey Gateway Bridge. Now, these people, when they were involved in the inquiry, had fantastic local information. One of the ladies was retired, one of them worked full-time and they were giving up their time because they were really interested in the issues. For instance, on the Birmingham Northern Relief Road it was actually the objectors who brought up the concept that perhaps the hauliers should not have to pay a toll on the M6 toll to reduce congestion and to make air quality issues better in central Birmingham. That was not brought up by the hauliers or by the people, so they are able to bring this great information—

Q190 John Robertson: We do not need any more examples. Friends of the Earth are happy with the old planning process and, “We have not changed anything and we are very happy that it might take five or seven years for projects to go through the planning stages.”
Ms Luhde-Thompson: No, correction. We think that the unified consent regime is an improvement on the system. What I was just talking about was people’s rights to participate in the process because we do not think that the causes of delay are actually people—

Q184 John Robertson: You are either deliberately or not answering the question that I put to you, and that is that the planning process has been misused in the past and that bodies such as your own have deliberately used it to obstruct any kind of investment.
Ms Howie: No. I would say that we have not deliberately used it to delay or prevent investment.

Q185 John Robertson: And yet all the other people are saying differently.
Ms Howie: Well, I would say that we have tried to ensure that, when applications come forward for a major development that will have long-term implications on sites, on jobs, on whatever, it is located in the most appropriate place and it is the right development for that site, and we need to consider social, economic and environmental issues in considering those applications. Whilst I recognise that your constituents might prioritise—

Q186 John Robertson: I would accept that, but you have just said that two per cent of the population were returning returns and that turns out to be 1.2 million people, if you consider that the country is 60 million people. You do not think that is an awful lot, so perhaps somebody else could come in and try and answer about the planning situation that we have had over the years?
Q191 John Robertson: You cannot really force people to take part in a process.

Ms Luhde-Thompson: Of course not, but you have to make sure that they have the opportunity.

Q192 John Robertson: With the best will in the world, I try to get a message out to my electorate and people might not take my message. The amount of people who say to me, “Well, we never hear from you and you’re never in the papers and you’re not on television”. Well, with the best will in the world, I cannot get on television and I cannot get the newspapers to take my story. How far down the line do you go to try and involve people in consultation? Eventually you have to draw the line and say, “I have told you about it, you have not taken part in it, so what more do you want?” It seems to me that what I am hearing today is that it does not matter how much the Government would do anyway because it would never be enough. Now, people would say that that would be the case with anything, but I am not getting any feedback that you are willing to, shall we say, contribute to the consultation rather than just object to it. That is the feeling I am getting. Emmalene, we have not heard from you; how about saying something?

Ms Gottwald: I think that the consultation issues are difficult ones and it is difficult for us to sit here and say to you what would be an absolutely perfect consultation process because it has to be different in each case because you have to take into account, firstly, what you are consulted on and also the people you are actually consulting. One of the issues that we are saying here is that there has been evidence in many situations, not just this one, that the Government is taking the bare minimum approach to consultation and we are concerned with that.

Q193 John Robertson: Who says that?

Ms Gottwald: We do.

Q194 John Robertson: But I would say they have not.

Ms Gottwald: Well, we would disagree then because, as has been mentioned on many occasions today both by the SDC and ourselves, this has been a concept in the making for a couple of years, if not longer, now. We have known about this process for a very long time, but there has not been sufficient early engagement, not just with us as stakeholders, but also with the public generally on these concepts, and we have tried to push the Government to do that and we have tried to meet with them too.

Dr Whitehead: I think we have gone down this route as far as we can this morning. We need to spend a little time on talking about environmental assessment and habitats in relation to NPSs, in particular the question of the appraisal of sustainability.

Q195 Dr Turner: Your organisations have been fairly scathing about the NPSs and the appraisal of sustainability. Would you like to tell us what your major criticisms are?

Mr Marsh: Yes, we certainly have been quite scathing and, as you will see from our evidence, the RSPB and WWF commissioned some experts to analyse the appraisals of sustainability, which is something we have been arguing with the Government for some time, that it should incorporate the requirements of the Strategic Environmental Assessment Directive, so we are pleased to see that they have done that. Unfortunately, they have done so in a way that, we feel, fails to meet the requirements of the Directive. I think the key issue is the alternatives which have been looked at in the appraisals and now the NPSs because it is a requirement in the Strategic Environmental Assessment (SEA) that you should look at reasonable alternatives. What Government has actually done is, rather than looking at alternative ways of meeting our energy requirements, it has simply looked at alternative ways of doing an NPS or having an NPS or not, which I think completely misses the point. The Planning Act actually requires the Secretary of State to appraise the policies in the NPS and, following the spirit and purpose of the Directive, requires you to think about the environmental impacts of this programme of energy development which is going to come forward in future years so that, when you get to the project stage and you do your more detailed assessments, your strategic decisions have already steered you towards the least environmentally damaging options, so what has simply happened is that the appraisals have effectively appraised the impacts of this particular consenting regime. That is something that should have happened, and indeed in part did happen, when the Planning Bill was being considered and, as you know, we now have the system of NPSs and people think, in principle, that they are a good idea, but that is not really the question that is being asked. The question that we wish to see answered is: what are the impacts of these policies and the projects that will flow from them on the environment? That really is not the question that is being asked, so the appraisals do not attempt to think about alternative energy mixes or is there an alternative to a market free-for-all, but it simply focuses on the consenting process, and we feel that that is wholly inadequate. There are further weaknesses about how it has assessed environmental impacts, but I would particularly focus on that issue.

Q196 Dr Turner: But these statements are guidance to a committee which is carrying out the sort of consenting process in order to expedite government policy. They are not intended to spell out government policy; government energy policy is spelt out separately. Are you realistically trying to say that, for instance, an NPS should determine whether a large-scale renewable energy infrastructure project is desirable in comparison with, for instance, improved domestic energy efficiency, because that is the implication of what you are saying? You are trying to change policy rather than stop the enactment of policy.
**Mr Marsh:** I think it is very difficult to properly assess reasonable alternatives for the NPS if you do not have the opportunity to debate those issues. I think that there is difference of opinion here between our expectations of what the NPSs should do and what the Government’s expectations are. **Mr Michaels:** I think it is not whether or not ultimately the Government decide to adopt a different policy at the end of the process; the question is that, when going through the process, the Government are open to considering different, alternative policies or even different, alternative ways of delivering those policies, and that is what the legislation quite reasonably requires. What has happened here in these Energy NPSs, the first five at least, is that the Government has been offered by Entec, its consultants, 17 different alternatives that the consultants considered were reasonable and ought to be assessed. In each case, the Government has said, “Those are not reasonable alternatives because they are not consistent with our current policy.” In other words, the Government has said, “We are not open to considering any alternatives that are different from our policy” and, with the greatest respect, what that does is entirely undermine the purpose of considering alternatives in the first place because you start the process with an entirely closed mind and all you do is you assess, as they have done, different ways of describing the level of detail to the IPC by which these policies should be considered.

Q197 Judy Mallaber: Can you give us some examples of what kinds of alternatives, you would think, should be discussed that would not then just overturn the whole overall thrust of the Government’s energy policy. Can you give us some examples that might help to clarify that? **Mr Michaels:** I suppose there are two ways of answering that. The first is to rebut the underlying assumption that it would be impossible to do that. If one looks, for instance, at the ports NPS, and I am certainly not holding up the ports NPS appraisal as a wonderful thing, but what they do there is they do assess a whole range of different policy approaches to delivering the Government’s overall ports’ objectives, and that is in stark contrast to these energy NPSs. Similarly, with the nuclear NPS there is at least, albeit very thin, an appraisal policy of having no new nuclear, which of course is in contrast to the Government’s present policy position, so what is happening here is starkly different from what is happening in other NPSs. In terms of which other alternatives could be assessed, rather than my putting forward those alternatives, one only needs to look at alternatives proposed by the consultants that are set out clearly, and they have set out in their appraisal for sustainability report. I think, eight different alternatives just on the first overarching NPS, all of which the Government have rejected, and all of those alternatives seem to me to be reasonable alternatives that are at least capable of being appraised. That is not to say that they should be adopted, but they should at least be evaluated so that the Government has the best information available to it when it decides which policy ultimately to take forward. **Dr Whitehead:** We are running out of time this morning, and I would like to finally and briefly turn us to Habitats Regulations assessment.

Q198 Mr Weir: Could you tell us what your views are on the Department’s conduct of the Habitats Regulations assessment with the draft energy NPSs, and there is a difference, I believe, between 1 to 5 and the nuclear one, basically because the nuclear one is site-specific, as I understand it. **Mr Marsh:** Well, the Habitats Directive works on two levels, so it will work on the NPS level and also the project level, and essentially it sets out a series of tests that the decision-maker has to follow to protect the integrity of European wildlife sites. I think there are a number of problems with the Habitats Regulations assessment, particularly of the non-nuclear NPS. It does conclude that you cannot rule out adverse effects on European sites, but, because of the nature of the document, and this links to the discussion about the spatial nature, there is a complete absence of spatial information about what those impacts might be. I think that the second and perhaps more significant issue is that under the Habitats Directive one has to think about alternative solutions in a similar way to the appraisals of sustainability, and unfortunately they use the same inadequate alternatives as were used for the appraisals of sustainability, so, in our view, the assessment wrongly, or perhaps at least prematurely, comes to the conclusion that there are no alternative solutions for what is being put forward in the statement. The third issue is that it then goes on to try to demonstrate that there are imperative reasons of overriding public interest, which is the third and, if you like, most demanding test under the Habitats Directive, without having any of that spatial information in order to do so. There is a second set of concerns about the guidance that the assessments give to the IPC as to how it will carry out at project level the Habitats Regulations assessment. We think it is both unclear and unhelpful on that point, and I think that the problem is particularly that the decision of the IPC is heavily circumscribed and that the finding of IROPI, if you like, gives the green light for developers and I think that developers may potentially come to the wrong conclusion that it automatically gives them a green light when their project will have to be tested more thoroughly at the local level and, at the same time, the IPC will not have the discretion it needs to think about the alternative solutions when it is faced with a particular project, so that is one set of issues. I think on nuclear it is slightly different because it is site-specific, so there is spatial information and we are generally somewhat happier about the way that that has been done. I think the gap there is that there is no attempt to look across the suite of nuclear sites to
assess which might be the most damaging to European wildlife sites or which might be the least damaging, so, when the IPC comes to consider a particular project, it has no sense of whether there might be less damaging solutions maybe on another site, and that is a matter of concern. I think what the NPS should do in that case, and it would be relatively straightforward, is to do a comparative exercise across the suite of nuclear sites to try and identify which are the more sensitive and less sensitive sites, but, secondly, also to make sure that the IPC is free to consider other options, which might mean going back to alternatives which have been discarded earlier in the process because they might turn out to be less ecologically damaging.

Dr Whitehead: I am afraid we have run out of time this morning with our discussions. I believe that most of the issues on Habitats Regulations assessment have been covered. Fiona Howie, Phil Michaels, Naomi Luhde-Thompson, Simon Marsh and Emmalene Gottwald, thank you very much for your evidence this morning. We are very grateful for your contribution to this process and, rushed or not, we will continue to examine these issues closely.
Wednesday 13 January 2010 (afternoon)

Members present:

Mr David Anderson       John Robertson
Colin Challen           Sir Robert Smith
Miss Julie Kirkbride    Dr Desmond Turner
Judy Mallaber           Mr Mike Weir

In the absence of the Chairman, Dr Alan Whitehead was called to the Chair

Witnesses: Mr Simon Bullock, Economy Campaigner, Friends of the Earth, Mr Ben Ayliiffe, Senior Climate and Energy Campaigner, and Ms Jean McSorley, Senior Nuclear Consultant, Greenpeace, Mr Keith Allott, Head of Climate Change, WWF, and Professor Andrew Blowers, Nuclear Consultation Group, gave evidence.

Q199 Chairman: Good afternoon and welcome to our third session of hearings on the Energy National Policy Statements. This morning we discussed with a number of witnesses from organisations which are represented here this afternoon. This is related to planning participation and environment assessment. We are particularly concentrating this afternoon on looking at energy strategy and technology specific issues, but of course that does not preclude you from venturing into those other areas if you consider it is important for your answers, so the terms of reference are loose rather than tight. Welcome to this hearing and thank you for attending this afternoon. I would be grateful if you could give your names and titles for the record before we proceed.

Mr Bullock: I am Simon Bullock, campaigner for Friends of the Earth.

Mr Allott: I am Keith Allott. I am Head of Climate Change at WWF UK.

Mr Ayliiffe: I am Ben Ayliiffe. I am Senior Climate and Energy Campaigner at Greenpeace.

Ms McSorley: I am Jean McSorley. I am a consultant for Greenpeace.

Professor Blowers: I am Andrew Blowers, this afternoon representing the Nuclear Consultation Group.

Q200 Chairman: I should declare for the record that I am a contributing member of Friends of the Earth, but that does not mean I am going to ask easy questions! Thank you very much everybody. I would like to specifically start with a question to the Greenpeace witnesses, who were not present this afternoon representing the Nuclear Consultation Group, gave evidence.

Mr Ayliiffe: As they stand at the minute, Greenpeace do not think they should, and I say that for three reasons really. Firstly, specifically thinking about nuclear, which is an area that certainly Jean and myself have looked at in some detail, the problem with the NPS is that it is sort of ongoing at the same time as there is a whole host of other regulatory issues around new nuclear. So you have EU issues such as the justification of new nuclear power, which is ongoing at the same time. You have things like the generic design assessment process for new nuclear power. You will have licensing, possibly, of new reactor design. You have issues around the funded decommissioning programme for sorting out back-end costs of new nuclear. All this is still up in the air. So as it stands currently, the principle of allowing new reactors to be put up and built is not justified. There is no sort of official sign off that the reactor designs are safe. So it is very difficult to say there is a need for all this while these issues are still up in the air. The second reason is that there seems to be a disconnect really between the UK’s ambitious climate change target for 80 per cent by 2050 and the fact that the NPS does not really allow the IPC to consider infrastructure projects in terms of their lifetime greenhouse gas emissions. It seems a very strange state of affairs. Then finally, we do not think they should be given sign off because, again a specifically nuclear related issue, there is an awful lot of confusion and a certain lack of evidence regarding the management of spent nuclear fuel from new reactors. So for those three reasons we think that as it currently stands it should not be signed off.

Q201 Sir Robert Smith: I just want to ask a question because I share your concerns about nuclear probably, but surely even if the planning side of it sees that a nuclear power station is suited there, if it does not get the safety case it is not going to be there anyway, whether the national planning takes into account the safety side or not, because that safety is dealt with by another body?

Ms McSorley: One of the problems is that you might argue there is a need but you cannot even prove that that need can be met. You do not know the timelines by which it might be met. You do not know the scale of the proposed programme and the environmental and the waste parts of that. You do not know the impact that will have on transmission, which is another area which has to be taken into account with nuclear power across the grid as a whole, what is the holistic overview across the country and the timeline for transmission in connection with all of this, and to say now that you can just sign off—if it is not going to meet the planning target without all those other pieces of the jigsaw in place, it is just not possible to do it. It is just not a logical or progressive process in which to address something so big as a nuclear programme, and in fact the industry does not have a lot of answers to this either, so to be
signing off on an NPS now and giving directions to the IPC not to consider major issues subsequent to signing off on an NPS is quite disturbing, particularly for local communities as well as national groups.

**Q202 Chairman:** You have made that statement relating to the NPS. What is your view on the totality of the energy statements, particularly on the Overarching Energy NPS? Do you consider that the documents, taken as a whole, would give the Infrastructure Planning Commission the information and the material it needs to be able to reach decisions on individual applications, and do you also think that the information which is in particularly the Overarching Policy Statement gives sufficient guidance on the Government’s energy and climate change policy generally?

**Mr Ayliffe:** Well, I think it explains what the Government policy is, with 80 per cent cuts. We have really concentrated on the nuclear ones, but the impression we get is that whilst on the one hand the NPS is saying, “This is the Government policy. We have a need to decarbonise by 2030/2050,” we still do not see how the NPS is going to be used effectively to get us there with big infrastructure projects when the IPC will not be able to consider the overall lifetime emissions of a power station. There seems to be a disconnect between the two of them. You have these very ambitious targets over here, but then you have an IPC which, on the basis of the NPS, is allowing big energy projects to go ahead which will have a significant impact on whether or not we actually meet these targets, but the IPC is not allowed to say, “Well, we shouldn’t allow this to go ahead,” or, “We should allow this to go ahead because we can see exactly what the emissions will be over the lifetime of, say, a power station.”

**Q203 Chairman:** So are you suggesting that additional framework or protocols should be in place, perhaps, to talk about energy mix or how the targets relate to particular applications? How would you see that criticism working in practice?

**Mr Ayliffe:** That is an interesting question and, as I have said, I do not see how that is going to happen. I think one of the issues is that the Government suggested that although we have a need for new capacity, it all ought to be left up to the industry to decide how we get there and that, in the past, has led to, well, a little bit of this and a little bit of that. I do not see how that is going to change anything when you have an IPC which, as I have said before, cannot consider the fact that we could have hundreds and hundreds of gas-fired power stations. You have got something like the Committee on Climate Change looking at carbon budgets. Maybe there is a role somewhere for them to say, “Well, okay, we’re five, ten years down the line. This has been green lighted by the IPC. What effect is that having? What do we then need the IPC to do to get it back on track to a decarbonised economy?” but I do not see how that is going to happen at the minute.

**Chairman:** Can we now turn to what you have already mentioned, which is the question of assessing carbon impacts of new electricity generation plants and how that may work into considerations of the IPC, and indeed how those are set out in the NPS document? I turn to Mike Weir.

**Q204 Mr Weir:** We have heard a lot from witnesses about the lack of the ability of the IPC to take into account the carbon emissions. What is your response to the Government’s argument that the IPC does not have to do this as it is covered by the existing policy, such as the EU Emissions Trading Scheme?

**Mr Bullock:** The Government is saying that the IPC does not need to bother assessing carbon because it believes that the policies underlying the NPS are consistent with the budgets for the low carbon. To my mind there are two problems with that. The first is that there is a loophole in how the Government assesses progress on the carbon budgets. The electricity generation sector is completely within the EU Emissions Trading Scheme and how the Government measures progress on those emissions is not to say, “We will measure what the actual emissions are in that sector,” but to say, “We will measure the allocated emissions.” The number of permits it has given in the ETS. For example, if the UK is allocated 100 million permits, that is what gets recorded, irrespective of whether we actually make 150 million or 50 million. The quantity that gets recorded as assessed against progress against the budgets is the allocated emissions. That means that in practical terms it does not matter for the purpose of meeting the budgets whether you build coal-fired power stations, wind, nuclear. It makes no odds. Because of this loophole, anything is compatible with meeting the carbon budgets from the electricity generation sector, so to my mind that makes a mockery of the idea that saying “This system is in line with the carbon budgets” will mean that low carbon infrastructure will get those. It does not provide that guarantee at all. I mentioned there were two points. The second one is that we strongly believe, obviously, that this loophole should be closed and that the Government should measure actual emissions, what actually happens on the ground, but even if they did that the NPS are still just expressing a hope that as a result of its policies the applications coming through to the IPC would be low carbon applications that would be consistent with the budgets. There is no guarantee and that is the real concern for us because the Climate Change Committee in its October report were saying very clearly that they believed the Government’s policies on bringing low carbon infrastructure on board were not strong enough. There is a real danger of lock-in to high carbon infrastructure and there is a real danger of more gas getting the interest? of the renewables and that the Government’s policies need to be strengthened. In that context we believe it is really important that the IPC and the NPS, which are very strong legally binding settings in those
documents, have a safeguard in them to ensure that if the Government’s policies are not strong enough then the IPC does have a role, a mechanism of sorts—which we can come on to—to make sure that we do not get locked into high carbon infrastructure.

**Q205 Mr Weir:** Is there not a danger in that, though, of building up an alternative bureaucracy? You are going to have the Climate Change Committee and the IPC all looking at the same thing. Is it not more sensible to perhaps strengthen the role of the Climate Change Committee to deal with that rather than the IPC?

**Mr Bullock:** That is absolutely right. Nobody wants there to be huge levels of bureaucracy in this at all. Friends of the Earth does not believe that it is appropriate for the IPC to assess individual decisions against the carbon budgets because clearly the carbon budgets are about the whole economy and this is just about electricity generation. You are right, the Climate Change Committee should have a bigger role, and what we suggest is that the IPC has an annual report to Parliament and in that annual report it should set out for the Climate Change Committee the sum total of the carbon profile of the applications coming forward and the applications that have been approved. The CCC then has to report back after six months or so to say either, “Look, this is in line with the carbon budgets,” in which case continue as planned, or it could say, “There’s clearly a problem here. We are getting too much high carbon stuff through. You need to implement measures X and Y to ensure that the carbon budgets are kept to.”

So there has to be a stronger role in the NPS to create a link between the IPC and the Climate Change Committee, but just to do that job you need to be able to assess carbon emissions and currently the NPS applicants are not even required to set out the full life cycle carbon emissions of any application, so the IPC and the CCC could not do that job. So there are two things that need to happen: measure the carbon and then create a mechanism whereby the IPC gets expert advice from the Climate Change Committee to make sure we have a safeguard to prevent high carbon lock-in.

**Mr Allott:** If I could just come in on the issue around the EU Emissions Trading Scheme. This is not an ideological thing about carbon trading, it is about what works and about the need to transform our economy and avoid high carbon lock-in at a time when we are going through a generational investment cycle which would lock us into an alternative pathway, depending on which choice we take. Unfortunately, that is coinciding with a very weak carbon price and a very weak cap under the ETS. The cap as currently envisaged, as it declines, will decline towards zero by about 2070, but that zero could be met by essentially almost unlimited use of offsets. Now, this is not a mechanism which is, as currently constituted, enough to ensure the transformation that we need to see and would lock us into a high carbon future, which could be very expensive and costly to reverse. I think the Climate Change Committee recognises very clearly, certainly people like Nick Stern and many of the people are now recognising that this is actually about making the right decisions about transforming your economy and the fundamental choices that you make, not just relying on a silver bullet ETS mechanism. The Climate Change Committee recommended very clearly that the power sector in particular should be the prime candidate for rapid decarbonisation. Most of that should be achieved by 2030, essentially almost complete decarbonisation of the power sector by 2030, because it is the biggest polluter in the economy at the moment. It is also the sector which is one which can be decarbonised but which also could be re-carbonised through a high carbon investment cycle, which would have lock-in problems. It is also the sector which can potentially provide a pathway for decarbonising, along with all the other measures we need, the heat sector and the transport sector. So this is a strategic choice and it cannot be left purely to some market mechanism which, frankly, so far has failed to save much in the way of carbon. This is actually about the national interest and about creating new industries, new jobs and new technologies. So the ETS should not be a silver bullet, basically. I agree there is a role for thinking carefully about the interaction between the Climate Change Committee and the IPC. The Climate Change Committee is now a statutory consultee for the NPSs, but I think there is clearly also a role for the IPC to be able to look at these big, lumpy, high carbon projects which might be going forward and decide on a project by project level, subject to advice from the Climate Change Committee, whether or not that project is itself a threat to the trajectory we need to be getting onto.

**Q206 Sir Robert Smith:** Can I just hear a bit more? Simon Bullock was talking about the permits being a fiction in terms of the carbon emissions from the electricity generation. Does the generator not need the permits to actually operate the plant?

**Mr Bullock:** Yes, that is correct. The point is that the Government is saying, “You do not need to concern yourself with carbon because the NPSs are in line with the carbon budgets.” So the judge of success is whether the carbon budgets are met or not, but the judge of success on the carbon budgets in that sector is simply the allocation of permits. Of course, the EU ETS does have an effect, a price effect, on whether developers will come forward with a gas or coal or a new plan, but at the moment, as Keith says, that is a very weak effect.

**Q207 Sir Robert Smith:** Is there a danger that if you start interfering it through other mechanisms you are interfering with the whole idea of the optimal solution, because in theory by the trading of the permits you should be finding what is in the UK’s financial best interests to produce a low carbon future? If you then say, “Well, we are going to
actually regulate this part of the market,” are you not distorting the idea of an optimal solution for the UK?

**Mr Allott**: I think you need to take a view as to what the UK’s best economic interests are. A future where we build high carbon on the basis that at the moment it seems to be cheaper to send lots of money abroad buying offset credits and hoping that there is a bottomless supply of cheap offset credits for ever and ever—if we are getting serious about climate change as a world, which I hope we will be, that is certainly not the case. So it might look an attractive proposition for a couple of years, but we would then lock ourselves into a very expensive route forward.

We would also foreclose the opportunity to generate new industries and new technologies because we would carry on business as usual, and this is not really a model for creating new jobs and new economies of the twenty-first century.

**Q208 Sir Robert Smith**: The only other thing is, in terms of them looking at the sort of carbon effect of the generation side, will not a lot of the low carbon actually be from smaller schemes below the 50 megawatts that they do not actually deal with? Would you expect them to take them into account?

**Mr Bullock**: I think that is why it is important that the Climate Change Committee has a role, because they do understand the totality of all of the sectors, not just electricity generation. Just to come back very quickly on your EU ETS point and economic efficiency, of course the EU ETS is potentially a very powerful mechanism, but even if it was substantially strengthened the Government and governments in other European countries still have long-term other policies. It is not that the EU ETS is the sole policy. The Government has a climate change levy, a renewables obligation, all sorts of regulations throughout the economy on carbon capture and storage. So it is the balance of those policies which will, in combination, deliver on the carbon budgets, not just the EU ETS.

**Q209 Sir Robert Smith**: No, but there is the nagging doubt from some economists that if you, as a member of an open market EU ETS scheme, do your own thing you are subsidising the whole of Europe? **Mr Bullock**: There is an issue about cost, but I think Keith is right, there is a very real danger that if the UK just took the idea that it does not really matter if our emissions are high because we will just buy cheap permits from Poland, that might make short-term economic sense but in a world where it is very, very likely that we will have much tougher carbon budgets in future we will get locked in and it will cost us a lot more.

**Q210 Colin Challen**: I am just wondering how serious you would actually rate this danger that the NPS might not be cognisant of the long-term carbon impacts of applications that it deals with. Surely this is going to be a well-informed body and even if they do not have a duty they will still have to—because this is the culture that is developing—take into account those impacts?

**Mr Bullock**: At the moment the NPS is very explicit that the IPC should not look at carbon at all.

**Mr Allott**: I agree. It is directed not to consider this.

**Q211 Colin Challen**: It seems to be something that may not last for very long, though, such a requirement not to consider. How would you explain, if you can, the origins of that particular requirement? I would suspect it is the Government’s commitment of not picking winners which seems to seep through all these energy policies and not try to determine the size of any particular sector. Would that be your view, or is it some sort of oversight, some mistake?

**Mr Bulock**: I think maybe the culture within Government is changing. Certainly, though, in the low carbon transition part they talk about what is an acceptable electricity scenario for 2030 and they do take the view of pretty much a wide range of different scenarios. Very different carbon intensities are acceptable to 2030 and the argument runs that that is because all roads lead to Rome, all these paths are compatible with an 80 per cent cut by 2050. I think what is changing about that is that the Government is moving away slowly from a culture that it is the 2050 target, the end point, that is important to a view that it is the overall carbon budget over a 50 year period that is important. With that new carbon budgeting approach, it is much more important what happens in 2030, that we are significantly on the way to decarbonising. So, hopefully, as time progresses the Government’s approach will change on that.

**Mr Allott**: I would agree with that and I think the Climate Change Committee itself agrees with that, the reference to recommendations specifically about the power sector, about the real decarbonisation trajectory for that sector, not the notional cap under the ETS but actually what really happens on the ground, because what happens on the ground actually matters and influencing real investment decisions in that sector actually matters. Unfortunately, the Government has not yet fully accepted that recommendation, but we know they are considering it and we hope that they do accept it. If they do, we think that would help to provide some of the guidance and would ease some of our concerns about the lack of clarity around the IPC’s role, but actually at the moment there is a worrying lack of clarity on what governments can and cannot do to shift the power sector onto a pathway through real investment decisions, be it coal or gas. We are seeing elements of policies emerging which we think are moving in the right direction. Things have moved on coal, so there is a requirement for partial CCS for new coal-fired power stations, but not full CCS and no clarity that that would ever lead to a full retrofit. Nothing yet on gas. On renewables things are moving. So this is a policy under construction which is moving away from the world of a year and a half ago when we heard from John Hutton and others.
that all that mattered was the ETS and nothing else. In a way this feels like a little bit of a throw back to a previous era and we would like this to catch up with the emerging thinking.

Chairman: We have begun to discuss possible responses to take account of carbon impacts and Friends of the Earth in their original evidence proposed a number of broad solutions to the issue of assessing carbon impacts, such as clearer guidance and safeguards to prevent lock-in, and so on.

Q212 Colin Challen: If I can carry that forward a bit more, what should the energy NPSs do then to take account of carbon, re-write the whole rule book or are there some ways in which it could be tweaked to address the concerns we have already heard this afternoon?

Mr Bullock: I would say four things. I think it is important to have clear trajectories—at the moment, as I say, it is based on a low carbon transition but if only goes up to 2022—to set out to 2025, 2030, 2040, what the carbon trajectory should be as a guide. I think the second big tweak is that the NPSs have got to give a requirement for applicants to set out the full lifecycle of carbon greenhouse gas emissions. It is a prerequisite to the other things that need to happen. We have got to be able to know more about the carbon practice because currently there is no requirement. Then there are two ways in which that carbon information should be used. The first one I have mentioned already, which is to say that the IPC should be reporting to the Climate Change Committee on the breakdown of the applications that are coming forward, what is the likely impact of that if it is approved, a breakdown of the applications it has already approved for the CCC to make a judgment on whether that is compatible with the budget, and then there is a requirement within the NPS for the IPC to take note of the CCC’s recommendations, whether that is, “Please don’t build any more gas-fired stations,” or, “Everything’s fine as it is. Keep going.” The last thing is that in section 4 of the Overarching Energy NPS it requires the IPC to do a full cost benefit analysis of all the economic, social and environmental costs and benefits and as currently set out the IPC is not able to do that job properly because it will not have any carbon information to use. So that is another reason why you have got to have the carbon requirement of applicants so that they can properly assess whether the carbon costs of a proposal, when weighed against everything else, the good and bad about the proposal, mean it should go ahead.

Q213 Dr Turner: Would it be helpful if the NPSs were to make it clear that in order for a generating station or facility to gain approval it should meet current emissions performance standards as set by the Government if there were one?

Mr Allott: As many of you may know, WWF and many other NGOs have been pushing hard for an emissions performance standard to be introduced for all new power facilities to be technology neutral, covering coal, gas, everything, setting out a clear pathway to actually implement the Climate Change Committee’s recommendations and provide some confidence for investors and confidence on outcomes. Unfortunately, that has not yet been fully accepted. The Government is looking at a version of an emissions performance standard in its responses on coal regulation, but we think this is a broader issue in terms of guiding investment. We think it would help. It would provide greater clarity as to what the overall carbon impact of a development would be over time, especially if you had a total emissions performance standard requiring full CCS for coal, or indeed for gas over time. It would also help to inform and guide the location aspects of investment, which we think is something which the NPSs are remarkably silent upon, because location aspects are very important for energy infrastructure, not just for nuclear, which I think is one of the only technologies in the NPSs where sites are addressed, but just in terms of identifying issue where, for instance, offshore wind, or renewable, or onshore wind maybe most suitable, but also where any fossil fuel development reliant upon CCS should be located, because there are real issues there about building coal or gas in places which may be actually sensibly located in clusters to allow more efficient capture and transport of any CO2 if the technology is to be rolled out, and also to be near to storage sites. At the moment there is no kind of strategic perspective on that. If you are applying an emissions performance standard up front, also with a clear horizon as to a tighter standard that would apply requiring full CCS, then any developer would take that very seriously. The other location aspect I forgot to mention, of course, is that an emissions performance standard could drive highly efficient use of gas through CHP and clearly you need to be locating any new CHP facility near to the heat demand. So this is a tool which we think is actually very important, not just in its own right in terms of the emissions but also in enforcing more strategic location decisions and therefore would tie in very nicely with the NPS.

Q214 Dr Turner: Do you think it would be reasonable to say that if we did have emission performance standards and they were made a requirement in the NPS it would resolve most of the problems that we have been discussing for the last half hour?

Mr Allott: I do not think it is a silver bullet. Not many things are in this complex world that we are in, but I am sure it would help a lot. It would certainly ease a lot of, but not all, our concerns about the failure of the NPS to really grapple with the carbon risks attached to giving to the go ahead to a new development.

Mr Bullock: I think with that as well all of us are campaigning for a stronger energy policy and indeed, yes, we do want to see emissions performance standards, but what we are talking
about with this is ensuring that the National Policy Statements have a safeguard in there. The NPSs are very strong, unprecedented legally powerful documents which, when adopted, do not get reviewed for five years, so if we could have a safeguard in there in case the policies we are all hoping come forward do not come forward, then that will help prevent the carbon lock-in that everybody seems to want to have.

Q215 Dr Turner: Do you think it is reasonable to expect the IPC to monitor the Government's performance on emissions when that is the job of the Climate Change Committee? Do you think it is stretching the use of NPSs too far?

Mr Bullock: I do not want to repeat myself too much, but I think we would say that there is a linked role for the IPC and the Climate Change Committee to work together, that the IPC reports on what it is doing to the Climate Change Committee, which advises it on whether its actions are compatible with other measures.

Mr Allott: I would agree with that. I think you could say that the IPC would ultimately have the role for making a decision on a project or an application, informed by the monitoring and the advice from the Climate Change Committee. Precisely how it will work, I am sure it is not too hard to work that out in detail.

Q216 John Robertson: The figures you are talking of, the sort of targets set, would this be yearly targets or ten yearly targets? You sort of went through the years in tens. I do not know whether you meant to go through the years in tens or whether that was just examples you were giving. How do you see looking at these targets and hitting them, in general?

Mr Bullock: The Climate Change Committee sets a budget of three five year periods, which takes us to 2022, and I think what we are hoping for is that it goes up to 2050, a 50 year period, and we feel that we need to see more clarity about what happens between 2020 and 2050 because it is a big deal, because the decisions the IPC make affects carbon emissions for decades. So we are not talking about one or two years here. If you build a coal-fired station it lasts for decades, so we have to think of the full life cycle of it.

Q217 John Robertson: I wonder if you would accept that with new technology, particularly CCS in coal and then following on to gas, there has to be a certain amount of flexibility built in here because what you started with will not necessarily be where you end up. We expect things maybe not to be so great at the beginning but will improve as the years go on. Is there a flexibility built in there, or do you see the gap to be rigid?

Mr Allott: I think there are smarter ways. We are actually supportive of really trying to find out how we can accelerate and learn whether CCS can do what its supporters say it can. We are not saying no to the technology, but there are different ways of bringing forward technology in a smart way which has no environmental risks and no risks to the taxpayer, and we are not convinced that the current package fully ticks those boxes. There are ways of demonstrating CCS on a pretty large scale without having to build a 2 gigawatts power station with only 20 per cent of the emissions covered and then we are all left with either an environmental liability or a taxpayer liability to potentially bail out the utility in 20 years' time to ensure full CCS.

Q218 John Robertson: This is the flexibility I am talking about really. In that case we still are receiving the electricity from these stations. There is, of course, a problem of the need of the nation and the security that we have to have, in particular our base load. Should there not be some flexibility in there to allow for that to be met?

Mr Allott: I think the first thing to say is that clearly security of supply is one of the key objectives that we all have to make sure we meet, but this is not necessarily having a policy which is driven by a projected demand. There is an issue here about, I think, the way the NPSs deal with firstly the overall need. It is getting more in terms of a predict and provide approach rather than looking at alternative ways of managing both overall need but also the need at peak times across the system and the conclusion to that leads on to where you can just build whatever you need on security of supply grounds. It does not give very much assessment of options, for instance of different energy mixes, and I think we would not want to be saying that the NPS should be setting a sort of single shining path which has to be complied with through very central plans, but this is all about band width. Maybe this is talking about a narrower band width as we move to guidelines for a new energy system for the twenty-first century, because we are going through a need for a lot of new investment, we believe mostly in renewables and energy efficiency, which would certainly deal with security of supply problems for the next decade at least if the Government just focuses on meeting those targets. There are issues going forward beyond 2020 about different choices that we face as a nation, but those are not being dealt with in the NPS. It is kind of, “Just build anything.”
Q220 Mr Anderson: I have read the documentation and the figures and I understand where you are coming from, but why do you think the draft energy NPS fails to justify the need for new conventional generating capacity?

Mr Bullock: I am going to just look at the Government’s argument here. The Government is arguing that there is a need and it says there is a significant need for all types of electricity generation. It bases that on some figures in the NPS. This is in our written evidence, but I will try and explain our thinking on it. The Government says that by 2020 we will need 43 gigawatts of new generating capacity. That takes into account the planned closures as well, the coal fired stations closing in the middle of this decade. The Government says that of that 43, 26 of it will be renewables and 17 will be non-renewables. It also says that 20 gigawatts of this 43 is under way, already consented to, being built or already built, and there is a parliamentary question answered by the Government last week which said that of that 20, 14 gigawatts is non-renewable already. So of the 17 gigawatts that the Government is saying it needs from non-renewable sources, the Government is also saying that 14 of that has already been built. On top of that there is a large number of applications in the existing planning system which are not counted in those figures but which will get dealt with before the IPC makes its decisions and in those applications outstanding there is at least 7 gigawatts of new gas in there. So assuming that they will go through—and it is pretty likely they will get through—that will mean that 21 gigawatts of non-renewable capacity to 2020 is already predicted to be being built and the Government itself is saying, “We only need 17 gigawatts of new non-renewable capacity.” I am sorry to throw lots of figures at you, but to our mind our analysis of that is that the Government has set out a case for a significant need for all types but its own figures do not back that up. Whether it was more nuclear, whether it was proven, could include, as the Government says, all types, or whether it was gas fired stations, new stock by say 2025 and 2030. Again, it is in our written evidence but the same analysis of the Government’s figures holds for 2025 as well.

Mr Allott: Just one other thing to quickly mention about the figures as well is that I gave figures for 2020 and people will rightly make the argument about, “Hang on, we need a lot more capacity beyond 2020, new stock by say 2025 and 2030. Again, it is in our written evidence but the same analysis of the Government’s figures holds for 2025 as well.

Q221 Mr Anderson: Is one of the concerns from the Government that the renewable industry may not deliver the difference in the figures you went through, and if they can deliver it would only be at considerably higher cost than what the alternatives would be?

Mr Bullock: It could be, but the NPS is saying, the Government is saying, “This is what we anticipate. This is what we are planning to do,” and I would imagine that the Government’s response to concerns—and there are concerns—that it would not necessarily happen is that we must strengthen policy.

Mr Allott: I would remind people that it is also a legally binding target that we signed up to only just over a year ago, so I would hope that we do really try and meet it.

Mr Allott: The renewables target.

Mr Bullock: Just one other thing to quickly mention about the figures as well is that I gave figures for 2020 and people will rightly make the argument about, “Hang on, we need a lot more capacity beyond 2020, new stock by say 2025 and 2030. Again, it is in our written evidence but the same analysis of the Government’s figures holds for 2025 as well.

Q223 Mr Anderson: Is there not a concern, because we are facing at the moment a potential shortage in security of supply? In effect it is a belt and braces job. Why not build what might end up being extra capacity but just to make sure that it is there, which could include, as the Government says, all types, whether it was more nuclear, whether it was proven, say CCS coal power stations?

Mr Allott: I think the reality is that a lot of technologies take a long time to build. Regardless of what you think about nuclear, we do not think it is necessary or needed, but you certainly would not be building it as part of the response to a perceived near-term security of supply problem, even the most optimistic assessments, as long as you get it commissioned—
Q224 Mr Anderson: But you would know it would work in terms of generating electricity? There is no argument about that, is there?

Mr Ayliffe: Well, you say that, but the new designs have not passed all of the regulatory assessments yet, and this is a technology they are suggesting we build here that has never been built anywhere in the world. There is an assumption that it will work, but that is not backed up by where it is through the design assessment process or licensing.

Mr Allott: We have seen some very good news just last week about offshore wind, going to 40 gigawatts of offshore wind. We think that is a very good development that needs to be built on and driven forward. The alternative is building lots of coal and gas and then hoping that it will be shut down if it is not necessary. I suspect that the investors in that might have a different view. The industry is actually going for gas probably more than I think any of us would like at the moment, but to be honest if it is a choice between gas and coal we do not like the use of gas and we think it is very wasteful to do it in a way which does not maximise the heat recovery. On pure lock in grounds—and this is not in any way to endorse new gas, but a new gas station will last little more than half the length of a coal station in terms of its design lifetime and the emissions are half as high per year, so in terms of the lock-in problem there is serious concern and there are concerns about whether CCS should be required for gas. We believe it should and that gas CSS should be taken seriously as the reality for planning, but the real problem is the lock-in for coal. We do not think it is necessary if we really go seriously for energy efficiency and demand management, which are always the priorities and the smartest thing to do for your economy, and then go for renewables where the potential for new jobs and exports is greatest.

Q225 Chairman: Is there not, though, a problem in terms of developing documents, which will certainly lock policy in over a five year period, that because things are changing so rapidly it is difficult, for example, to adequately predict demand in, say, ten years’ time, bearing in mind what is happening in terms of the use of electric vehicles, changes in energy efficiency, and that if you specified the mix and you attempted to specify demand that actually you may get it very wrong and you would have, in so doing, locked in a particular path of energy policy which you might subsequently regret?

Mr Allott: I do not think the NPS or anybody should be specifying a particular shining path where if you fall off you are in trouble, but this is all about having a narrative which has got some flexibility within it, but not complete flexibility. We are meant to be trying to manage constraints and at the moment the approach is almost, “Well, anything goes,” and that is possibly the worst of all worlds. I think there is a middle way which manages to allow for some flexibility, but looking ahead and planning and modelling future demand is in some ways easier than modelling demand in the next week or next month. This is where you have got immediate short-term variability. If we were able to look at this and look at technological plans and effective policies and measures, there are variables. For instance, the take-up of electric vehicles, which we think are very, very promising, but actually if you do this in a particular way the overall impact on total demand is much less than you might think because of the type of charging infrastructure and technology you use when you charge from the grid means that you can actually absorb some spare capacity and some spare power on the grid at times of low demand elsewhere in the economy. So all of these things can be managed and thought through. I agree, you need to have some margins for error, clearly, in this and some flexibility, but that does not mean that it should be a free for all.

Q226 Chairman: Is it not a logical consequence of an analysis on need which indicates that non-renewables that are already in the pipeline or have been built are up or around what might be regarded as non-renewables in the future energy mix that an NPS document should therefore simply say, “No more renewables should be built”? Is that what you appear to be saying?

Mr Bullock: I think what we are saying is that the Government’s argument for need seems to be at variance with its figures, so we would like to see them set out a more comprehensive argument about what the genuine need is for non-renewables. It could well be that that is the case. At the moment it is so bizarre to us that there is such a strong assertion and strong need but that is not apparently backed up by the figures that we have here. Is something awry here? What is going on? So it is more that this is the consultation, scrutiny period for the NPS. If that case is valid, then it requires a lot greater depth than it has at the moment.

Q227 Chairman: I think what I am asking you is what is the consequence of your observation that this is rather bizarre, in your view?

Mr Bullock: The consequence is that there is no more need beyond what is already consented and, let us be frank, there is an awful lot that has been consented. The National Grid is saying that 15 gigawatts of new gas is coming on line between now and 2015. That is a lot. It is not to say that we are stopping building stuff. This is stuff that is already planned to come on stream in the next three or four years. I think the Government’s own figures are saying that you only need to build renewables to meet its own need projections.

Q228 Sir Robert Smith: I just ought to declare an interest as Vice-President of Energy Action Scotland, the fuel poverty campaigning and energy conservation charity. The Government, in preparing these figures, do you think they have been pessimistic, optimistic, or have got it about right on demand management and efficiency?

Mr Allott: I will have a bit of a go on that. I think that they may have been realistic on the assumption of carrying on business as usual policy measures, but they have not looked at the alternatives that they
could apply if they took a much more ambitious approach on energy efficiency. The Government has got some good policies on energy efficiency but it has not really looked at the impact of taking a more aggressive approach, not just on energy efficiency but on actual demand management—demand reduction but also demand management at peak times and all the creative options that could be brought into that, either technological or behavioural or incentives to companies through different contract arrangements. It has big consequences on what you then need to deal with on those occasional times when there may be a big spike on the system at a time of low renewables output. There are much more creative ways of doing this than just thinking about the supply side the whole time and that is one concern.

Chairman: Thank you. I would like to move us now to the whole question of nuclear power, nuclear waste, particularly in the nuclear document and also in the documents in general. I do, however, anticipate that we will have a vote very shortly on a particular debate this afternoon and I would suggest at that point we will take a fifteen minute break, assuming there is one vote, and return to discuss this issue, but we could make a start.

Q229 John Robertson: Chairman, after what I have heard from the Panel, I think I have got a general question which needs to be answered before we go into the nuclear debate, and that is basically that from what I am hearing you do not like nuclear at any cost, you would find an excuse not to have it if there is a system and time of low renewables output. I noticed that from the first point when we were talking about NPSs in general, the anti-nuclear bit came out right away and as we developed the argument, so is there any point really in going into all these questions about nuclear when you are actually going to say “No” to everything? You can put up an excuse for why you do not like it—and I have heard them all from the first point when we were talking about NPSs, from what I gather from most people we have heard today, are deficient in certain areas. Okay, we will continue.

Mr. Ayliiffe: Well, thanks for that. Obviously there are two sides to every story and of course I think the danger for the Committee in overseeing the usefulness of certainly the nuclear NPS is that there is a lot in there on the issues of spent fuel management which we at Greenpeace have a certain opinion on, nuclear. That is fine. Other people may agree or disagree with that. There are certain things in the NPS around issues of spent fuel management. We think it is unnecessary. We do not think it will do what we need to do in terms of decarbonising our economy and there are still intractable issues around nuclear waste. What is in the NPS certainly with regard to nuclear waste is, I do not think, good enough for the IPC to make considered opinions on whether or not you could actually store, say, nuclear waste safely. It seems that what the IPC is going to have to do, as it is currently formatted, is to take promises from the Government and the nuclear industry, which has a history of sort of dishonesty, that they will manage to sort this stuff out and that is a big risk to take.

Chairman: Indeed we do have a division and could I therefore suspend this hearing for fifteen minutes, assuming there is one vote, and look forward to as many Members as possible returning after that.

The Committee suspended from 4.00 pm to 4.16 pm for a division in the House.

Q230 Chairman: We will continue.

Mr. Ayliiffe: Greenpeace certainly will not apologise for having a view on nuclear, but I genuinely think that there are issues in the NPS as it stands currently, certainly around dealing with spent fuel from possible new reactors, which are so vague that I cannot really see how an IPC would be expected to really be able to properly sign off on, say, a reactor design.

Q231 John Robertson: Can we maybe split the waste questions—I have not got them, somebody else has got the waste ones, so could you just stick to the NPSs for nuclear itself at the moment. I hear what you are saying and we will agree to disagree on what is right and what is wrong with regard to energy. While I accept what you have been saying—and there is some really interesting stuff in what you have given us and it will be very useful—at the end of the day we are going to go down this road, all nuclear, so we obviously want to make sure that everything is done correctly. We want to want to make sure that all the “is” are dotted and the “t’s” are crossed and the NPSs, from what I gather from most people we have heard today, are deficient in certain areas. Okay, we want to hear them better and our report wants to be on the lines of we want to help the Government make it better and we see people like yourselves as being part of that process. So how do we make the NPSs better, fit for purpose, even if it is something you do not like?

Ms McSorley: We do not accept that nuclear will happen.

Q232 John Robertson: We will agree to disagree on that one, okay?

Ms McSorley: Well, no, it is quite important because one of the areas we had not raised earlier is that there are the issues of waste, but there are issues still about the potential for accidents from these plants, which is specific not just to local siting issues but to national issues. There are areas around the whole issue of terrorism and the sites.
Q233 John Robertson: How many people have been killed in nuclear power stations in the UK?
Ms McSorley: You mean as a result of accidents? We do not know exactly—

Q234 John Robertson: How many people have been killed as a result of accidents in the UK?
Ms McSorley: We know that several compensation cases have been paid off in the nuclear industry, but the fact is that it is not so much—

Q235 John Robertson: How does that relate to the coal industry or even the renewables industry?
Ms McSorley: Or the uranium mining industry. We can certainly supply figures on this, but the stark fact is that there is no guarantee of no accident. They present a terrorist risk, or terrorist targets rather.

Q236 John Robertson: Well, so does this place, but we will just have to live with it.
Ms McSorley: On top of that and a key factor to remember is that there is no guarantee that these plants are going to be signed off on. There is an assumption being made in the NPSs that is not discussed because it is not joined up with other nuclear regulatory processes, but the generic design assessment process, which is not legally binding, will get a tick in June 2011 and beyond that licensing of a reactor which includes everything to do with the reactor itself, spent fuel, conditioning, all the parts of the site, will get a tick and that that will happen in time to deliver and there will be no problems. Well, we know from current experience in Finland that there have been problems with new build over there. We know that there are major outstanding issues from our own nuclear regulatory bodies about signing off on new build, so on this assumption of, “Oh, well, it will go ahead, so let’s say it’s going to go ahead and let’s just try and tweak the NPSs to try and make it look better rather than challenge some of this fundamental assumptions,” just for the record, we are challenging the fundamental assumption and then we can go to the other questions.

Q237 John Robertson: Okay. Well, the Finland thing, there was a concrete problem I know about and these problems will be ironed out on that type of reactor. The other reactor will be built in China before we even get to the stage of building, so it could be that on all these kinds of problems you are talking about there will be ticks in all the boxes and there will be a working model for us to see before there is one even started in this country. I understand where you are coming from, but I just find your negativity, in a sense your hatred of nuclear, really does not help take the discussion any further forward.
Ms McSorley: Just on the negative aspect, I think one thing is that the NGOs are incredibly positive about securing supply of power in this country and we have come, with various governments over the years, to be very positive about the ways forward on that. It is not being negative about nuclear power, it is being realistic about it and this assumption—

Q238 John Robertson: It is well beyond negative, it is a hatred. It is dislike at all costs.
Ms McSorley: Well, obviously that is a view which you have, but it is about being realistic about whether all of these issues can be signed off on time, but most importantly what issues the NPS do not look at, the regulatory issues, and it is one of the questions in front of us. There is the issue of justification, which has not yet been signed off on as a regulatory process, which the Government has to decide on. There are the NPSs, there is the generic design assessment process, licensing, fixed unit price. Ben mentioned these earlier. All of these have to be wound up and they all have to be signed off on for these reactors to go ahead, but the problem is that really some of them might be signed off on, allowing an application to go ahead and construction to start, and then you might find that other countries are not ticking off all the boxes, that you do not have the operational experience that you want. I remember some years ago speaking to the new installations inspectorate. One of their large concerns was that these reactor designs would come forward without there being any operational experience overseas for specifically these reactor designs for them to look at, in the same way that there is no repository for spent nuclear fuel anywhere in the world for us to say, “There is operational experience on this. We can point to this working and how it works.” So this is a realistic take on nuclear power that we are saying that the NPS does not encompass fully. It is too directional. It directs the IPC to not take certain issues on board. It does not make the linkages with other regulatory issues and it has to do that for this to be a realistic assessment.

Q239 John Robertson: So are you saying there should not be a repository then because there is not one somewhere else? Is that what you are saying?
Ms McSorley: No, what we are saying is that there may not be one, but you have no occasional experience—
Mr Anderson: But there does not have to be one. I will move on because we are not going to get anywhere on this one, unless Simon or Keith, or even the Professor wants to—

Q240 Chairman: For the guidance of the Committee and for the witnesses, the purpose of this afternoon’s session is to look at the NPSs, in this instance particularly the nuclear NPS, and look at the content of that and could then critique it or otherwise as a document which is either fit for its purpose, which is an NPS document relating to the whole structure of the IPC and what follows from that, and not necessarily to state a case either for or against nuclear power. I think we appreciate that witnesses this afternoon have in general a negative view of the wisdom of nuclear power and indeed they have been questioned by a Member who has a positive view of nuclear power, but if we can steer between those two poles in terms of what are the
issues concerning the NPS and its validity or otherwise then I think we will be able to proceed constructively and would invite you to talk about that.

Mr Ayliffe: Thank you. Yes, of course. Our principal line on nuclear, just to reiterate it, is that we do not think that we do need it and that is fine, but certainly on the issue of what is in the NPS, I think it is important. You can just see the size of the thing. There is an awful lot of emphasis in the whole NPS process on nuclear and we worked out that there are something like 1600 pages that somebody would have to read to get through, to actually have an idea of getting their head round, say, what was going on at Sizewell, comparing what was going on there with somewhere like Bradwell, looking at justification, which is an awful lot to get your head around. It is a very, very complex issue. That said, the problem we have with it fundamentally is that there are gaping holes around very significant issues such as spent nuclear fuel and that is something that I think the Committee really should look at because, as I mentioned before we broke up, it strikes us that given the lack of concrete proposals around dealing with spent nuclear fuel from new build the IPC will be forced to accept effectively the promises of the nuclear industry that they will at some point possibly, they assume, find a way of safely dealing with spent nuclear fuel on site. That is an extraordinary assumption for the IPC to have to make and I think certainly on the issue of whether or not this document does what it says on the tin, that is a key issue which we think you should bear in mind.

Professor Blowers: We are going to come to the issue of nuclear waste, as I understand it, and I did not really want to talk about it at the moment because in framing this debate there seems to me an issue that is relevant to the documents and that is how these documents have been consulted upon themselves and I wondered if you might just let me say something on that, because I think the consultation process is fundamental and I think it is very flawed. The NPS process so far, which has been preceded, of course, by the Strategic Siting Assessment and various other things, does not encourage, it seems to me, effective and democratic participation, particularly on the part of those—and I do represent some of those—who are at the sites themselves. I find the documents in terms of fit for purpose are actually, particularly the nuclear ones, tendentious, vague and they are poorly integrated. That is a very serious problem in terms of a consultation process because a document ultimately needs to reflect what it has heard in terms of the consultation. If you try and take this, instead of from the Olympian heights of parliamentarians, down to the citizen whom you are trying to attract to be consulted or even community groups the situation you face is that you have got three consultations occurring at the same time. That is one problem. Secondly, the whole process is completely unmanageable. You have got a whole series of “blue tombstones”, of which this is just one, a colossal amount of documentation both in weight and in volume in terms of reading and if you are going to be knowledgeable you need all the background stuff as well, which most people do not have, and I will not go into all of that that you need. Now, the 1674 pages which people are saying you have to read in my view is neither here nor there because you cannot skim some of this stuff if you want to respond. So it is very, very difficult to navigate and select and understand and basically know what you are talking about. So the impression one gets form below is that this tonne weight of stuff is being thrust upon people, almost saying to them, “You can’t possibly respond to this, can you? It’s just too unmanageable.” The second thing is, it is unfair because if you look at the documents and read them seriously and do an analysis they are designed to achieve an objective and that objective is to get something like ten sites up and running as fast as possible. That is basically what it is about and everything is designed to that. So the process is very rapid, the process is sequential and it is cumulative, and therefore you cannot go back on certain decisions that have been taken, and you ought to be able to, in my judgment, it should be iterative. The scope is more and more narrowed down so at the point where communities are asked to communicate their feelings already major decisions have been taken before they really get a look in, and of course it is unresponsive. We do not know what happens to our comments. We have made a myriad of comments. Many of them are ignored and they come back in a sort of vague and bland document, “Yes, we have taken this into account . . .” and almost no changes whatsoever were made to the strategic assessment criteria. If you look at that, they are virtually the same and the changes they made were more technical than substantive. So people below think the whole thing is unresponsive. Lastly, it is biased because if you look at the sources for all the material they are basically technical, industrial consultants who are in the nuclear game who are writing the stuff. Now, I am a social scientist. I know a huge literature in social science. It is very critical of the nuclear industry. Never is that cited in these things. There itself, I think, is a bias. Then you have the situation when you are trying to get consultations with people who are hard pressed, who are working part-time, they are volunteers and they are unpaid, and they are up against the totality of power that is produced by the masses of money that go into this whole pro-nuclear thing. Ultimately, therefore, the process is skewed. I was on the CoRWM Committee. I was also on the RWMAC Committee. We undertook, certainly with CoRWM, an extremely detailed public and stakeholder engagement process and got public confidence in our proposals. This took place over three years. What is happening now is a complete travesty, it seems to me, of an effort to try and involve people and you will see in the documents that are coming to you in the written form the sheer frustration that people are feeling about this. They are overwhelmed by it, they are frustrated by it and they say, “Well, what the hell! This process is there simply to outgun us and to make sure that these power stations, willy-nilly, with
their spent fuel stores, are planted in existing locations.” I want to come to the question of siting in a moment, but I do feel you need to understand that a document in a sense cannot be fit for purpose if it is so biased and so difficult for consultees and therefore the consultees you will be talking to no doubt next week are the privileged ones. They have privileged access, they have all the power, they have all the time and do make a massive input into this. Now, those of us, if you like, at the bottom of the tree do not have the opportunity and there is immense frustration out there, and I do want you to understand that.

Q241 Chairman: Thank you for that. Bearing in mind that we are looking at these documents themselves, what would your reflections be on what would look like a fit for purpose document as far as these issues are concerned? That should be the question to the panel in general.

Professor Blowers: My answer very briefly, if I may, would look like a fit for purpose document as far as mind that we are looking at these documents to achieve nuclear power stations on specific sites as fast as possible and the whole thing is limited to that. Now, that is blatantly unfair and a document which was fairer would have opened up the process so that people could have an input into that. The situation is totally constrained, frankly. But then, if you had documents of the type that I want you would not have nuclear power stations. We know that. That is the whole dilemma that we are in. If you did the process properly then there is no way we will get these power stations up and running. By the way, I agree with Jean, we will not anyway, but we certainly would not if this process was done in a fair and equitable way.

Q242 Chairman: But the fact of the matter is that the Government, which is framing such policy statements, has as a general policy decided that part of the future energy mix should be nuclear. The question then is under those circumstances how one distinguishes between the social steers of policy and the rowers of policy in framing policy in such a way that the rowers can make the most sense of what the steer has been and that, I think, is the central question of whether a document is then fit for purpose, whether one considers that in reality there will be no nuclear power stations as a result of various other constraints which may be outside the realm of a particular National Policy Statement. So that, I think, is the central issue and I do not know whether you have any further reflections you may want to make, bearing in mind that framework, on what those documents might then look like?

Mr Ayliffe: I guess we might get into the details of it here a bit. One issue again—and I sound a bit like a broken record, so I do apologise, but this issue of spent fuel. All the nuclear NPS says is that the Government is convinced that arrangements exist or will exist for the management of spent nuclear fuel that could arise from new reactors. Now, that is all very well and good on the face of it. However, it is obviously a rather more technical issue than just saying arrangements will exist and signing it off. So if the IPC is going to have confidence that it will make a correct decision on allowing these things to go ahead at certain sites and the public will have confidence that whatever is put down in an application that goes to the IPC is safe and answers all the worries they have, then for things like spent fuel it should say how exactly will it be, how long will spent fuel be kept on site. There should be something in here in that. There should be stuff about whether the spent fuel will be conditioned on site and whether it will be encapsulated on site, whether it will be put in wet or dry storage, where the end place for this spent fuel will be. There has to be something in here which actually gives some meat to the bones of a rather bland assertion that arrangements will exist. So that sort of thing should be in there, because without that knowledge I think it is very, very difficult to say with confidence that we are happy that we can build these things.

Q243 Chairman: Okay, so that is one clear. We certainly had the intention of moving into the issue of discussing radioactive waste, but before that, John, do you have any further questions on this issue?

Ms McSorley: Could I just add that another issue which would be discussed by the IPC, we believe, is the agreement signed between EDF when it bought British Energy and the deal was struck in Government over the order in which land sales would take place. If you look at that agreement—and if you permit us we will give further evidence on this to the Committee in written evidence—you can see that there are specific arrangements, for example that the Bradwell site will not be sold until EDF is satisfied that it will get planning permission at Sizewell. Hinkley—it is not until they get planning permission for two reactors there that they will have to sell Dungeness or Heysham, although in theory Dungeness is now out of the running. It is not until EDF gets planning permission for Hinkley and Sizewell, two reactors at each site, that they have to release the final land at Wylfa and we know that that has already caused issues because the NDA gave them the last of its money for land sales, and these are timing issues and they do not just go to the heart of whose technology is first cab o
happens with Wylfa, Heysham, Bradwell, that is not discussed in here. That happened in 2008 and we are not looking back at that. That took place in another place. That is a key issue, absolutely crucial for the planners, crucial for the IPC, and it should be discussed. So it is an area where there is a serious omission in this document.

Q244 Chairman: I think we can take that as a suggestion of what a good document might look like.

Mr Bullock: Just a very brief point on this question like. suggestion of what a good document might look

Chairman: I think we can take that as a suggestion of what a good document might look like.

Mr Bullock: Just a very brief point on this question about the steerers versus rowers issue about whether new nuclear is definitively the direction in which we should be steering. In the Strategic Environmental Assessment legislation there is a requirement that reasonable alternatives are proposed and in the assessment of sustainability for the nuclear NPS there is, as a reasonable alternative, no nuclear build alongside a nuclear build. I am not expert on this, but my understanding is that the decision on whether it is reasonable or not hinges on whether the case has been made adequately that nuclear waste can be dealt with safely. So it feels to me that that is definitely an issue that is up for discussion and scrutiny.

Chairman: Well, let us just turn to that in a little detail now.

Q245 Colin Challen: Before I ask the question, I certainly agree with Professor Blowers’s analysis of how vested interests may have influenced this planning process and I wonder if there are any published citations that could be made available to Members, because I think that is an area which tends to get brushed under the carpet because we are not supposed to talk about the role of vested interest in these processes. I am just wondering and I am very concerned about this fast track process that nuclear is going to benefit from, possibly, if they can find the money to do it, and how that will influence the networks that we have, distribution and transmission networks, and the impact it would have on other technologies and whether this planning process and the IPC is able to take into consideration those sorts of issues, because if you say you are going to stick with this old-fashioned, what I describe as a hub and spoke, centralised power generation system—which I think should be consigned to history but vested interest says not—you can determine the whole transmission arrangements for the next 50 years by just saying, “We’re going to go straight for these ten or so big points of electricity generation.” Can the IPC under the NPS actually consider those sorts of national issues, or are they really going to be treating themselves as jumped up local planning committees where they are just more parochial? Are they forced to be parochial in that sense?

Ms McSorley: I think it is quite difficult for them, because as we speak there is a discussion about new power lines going from Hinkley and anybody who has seen the local media would know that they have said the two communities are very much up in arms about the two proposals and they have joined together to fight that. That is happening under the National Grid. There was an agreement signed some time ago with EDF to get the upgrade. Meanwhile, somewhere else is the IPC perhaps considering the issues of the electricity networks’ NPS, but how much it can have power or really take into account what is happening on the ground under processes being pursued by the National Grid and its processes with local people and the stages they are at—are these stages running parallel? Will National Grid get to its point of destination before the IPC can? What is the impact of that? These are issues actually also raised by industry, it is not just the NGOs raising them. So again there is another example of disconnect where there does not seem to be an overview, but what powers, if any, does the IPC have to—intervene might be too strong a word, but to kind of call that in and say, “Look, what does it really mean if you are doing this now for what decisions we make? Does it tie us in when we don’t want to be tied in to a planning decision?”

Mr Allott: I would just make the wider point about the grids. I agree there is a huge issue around the potential for decentralised power which may be being foreclosed by this focus on the big kit which is kind of implicit across the NPSs, as I understand it. I confess I am one of the people Professor Blowers referred to. I have not been able to read the nuclear NPS as I have been kind of busy with other things as well and the sheer size of it is daunting, but looking at the overall issues to do with the grid, I think this raises the wider question about looking at alternatives and alternative models for moving towards a new system for the way we operate our energy systems in the current century rather than just inheriting a continually upgraded version of what we inherited from whatever happened last century. One of the examples would be looking at options for greater interconnection and super grids connecting with Europe, which is a rapidly growing narrative, which would allow and enable a much greater flexible network, not just as the UK, a set of islands, but actually linking to other renewable sources across Europe and having a more balanced system. That is an alternative. I do not see that anywhere in the framing that I have seen of the NPSs. Meanwhile, we are being driven to a particular route because there happen to be a few old pylons in that place. That may not be the most strategic option. It may be an option, but where are the other alternatives in the framing of this?

Mr Ayliffe: The concern I had with the way this was all being framed was that the IPC, certainly on nuclear, does seem quite narrowly focused. It is almost as if somebody in Hinkley Point could have a discussion in front of the IPC about whether they wanted the gates painted blue, green or yellow, or the reactor dome pink, but actually these major issues, weighty issues around nuclear spent fuel I have touched on, would probably be outside of the remit. It would be interesting to put it like this, a question
to the IPC. Take the theoretical position, which could happen. In 2010 EDF came forward to the IPC later in the year and say, “We’d like to press ahead with an application for Hinkley C.” Their plans for spent fuel storage remain as hazy as they are at the minute. The regulatory position is that the Health & Safety Executive with the GDA process has not signed off on plans for back end waste storage and possible disposal. At the same time the Department for Energy and Climate Change has not finalised plans for the funded decommissioning programme, which will look at costings and, you know, the actual nuts and bolts of managing spent fuel. Will the IPC have the weight and the power to turn round and say to EDF, “Okay. Hold on. We’re going to freeze this application until all these other things are sorted out,” or will they be effectively toothless and be able to say, “Well, sorry, we can’t do it. The Government says, ‘We think these arrangements will exist,’ and we will have to carry on and perhaps muddle through in the future,” because it seems to me that if you wanted to get the best out of the IPC they would have to have the ability to turn round and say, “Okay, hold on. We’re not satisfied at this point that these arrangements exist or will exist, so freeze things and let’s get them sorted.”

**Professor Blowers:** I think what we are trying to do is answer your question as to what would this document look like. It is obviously quite difficult, but I do understand your problem, which is that you may want to say something on this. What I would say is that it is a question of alternatives. In a sense the thing is tied up now. There are no alternatives. The sites were chosen for purely pragmatic reasons. The land was there, there is a bit of infrastructure and the argument was, “Well, it’s been there before. People don’t mind.” Actually, I can tell you and give evidence that that is not the case, because we have done surveys and work which demonstrate a great deal of hostility on existing sites. Be that as it may, do not be fooled by the normal assumption. But if you look at the criteria—and I think this is where we are looking at the nuts and bolts of these documents and I would just like to mention two criteria, because the criteria are either exclusionary or they are discretionary. One of the exclusionary criteria is demographics. Now, if you read the bit on demographics in the early papers I challenge you to tell me you understand it, because I do not. I have tried very, very hard and the whole thing is based on some kind of calculation of weighted population and distance, but they come up with the answer that the location has got to be semi-urban. Now, how daft is that? It is neither remote nor urban. So either it is not safe and therefore it really should be remote and not semi-urban, or it is perfectly safe and why don’t you put it in an urban area where at least you can use the waste heat and make the thing much more efficient? The whole semi-urban criterion, if you look at it, was designed solely to make sure that the existing sites come above the threshold and everything in that document seems to be to the same purpose. That is why I think the document is an unfair document and actually not fit for purpose because it has been constrained in that way. If you take the discretionary criteria, and the important one I want to latch onto here is flooding and the coastal processes because these sites are all on the coast. Some of them are on sites which we know are going to be inundated and yet the projections do not go beyond the year 2100. We know there is going to be stuff on the site for about 160 years, probably up to 2,000. Nobody can make or dare make any predictions beyond 2100, but even then on some of those sites the situation is pretty precarious; in other words, we have a policy where the sites on the whole are going to be located possibly ultimately in the sea. This is the most crazy idea. Only one site has dropped off the map so far and that is Dungeness. I would say there are other sites like the one that I represent that any sensible IPC would simply write out of court because Bradwell is very, very low lying. There are big problems with cooling water in the estuary and there are problems with evacuating the local population, and so on. These are things which nobody in their right mind would put forward in a document to try and get the IPC to justify. Going back to my previous point, they are only there because they are bankrupt in terms of sites. There was a siting alternative. They looked at 270 possible sites. How many of those did it think would be possible? Three. So we are back now to the ten sites. We may have fewer, we may not get any of them, but I think, to finalise the point about that criterion, if you look at the question of flooding it seems to be totally nonsensical to allow it. I will quote you one bit of substance from the NPS which I think indicates just how shabby the whole document is. It talks about the EA and it comes up with this sentence: “The EA has said it is potentially reasonable to conclude that a nuclear power station within the nominated site could potentially be protected against flood risk throughout its lifetime, including the potential effect of climate change.” What kind of sentence is that? That is no guidance to anybody. What you really should have in this is a statement which says, “You cannot build a site”—it makes it exclusionary—”if it is liable to inundation under certain scenarios in the near future.” That is not said because the argument is overriding national interest, which means we have got to have nuclear. The only places we dare nominate are the existing ones. We are going to stick it on there come hell or high water—and high water is what it will be! I do think that is where the NPS is such a fraudulent document, the nuclear one in particular, and really that ought to be redressed.

Q246 Colin Challen: Just following on from that, they mention that three other sites were considered, new sites, which I presume were not anywhere near existing sites?

**Professor Blowers:** They are three non-nuclear sites, yes.

Q247 Colin Challen: In this process—and I have not read all the stuff either so I am quite ignorant in that regard—at what stage would other sites have to be
considered, because it may well be the case that the IPC will reject some of the ten sites already considered, so how is that catered for in this process?

**Professor Blowers:** I think it makes the whole thing so much more absurd. I do agree with you. I think it is quite possible that the IPC—

Q248 Colin Challen: I will rephrase the question. Is there any provision in the NPS for bringing on other sites?

**Professor Blowers:** No, because with the NPS the IPC is only allowed to look at those sites that are nominated and those are the ten sites, so it is restricted. This is up to the point of 2025. Beyond that, if they want further nuclear power stations it is up for grabs, but they are saying that only those ten sites are potentially deployable within that time constraint.

Q249 Colin Challen: So you would probably agree with me in saying that the IPC has got a built in predilection, a predisposition to approve these sites at whatever cost?

**Professor Blowers:** This is what I call a case of premature legitimation of a predetermined policy and the IPC is hog tied, except that even so, bad as that document is, there is still, it seems to me, sufficient discretion for a sensible IPC to deny some of those sites if it feels they are outrageous, so further sites might well fall off, but then what happens?

Q250 Chairman: I think that is a point of clarification, therefore, that the IPC has discretion to the extent that it may reject particular sites, for example on the grounds of likely inundation, then what appears to be the case, as the documents stand, is that there is then no plan B for alternative sites, that actually existing sites may be rejected but no other sites under the terms of that particular NPS can then come into consideration?

**Mr Ayliffe:** Not until 2025.

**Professor Blowers:** That is absolutely true, but I would just caution you on the first thing you said, and that is if you look at the way the document is written every effort is expended to get the IPC basically to allow those sites because there is this thing called overriding national interest. However, bad the damage and however much mitigation is appalling, you can still appeal to overriding national interests and they are told, “We need this stuff. You've got to find the sites,” and that is why I think the NPS is absolutely fundamentally flawed. That should not be said because that so balances the thing you might as well not plan at all. You might as well say, “These are the sites,” which is virtually what is being said, “You’re going to have them,” and that means dumping on a whole load of communities now and in the future. But if you are going to address that question, that is where I would start actually.

**Ms McSorley:** Again very quickly on sites, when British Energy was sold it was sold to a company on the understanding that it would probably get new build on a number of these sites and also have to sell some of the sites to other potential nuclear operators, and the Government is tied into a deal with EDF on that. Westinghouse is not in the frame on that one. So there are questions around that decision being made some time ago and how that might influence the IPC’s decisions, because if it says no to Bradwell, for example, EDF again ends up, as it might have done with Dungeness, with something that is pretty worthless in terms of nuclear development. It is a much less valuable plot of land and that is why that issue has to be discussed in terms of what the IPC feels it can say no to as well as its powers to say no to things.

Q251 Colin Challen: Shall we turn to radioactive waste? Obviously we have heard a bit already about that subject this afternoon and I am just wondering if you think you have characterised the adequacy of the Government’s plans to deal with radioactivity as they stand today and I am just thinking of the Finnish development. The way the Finnish new nuclear power station was sold to the Finnish Parliament and the people of Finland was that they already had control of that issue. The solution had been found and that was the condition, no nuclear power without that condition in place, and then of course they started and discovered that they had not got a solution to that problem. Are we in the same boat in relation to that question?

**Mr Ayliffe:** Yes, I think we are. I think the Government’s position on final disposal or not is wholly inadequate. There are vague promises that we would have a solution to nuclear waste, a full geological disposal, and if you take this as face value in the nuclear NPS it seems that there is no problem, but realistically we are no further towards finding a long-term solution to waste disposal. I would just say for the record that Greenpeace do not believe that there is an environmentally acceptable way of dealing with high level radioactive waste, but the way the Government has framed it makes it seem that there are solutions, that we can crack on and go ahead with this stuff. The Flowers Report in the 1970s said that you should not create more waste until you have a solution and we think that still stands. We do not see the solution and the way that the managing radioactive waste safely programme which the Government has developed to try and sort this problem out is, of course, predicated on the principle of voluntarism, so that there will be a community somewhere that comes forward, that they will be able to then bury all this waste in. This is fraught with danger, I think, because although I believe three communities have come forward in Cumbria to say that they are interested in having a waste dump, there is no guarantee that the geology will be suitable, and I would remind the Committee that Nirex in the 90s and the 80s spent a lot of time digging and drilling in Cumbria, that region of Cumbria, only to find that it was not suitable. So betting the house on finding a solution for geological disposal I think is risky. There are huge issues of whether or not there will be a geologically suitable site. We do not know whether the Nuclear Decommissioning Authority will be able to make a
safety case, even if they do find a site, and the NDA itself has gone on record—and this is in our submission—as saying, “There is no guarantee that the process will succeed in Cumbria. We need to bear in mind that the community has the right of withdrawal at any time and they do not need to justify their decision.” So although the Government does start mentioning, “Well, if voluntarism does not work then we might have to start strong-arming people,” but that was one of the reasons why Nirex did not work. People do not like being told that they are going to have a radioactive waste dump on their doorstep.

Q252 Colin Challen: The Government, I think, at least within the Press, has suggested paying communities, which would be in any reasonable definition a bribe. In planning law, of course, these things are taken very seriously. Is this process two party? If you come along and you say you are going to have a fair and objective planning assessment and you find that the local community believes that it may be rewarded financially for going in one particular direction, that is going to completely disrupt the planning process? If you are having local meetings, and so on, it is going to surely be a big problem?

Professor Blowers: As I say, I was a member of the CoRWM Committee and actually drafted a lot of the policy that we are now talking about. It is, of course, the case that if there was a community that wanted to participate in the process some support would be given in various ways, it would have to be in terms of information, and so on, and ultimately if a repository were to be constructed then what we will call packages might well be designed. But that was not seen as a bribe or an incentive, it was seen as a necessary element of improving the community’s wellbeing because of the negativities that surround that. But that aside, I would just like to say something about this evidential base. I, as a member of the committee, along with the past chair of the committee and two other members, wrote to the Secretary of State last November—and despite two prompts I have yet had no reply, I am still waiting for a reply—pointing out the problem with the statement in the NPS, and it is back to this question of is this fit for purpose. The statement is that effective arrangements have or will be made. You will remember that particular statement as part of your question. What we said in that letter was that we felt that was a serious misrepresentation of the situation because in fact it is unknowable whether effective arrangements will be in place. You simply cannot know that. There are three reasons for this. One is the scientific, in that the recommendation was for deep disposal after a long period of research and development and on storage. No such research and development has been undertaken and the science is being heavily contested at the moment. I hope you will look at the submission by the NWAA which is coming to you, which I think does give a very, very good scientific critique of the situation. It is one of those situations where we may never know and where the science, as we begin to learn more, begins to throw more doubt, even on the Baltic solution which the Finns are so fond of. There are no discussions about copper canisters, and so on.

Q253 Colin Challen: But we know that we have to deal with this radioactive waste, the legacy?

Professor Blowers: Indeed. I am coming to that point.

Q254 Colin Challen: The industry will say, “This is not such a big issue now with new nuclear build because it will create so little in comparison with the old previous generation. So given that we know that we have to solve the problem and it may be added to by, as they say, a very small, almost barely noticeable amount of nuclear waste—

Professor Blowers: I wanted to come to that point, though, because the first plank is the site, which is in doubt. The second is the social side. We talked about voluntarism. There is no guarantee that there will be a community that comes along with it, and even if it does that the site could be necessarily proven at that point. But all of that policy applies, as you hint, to legacy waste, it does not apply to new build. We do have to solve the problem of legacy waste and we will have to do that in various ways, but you cannot piggyback new waste onto that because it raises different issues about inventories, about the ethical nature of creating something that is not necessary to create and its implications for future generations, and there are technical issues to do with high burn-up fuels, and so on. All of that requires a process, a new process, to look at new build waste. Simply to say you can dump new build waste in repositories if they ever come about, that were intended for legacy wastes is, I think, misleading and something ought to be seriously said in the NPS documents on that particular issue as well as the other issues of the flooding because the point is in the year 2000 we are still going to have stuff on those sites, as far as we know, and we do not know that there is going to be any method of long-term management by then. In other words, we are saying there is a black hole ahead and I think this is where the Government is utterly irresponsible and unethical. It is saying, “Okay, you communities and all you people in the future for the next 200 years at least, you are going to have this stuff. We don’t know what we’re going to do with it and actually the situation may be far worse in the next century when the conditions at those sites deteriorate and when people are no longer so sort of committed to the new plants when the new plants have disappeared, as they will do.” That is an astonishing legacy, it seems to me, to be imposing on future generations and I am absolutely amazed that virtually nothing is said about that ethical question in the NPSs, which in the past has been a very, very serious issue. Now it is almost as if we need nuclear power now. We don’t give a damn what happens in the future.

Mr Ayliffe: Very, very quickly, just to echo Andy’s point really that knowing you have to deal with legacy waste is not a reason for producing more and
you should not conflate the two, legacy and new build, but I would just point out to the Committee as well that dealing with radioactive waste is not just about volume, it is of course about radioactivity and it is entirely likely, in fact certain that the waste produced by new reactors may be smaller in terms of volume but it will be far more radioactive, produce a lot more heat and will subsequently be far more difficult technically to actually deal with.

Ms McSorley: If I might just raise an NPS issue very specifically. You have heard from my colleagues that there are issues around disposal, on site management, issues around how we are going to deal with spent fuel. Paragraph 3.8.20 says quite clearly: “Having considered this issue of radioactive waste the Government is satisfied that effective arrangements will exist to manage”—that is from now, in between the disposal site—“and dispose of the waste that will be produced from new nuclear power stations. As a result, the IPC need not consider this question.” That cannot stand and that has to be struck out of this NPS. The IPC has to look at a cradle to grave approach and not these arrangements and really it cannot take the Government’s or the industry’s word on this and for the IPC to be told not to consider it is totally unacceptable.

Q255 Chairman: Yes, I was indeed going to and the relevant paragraph says, does it not, “Having considered this issue, the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result, the IPC need not consider this question.” May I take it for the record that that is a statement with which you collectively do not agree?

Ms McSorley: Yes.
Mr Ayliffe: Yes.
Mr Allott: Yes.
Mr Bullock: Yes.
Professor Blowers: I think also you might ask the Secretary of State, if you could, to give a reply to the letter which has been submitted on this particular issue.

Mr Ayliffe: I think it sort of typifies the industry in that the approach to new build is that it is almost like, you know, the triumph of hope over experience. I still dream of playing cricket for England. It is highly unlikely to happen, but it seems that the Government is expecting people seriously to assume, “Well, okay, they’ll find some way of dealing with this incredibly dangerous radioactive material at some unspecified point in the future, so we won’t really need to think about it.” I mean, it is incredible.

Chairman: We have covered the areas we wanted to cover this afternoon and we have run out of time for our discussions. I would like to thank you very much for your evidence this afternoon. Obviously I will look forward to the news flash on Sky Sports that Mr Ayliffe is about to bat for England! I might add that I think it would be very useful for the Committee if the Committee could be supplied with a copy, Professor Blowers, of the letter which you submitted to the Minister, assuming it is in the public domain, for our deliberations. I would be grateful for that. Thank you very much.
Wednesday 20 January 2010 (morning)

Members present:
Charles Hendry
Anne Main
Sir Robert Smith

In the absence of the Chairman, Paddy Tipping was called to the Chair

Witnesses: Mr Robert Asquith, Planning Director of New Earth Energy, and Ms Gaynor Hartnell, Director of Policy, Renewable Energy Association, Ms Gemma Grimes, Planning Advisor, Mr Peter Madigan, Head of Offshore Renewables, British Wind Energy Association, gave evidence.

Q256 Chairman: Good morning. Could I welcome Robert Asquith, Gaynor Hartnell, Peter Madigan and Gemma Grimes. You are very welcome. The NPSs have been published. Do you think they are broadly in a form that the Department could adopt?

Ms Grimes: Yes. We believe that they are in a good state to be taken forward. They are well developed. We have a couple of points of detail that we will bring out in our formal consultation response to the Department of Energy. We would just like to say that we feel that the need for renewable energy, the detail of the Government’s ambitions on renewable energy, might be better expressed.

Ms Hartnell: Broadly speaking, the Renewable Energy Association shares that view, that they should be adopted, with the caveat that the need is not adequately expressed. It should be far more robustly expressed. We are disappointed that the guidance does not cover a wider range of technologies and we feel in this particular version it should signal that the next iteration will contain a wider range of technologies. There are a few details we will send in to the Committee where we feel it ought to be changed, one of them being that we do not want to see the IPC being able to refuse a consent if it believes that the Environment Agency would have cause to not issue a consent. We do not think that is right.

Q257 Chairman: The new technologies that you are concerned about, would they be around biofuels?

Ms Hartnell: The vast bulk of renewable energy projects are going to be coming in at under 50 megawatts on the electricity side, and indeed the renewable energy target we are striving to meet, of 15 per cent of total energy by 2020 is not just about electricity anyway. There is a huge expansion needed in heat, transport fuels and biomethane to grid. Really there is a great need for efficiency across the whole decision-making spectrum for renewables, the Town and Country Planning regime as well. Admittedly, the guidance was not written with that objective in mind, but we would like to have seen it have some bearing on bringing efficiency into the process for the Town and Country Planning regime. We believe it could have been written with that objective in mind and we would like to see it fulfill that role in the future.

Mr Asquith: One of the areas on which would like to see greater clarity is the relationship between the NPSs and the Town and Country Planning system.

Q258 Chairman: We are going to come to that, Robert. Have a think about that one and we will be there in a minute. People have mentioned the IPC. Is there sufficient robustness in this statement to allow the IPC to make sensible decisions?

Mr Madigan: From BWEA’s perspective, we would like to see that statement made as strong as possible, and also greater clarity given to the weight which that statement carries. The Government has clearly set out its renewable energy policy and that needs to be communicated to the IPC. From the perspective of offshore wind, 8 January saw the announcement of a third round for offshore wind, and in order to deliver that large capacity of renewable energy we need a clear statement of the Government’s ambition in the NPS.

Ms Hartnell: One cannot over-emphasise that enough. We have an excellent history in this country, unfortunately, of setting renewables targets and then missing them. We have to stop that. We have these mandatory targets now and we need to change things around.

Q259 Chairman: One of the things people have said to us is that the Overarching Policy Statement does not say anything new really, that it is a bit thin. Is that a fair criticism?

Ms Grimes: We believe it could state the urgency of climate change and the corresponding need for renewable energy more clearly. In the summary of the Government’s Energy and Climate Change Objectives at EN-1 there is no reference to the EU 2020 targets and further down that section no reference to the binding target to cut emissions prior to 2050. It talks about the need to cut emissions by 80 per cent by 2050, but there are further goals along that route to reduce carbon emissions sooner rather than later and that could be brought out much more in the Overarching Energy Statement.

Chairman: Let us turn to the question of establishment of need.

Q260 Dr Turner: Several witnesses have expressed concern that, as drafted, the policy statements would not in themselves prevent more carbon-intensive generation coming through (more gas, for instance). They are worried, as you are, about the expression of need not being clearly related to government policy on low carbon transition. What would you like to see put in place, probably in the Overarching Statement,
to establish that these statements are a reflection of government policy and that in the hierarchy of generating capabilities renewables must come first?

**Ms Hartnell:** Renewables are in a unique situation, in that there is a mandatory target for renewables which does not apply to other technologies within the energy mix, but the decision on the carbon intensity of proposed generation projects should not be a planning decision. We have a raft of environmental policies dealing with carbon emissions. The IPC should be about judging a proposal in a specific location put forward by developers. It is doing a different task. If the Government’s policy is to let the market come forward with technologies within the framework it sets for environmental policy, we would argue that the IPC should not be doing that job.

**Q261 Dr Turner:** You have said in your evidence that you want a further expression of need in the policies. **Ms Hartnell:** I do not think that is contradictory to what I have just said. Whatever other generating capacity may or may not get consent, renewables are striving to meet a certain target. Renewables would not be constrained off the system, if there was a need to constrain off, because too much capacity had been consented and was seeking to generate. It does not affect renewables.

**Q262 Dr Turner:** It does if it is all too easy to invest in non-renewable technologies, does it not?

**Ms Hartnell:** It would become less attractive to invest in non-renewable technologies—and this is a market decision—if the view is that those technologies or those plants would be constrained off more as a consequence of meeting the renewables targets than other capacity within the system.

**Q263 Dr Turner:** If there is no constraint in the planning system and they are cheaper, then they are attractive to investors, are they not?

**Ms Hartnell:** Not if they are not allowed to generate because they are constrained off, or not if they are not able to make enough money through generation—but it is a market decision and the market can take care of that.

**Mr Madigan:** We would support the REA’s comments on that. We support a market-based approach to bringing technologies forward. As Gaynor said, the IPC should be making consenting decisions and the issues of priority should be dealt with by other government policies. It is not for the NPS to pick technologies.

**Q264 Dr Turner:** Your faith in markets is very touching but it has not been borne out by experience so far, has it?

**Mr Madigan:** If the markets fail to deliver, then the Government can bring in further policies to address that. But that should be done separately from the NPS. There is a danger if you set firm mix figures within the NPS. It is a very inflexible mechanism and it would be difficult for the industry to respond.

**Q265 Dr Turner:** I am not suggesting that the NPS should set firm figures. Of course the Committee on Climate Change is also involved in the statutory consultee, so that point should be covered. I am trying to elicit from you what both bodies want to see in the NPSs as a firmer expression of need.

**Ms Hartnell:** Setting out the context of the renewable target in terms of the Renewable Energy Directive; saying things like, for example, “If we fail to move as swiftly as anticipated on renewable electricity expectations, then the heat contribution will have to rise”, or other contributions will have to rise. A discussion of that would be useful. Perhaps some reference to greater efficiency across the board would be helpful, and a recognition that in the past we have struggled to meet targets. Perhaps some ranking of where we are in the European mix in terms of other Member States and the fact that our trajectory towards meeting our target is steeper than virtually any other Member State because our starting point is so low and our target is relatively high.

**Q266 Dr Turner:** What you are saying, as I understand it, is that you want to set out the arguments, for a hierarchy of generation and energy approaches, and you want the IPC to work out the conclusions, whereas in fact the IPC is there as a planning body, not as an energy policy body.

**Ms Grimes:** We are saying that we want existing government policy in a range of sources condensed and made clear within the NPSs and the Overarching NPS and the Renewable NPS. Also, that it is not the role of the IPC to pick technologies. Their role is to determine whether the applications in front of it are acceptable in planning terms. It is the role of the market to bring those applications forward to the IPC, and we believe from our perspective—and I think the REA would agree with this—that the market has proved very capable of putting forward the applications, it is the planning process historically, particularly in the Town and Country Planning regime, that has proved ineffective in determining those projects in accordance with national policy, I think it is fair to say.

**Q267 Dr Turner:** That is why we are here discussing these, because the current planning system has totally failed to deliver and has been an obstacle to delivery. It is an intention to remove that obstacle. I am still unclear just what you want the expression of need to do. Does it need to be, as Gaynor has just suggested, virtually a thesis on energy considerations, or a clear directive that the Government sees the desirability of renewables as opposed to carbon intensive generation?

**Ms Grimes:** It needs to adequately express the need for renewables, based on the existing policy that is already out there. We do not feel that all existing policy that is out there is currently within these documents—and I referred earlier to the issues about the 2020 targets and binding cuts in CO₂ emissions not being explicitly referred to in section 2.1 of the Overarching Energy NPS, so those need to
be brought in. It is the fact that in existing planning policy for renewables, these things are all over the place. The PPS is quite old now—and we will possibly come to that later in further questions—but it is that central point to which the IPC can go for the latest thinking on government policy and then know the weight that they need to accord to that need. At the moment the direction to the IPC as to the weight to be given to the need is missing and the full details to the extent of that need we feel could do with strengthening.

Dr Turner: It sounds as if you would be satisfied by a sentence or two and Gaynor would want a few paragraphs.

Q268 Chairman: Let me put it another way. The Government has very firm renewable targets. How is the IPC going to take those into account in its decision-making?

Ms Hartnell: It is going to start from the perspective that the need case does not need to be demonstrated because we have stretching targets, and it will then move straight on to considering the individual characteristics of the project being proposed.

Q269 Chairman: Suppose there is a feeling that many people share that we are not going to meet these targets, what should the IPC do?

Ms Hartnell: Again, the IPC is not charged with meeting the targets. This is just a general observation: the Renewable Energy Association does not have any problem with this approach, except that we feel it does not really go far enough and it will not really deliver much difference for the smaller projects, but previously these projects would have been taken under the section 36 process, by the Secretary of State, within the department that is charged with delivering the targets. If it understood the need very clearly, now it is just expressing that need via a third party, the IPC, to carry out things that it could have consented fairly quickly, should it have wanted to, before.

Ms Hartnell: The Government sets a policy framework to try to steer the generation mix in the shape it wants to be. In relation to Des Turner’s comments about us being very comfortable with markets, I would like to point out that we are very pleased that we have a mandatory renewables target. We would not want that to be left to the market. Within that unique position, our point is that we are comfortable, we have these targets, we cannot see why they are not expressed more clearly in this document, but really we are slightly disappointed that things do not go further to bring efficiency to the rump of the renewable energy scene which is these smaller projects.

Chairman: Let us move on to another issue, the Nuclear NPS. The NPSs are not site specific. Mike, would you like to pursue that.

Q271 Mr Weir: We have had evidence from other witnesses, the Campaign for the Protection of Rural England in particular, seeking a more spatial approach to the NPSs. In particular, they suggested that there should be a zonal approach for development, particularly of renewables. What are your views on that?

Ms Hartnell: We disagree with the CPRE on this. We are both aware of one another’s perspectives. We believe that this would be a significant departure from existing government policy on energy. It would result in a significant increase in costs all around, both to those carrying out the identification of zones, and particularly to the industry in having to reassess all its current projects in the planning system. There is a significant backlog in the TCPA planning system particularly and we do not believe that we can afford to brush those aside, given that we only have ten years to meet our 2020 obligations. The resource intensive and costly process would also be very time-consuming for any organisation that does this, whether it is nationally, regionally or locally. Based on past experience, I would imagine there will be a significant amount of time spent debating the public pros and cons of having it here or having it there. The evolution of technologies and the evolution of mitigation measures also means that if you identify a particular zone, that zone may then become less viable for particular technologies or other areas may become more viable. You limit yourself by making time-specific proposals that may then need to change later. We would also say that, based on past experience, a zonal approach has not been especially effective and there are particular examples that we could go into relating to a delay in bringing forward the necessary renewables.

Q270 Sir Robert Smith: To sum it up, the key part of the guidance is that there should not be a barrier holding back those developments. If the Government are not meeting their target, then the planning system should not be a barrier to the meeting of that target, but other parts of public policy, like the price of carbon and various other factors, should be there trying to bring forward the demand to make those applications.

Ms Hartnell: The Government sets a policy framework to try to steer the generation mix in the shape it wants to be. In relation to Des Turner’s comments about us being very comfortable with markets, I would like to point out that we are very pleased that we have a mandatory renewables target. We would not want that to be left to the market. Within that unique position, our point is that we are comfortable, we have these targets, we cannot see why they are not expressed more clearly in this document, but really we are slightly disappointed...
Mr Asquith: One of the problems with the spatial type of approach to which you refer is illustrated by the pace of technological change in various renewable sectors. I am working in a renewables sector at the moment which is still quite new, with new technology. Having been involved, some time ago now, with the original PPG-22 on renewable energy, there is a realisation that by the time that kind of guidance gets published it is almost inevitably, to a certain extent, out of date. The wind sector is a good example, in that the nature of wind turbines has changed significantly over the period since the early 1990s when planning for renewable energy started to become as prominent as it is. That is one objection that we have. Another is the experience I have had of the amount of time it takes local planning authorities and other organisations to get to grips with that and then to produce policy. It takes time and resources, and these are organisations which are resource constrained. Third, there is the issue that however you word a spatial policy to say that this is the preferred area or an area of search, it does immediately, however carefully you word it, demote all other areas to a lesser status. There are many examples of projects which have been promoted in areas which might not have been immediately obvious but which have been perfectly acceptable projects to come forward.

Q273 Anne Main: I would like to pick up on what Paul was just saying and on something Gemma said earlier. You said that immediately constrains other areas from being investigated, but not if, say, a traffic-light approach was adopted. Green: absolutely great—this would be a great area; amber: maybe you need to think about it; and red: absolutely no. There are other ways of doing it. The zonal approach has just been touched on. Do you think there could be other ways of trying to adopt a more spatial approach?

Ms Hartnell: We cannot really see any particular advantage in that kind of spatial approach at all. For a start, it takes resources, and there does not seem to be any particular advantage in doing it. All it would give is an idea where some planners think projects are more likely to be proposed than not. Those people living within an area of search would be sensitised, because their area was zoned for development. It might give people living outside that area a false sense of security.

Q274 Anne Main: Do you accept the public is deeply unhappy about some major infrastructure projects—not just energy: these National Policy Statements are going to cover various major infrastructure projects—and for the public there has been an anticipation that these statements would be more site specific, more area specific?

Ms Hartnell: It would be simply misguided for them to be site specific, though. Renewable energy project developers are the people who know best where a project should be. A planner could not second-guess all of the numerous things that a project developer would take into account when considering where a project should go. It is their day job. That is what they do. They are very experienced.

Q275 Anne Main: A renewable energy company may know where the best place to put it is, but that does not necessarily mean—and you have to take the public with you on this—that is where the public will accept it. There has to be a deal between both the public and developers. That has been a cry across my constituency and I am sure across many others, that it is greedy developers having their way. If we are to buy in to some major infrastructure, do you not accept that there has to be something that the public can say, “I accept that is a reasonable formula to go forward”? At the moment it appears to me that you are still saying it should be a developer-led thing and there should not be anything that shifts the balance somewhat to more community engagement with the projects.

Ms Hartnell: There already are a lot of areas where a developer would not propose a project because of, say, areas of outstanding natural beauty, national parks or whatever. When a developer comes forward with a project, they will have considered a very long list of things, some of which could be indicated on maps; others may not be very well indicated on maps.

Q276 Anne Main: The strength of need that is quoted in many development projects is going to be very, very high, simply because our targets are so high. The need is already going to be an overriding concern. For example, you do not build in the Green Belt unless you can demonstrate exceptional circumstances. This high level of need is going to be a determining factor already. Therefore, do you not accept that there should be potentially some way of writing into this an agreement, with the community as a whole, as to how we are going to ensure that the two halves of this equation are met: what the public want and what the need is and the developer wants?

Mr Madigan: It might be worth mentioning the pre-application process and the IPC process. At that stage there is a greater need to engage with the local community, so there will be considerable amounts of time devoted to getting local opinion fed into the process. Within the framework as it is currently set there is that opportunity.

Q277 Anne Main: People often say, “A consultation is that you are going to ask me my views, and then you are going to determine it anyway because it says in the rules that this is what could happen.” I understand the pre-planning consultation process but—trying to put on a public hat now rather than a developer’s hat—do you accept that to ensure that public engagement is enough and that the public goes with you on these applications there should be potentially something within the statements that reflects that?

Ms Grimes: We fully understand the position that you are coming from. We are very aware that certain elements of the public get very concerned about wind energy projects. However, based on past
experience, because this has been tried in a number of areas—it has been tried in terms of broad areas of search in England and Scotland, it has been tried in terms of strategic search areas in Wales, and then we have different local authorities trying their own thing on their own patch as opposed to a more regional approach—all of which have involved detailed public consultation but, nonetheless, despite that detailed consultation process, those areas, once identified, whether they are broad areas, whether they are strategic search areas, whether they are preferred areas—and it is an issue of semantics to a degree—when placed on maps in development plans do not resolve any of the debate and contentious discussion around renewable energy projects.

Q278 Anne Main: You want to take it out, then, so that if we do not have it in, we cannot.

Ms Grimes: We do not genuinely believe, from all angles, that it adds any value. It does not make things clearer for the public or for the development industry. It does not make the decision-making process any more streamlined. It does not increase the number of consents. It does not reduce the amount of time debating issues about the need, whether there is the extent of the need and whether visual impact outweighs the need. All these things are still thrown up in the mix and we simply feel that it adds another thing on the list of things to shout about at public inquiry. It is really not something that aids the process.

Q279 Chairman: Remind me: what is the threshold for onshore wind farms?

Ms Grimes: Fifty megawatts.

Q280 Chairman: How many will go to the IPC, do you think?

Ms Grimes: There are currently five that are expressing an interest with the IPC at the moment.

Q281 Chairman: But most onshore wind farms will be dealt with in the current planning system.

Ms Grimes: Yes. Around 70 per cent of onshore projects in England and Wales will go to the Town and Country Planning regime.

Q282 Sir Robert Smith: You have covered my first question, which was about the Welsh area of search and how it maybe has not made the difference, but how does your approach to areas of search compare with the Government’s use of areas around the three licences for offshore wind?

Mr Madigan: The Rowntree process is the leasing process for the seabed, so you have zones allocated to companies and consortia of companies for them to develop. They will start a process whereby those companies identify individual projects and bring those forward to the consenting system. The driver for allocating those zones was very much a commercial process. It is not an area of search approach. There is no assumption that these will be easier to consent than projects that were brought forward outside of those areas. That was not the intention. It was mainly driven by the need to have a competitive commercial approach to allocate these areas.

Chairman: Let us return to an issue that Robert took us to right at the beginning, when I rudely cut him off: the relationship of NPSs with the existing planning system.

Q283 Dr Whitehead: We have rehearsed some of these arguments and heard from Gemma that 70 per cent of onshore wind applications will go through the existing planning system. What do you think the relationship should be between NPS and the existing planning system? Is it a cut-off relationship or should it be a graduated relationship?

Ms Grimes: They are legally distinct systems but there is a great deal of interconnection between the two. You may be aware of a letter from the chief planner at CLG that went to all chief planners and local authorities.

Q284 Dr Whitehead: In November.

Ms Grimes: Yes. That confirmed that local authorities would need to have regard to NPSs in the creation of their development plans and in the review of their development plans, and they should also have regard to NPSs when making decisions on individual projects. We very much welcome that. There are two points that we would like to be strengthened. We would like guidance to be given to local authorities as to the weight that should be accorded to NPSs when making decisions, because it is fine to have regard to them but you are having regard to so many things you want to know what things are more important than others to bring into the balance. Also, it is stated in the letter that NPSs do not form part of the local authorities’ development plan, and we would like that to be reviewed because, at the moment, both the Department for Energy and the Department for Planning are very unclear. I do not think they have decided either way the relationship NPSs have to PPSs, whether they are the same weight or whether one has slightly more weight than the other. From our perspective, across both organisations, it makes no sense to have two policies that have the same weight when one is saying something slightly different potentially in emphasis to the other, and they both claim to deal with renewable energy.

Mr Asquith: It would be very regrettable if perfectly good schemes that had gone through planning failed at legal challenge because a planning authority had inadvertently perhaps misunderstood advice, or maybe the advice had not been as clear as it might be about the relative status of these things. I believe that if the NPSs are adopted and deemed to be a good thing it should be a very strong material consideration. Indeed, I think it would be better if they were somehow accorded the status of PPSs in the planning system. That would be a quicker route...
than the route of then trying to modify the relevant PPSs which are not just PPSs-22 but PPSs-1, the climate change supplement. In my sector we have to deal with PPS-10, sustainable waste management, to fit with them as well. There is a danger when you have more and more policy, well-intentioned, designed to cut through the problems of the obstacles and getting schemes to go forward, that it inadvertently creates a legal quagmire. That is our greatest concern. At a practical level in terms of the non-IPC proposals, it is very worthwhile noting that these NPSs will be clearly seen as statements of government policy which will be used to make a case for, or possibly against, projects. It must be seen that whilst their principal purpose is for the IPC, they will inevitably colour and have an effect upon the Town and Country Planning system as well. That is something that needs to be very carefully thought through as the final documents are prepared.

Q285 Dr Whitehead: The REA has suggested that local authorities and the rest of the planning system should be required to follow NPSs rather than have regard to them.  

Mr Asquith: That would be our preferred approach. That would obviously require some form of modification to primary legislation about the planning system to be affording that status. If that is not possible, the weight that should be given to them should be very clear—if you like, “very material consideration” or something like that.

Q286 Dr Whitehead: Do you think it is possible to get to that position without perhaps entering into a greater potential quagmire of legal challenge, a “paradise for lawyers,” shall we say, than is the case at present? Presumably your preferred outcome would create a hierarchy of regard, and under those circumstances the extent to which any sort of local decision-making might then be overridden by requiring to stand in line with an NPS would appear to undermine the status of PPSs and therefore a lot of the rest of the planning system.  

Mr Asquith: That hierarchy of regard, as you put it, is already there. One sees with new PPSs, as they are issued, almost universally a statement that where there is conflict between the policy and this PPS and existing policies in others and in development plans, then this PPS must have precedence, but that statement clearly tells the reader and the decision-making might then be overridden by requiring to stand in line with an NPS would appear to undermine the status of PPSs and therefore a lot of the rest of the planning system.

Q287 Dr Whitehead: The distinction at the moment in terms of NPSs as they relate to IPC is that the NPS produces the general statement of policy, within which an inquiry might be framed through the IPC. If one puts that as a parallel issue as far as local planning authorities are concerned, it is not easy at first sight to see how the planning system could easily “tuck in” to that arrangement as far as the IPC is concerned. Are there ways in which you think that could be clarified?

Ms Grimes: It comes back to the point that the NPSs are designed to be, and we believe them to be, a restatement of existing government policy. Existing government policy should already be fully taken into account by planning officers under the Town and Country Planning regime but, as I said earlier, because this government policy is so widely dispersed and because current PPSs on renewable energy and climate change were relatively out of date, this NPS is a consolidated summary of government thinking on energy and climate change. We feel that that should be a significant material consideration within the TCPA regime.

Ms Hartnell: Coming back to what I was saying earlier about what we would ideally have liked this NPS to have done, in an ideal world it would have been great had this statement been the kind of be-all and end-all of government policy on various different issues, so that time need not be wasted in the local decision-making process on, say, spurious claims that really opponents of schemes only need to air the risk of the lights going out because this wind farm is intermittent, to sow a seed of scepticism among members of the committee. It would be nice if the NPS were to set out non-issues as well, so that one could say, “Look, this is a non-issue. We shouldn’t be discussing it in this planning committee.” Furthermore, if a developer could see this non-issue being discussed, there would be some means of recourse where they could say, “We don’t want to be dealing with this. This shouldn’t be on the agenda.” This is something the Environment Agency should deal with. It is not something for the planning committee to be worrying about in an ideal world.

Q288 Dr Whitehead: In a sense, part of the design of NPSs, as far as what would be considerations on major proposals or major national infrastructure proposals is that certainly a fairly explicit aim is that the percentage of time that is taken up in inquiry by those sorts of issues, as opposed to location specific and design and arrangement specific issues taking up the minority of the time, would be reversed. The NPS is to some extent, as it were, a myth-busting device, and the rest of the inquiry then takes place with those out of the way prior to the inquiry taking place. What I cannot quite see is whether that model could easily be replicated as far as local planning authorities are concerned and how PPSs fit into that process, and whether requiring an NPS to be, as it were, the trump document as far as those other issues are concerned would so far undermine the local planning system with a number of other considerations that you might end up having far more legal challenges than you think you might overcome as a result of the non-issues being determined in the way that Gaynor has suggested.

Ms Hartnell: I will leave the detail to my colleagues who know far more about this than me, but I would point out that in the fewer larger projects one could perhaps afford a little bit more time to discuss these things. When they are being discussed across the
country in hundreds and hundreds of small, local decision-making meetings, it is all the more important that they are more efficient.

**Mr Asquith:** It is important to distinguish the scope for legal challenge from the scope, if you like, of planning appeal-type challenge to a decision which is taken locally. My concern is that a planning authority might inadvertently rely on something and give it a greater status than it should have done. That is why the status should be clarified for the NPSs. When it comes to these, as Gaynor says, non-issues, which are the old chestnuts of our business, it is helpful. Those are specific planning matters. It might be a planning appeal or a re-invite in some way, but they are not really legal issues for challenge of planning decision-making.

Q289 **Charles Hendry:** Is there not a danger that you will be perceived as wanting a mighty sledgehammer of a planning system to force through applications where there is very little public support in that locality, when you should also be looking at other ways of getting public engagement? There are some major wind farm applications where there is no local public support for them because those communities cannot see the benefit which they are going to get. There are others where the local community is actively supporting the application because of part-ownership schemes and aspects like that and they can see a very real benefit to their local community from doing it. Should that not be the area where you are focusing rather than on the legal challenges?

**Mr Asquith:** I cannot really speak for the wind sector per se, but really issues of how one handles public engagement, part public ownership, for example, are not planning issues. Indeed, those are more powerful tools to use than perhaps some of the spatial policies which were being referred to previously. In my search of renewable business, we are finding that we are not as inherently objectionable, and therefore the kinds of issues we are dealing with are the lack of understanding of what it is we are doing, which is reflected partly in the drafting of the renewables document.

**Ms Hartnell:** Yes, that is an area we would work on in parallel. The Conservative Party proposal to allow local communities to keep a proportion of the business rates for wind farms, and wind farms alone, for a period of time is good, but I would suggest that it should not just be for wind developments, it should be for all renewable projects. That is the sort of thing that we think is extremely helpful. We would push for that approach to be adopted. There are all sorts of ways in which local communities can be rewarded.

**Mr Asquith:** I was at a public engagement event only this last weekend and the inevitable question came up, “Why can’t we get cheap electricity from you locally?” There are all sorts of reasons why we cannot do that and it would be wrong and foolish of me to promise to do that, but the kind of solution to which Gaynor alluded is an answer which is currently not available to us but, ultimately, is nothing to do with planning.

Q290 **Charles Hendry:** We seem to have gone through a process of saying, “This is good for you. You should have these locally,” and that did not really work in terms of getting consent, and then saying, “It would be really bad and irresponsible if you try to oppose these,” and that has not really worked. It seems that the way forward needs to be of much more active engagement, of winning hearts and minds, with people really seeing that there is a benefit for their community for hosting a facility, and then you move them from being active opponents to active supporters. That could be business rates, it could be local community ownership, it could be cheaper electricity. In a way, that is going to be the area where you win people over rather than by saying, “Even if you might not want this, we want a system which will force this through against your wishes.”

**Ms Grimes:** I fully agree with all those points and I agree with you that there is certainly more that could be done by the industry, but there is also more that government could do in informing, genuinely informing, the public as to the climate change problem and the means by which we can genuinely address it, and address it in the most timely and cost-effective manner. I do feel there is more work that needs to be done on that, because, however much work we do: we would say that, would we not, because we are the industry.

**Charles Hendry:** Challenge understood.

**Chairman:** One of the big objections to wind farms in particular are environmental objections, landscape objections. Let us talk about that a bit.

Q291 **Dr Turner:** We have agreed that, if successful, the NPSs can be very useful in eliminating time-wasting by, for instance, needs as established by the NPS, and one would hope that that would equally rub off on local planning decisions as well. There is nothing that local planning committees love more than reinventing the wheel. This also happens with environmental impact assessment. The same, often generic issues, can be chewed over at vast length and expense time and time again, when in fact virtually all of the evidence contained is virtually identical. If then NPSs are successful in dealing with this matter, they should resolve a lot of environmental impact considerations, saving time, saving cost, which again could hopefully rub over into local decisions. Do you think that the statements do that satisfactorily?

**Mr Madigan:** You are absolutely right that one of the major benefits of the NPSs is, as Dr Whitehead said, the myth-busting aspect and focusing on the really sensitive issues that need to be debated in detail. We have some minor drafting points that we would like to bring forward in our written response to the consultation about some aspects of that, just to refine those points and add clarity. It is a balance. In some areas there is a need for specific detailed advice on the issues at hand; in other cases it would be a judgment based on the evidence. In those cases, the IPC needs to understand the drivers behind the evidence that is coming forward so that it can make
Mr Asquith: biomass and waste as an option?

Mr Asquith: One of the points about environmental impact assessment is that it driven by yet another Directive, in that case the European Directive and it is a separate process which in the UK is largely done through the planning system, in this case the IPC system. One of the things that could achieve the result that you are referring to is a very specific and tightly-run scoping process for environmental impact assessments under the IPC. I did not see anything specifically about that in the drafts. When one scopes the EIA with the local authority, often you end up dealing with issues which you should not really deal with but you do anyway because you realise that that is the reality of how it should be handled locally. With this kind of process, a real tight drafting of the scope of EIAs, would help so that we could eliminate all the areas which are in that particular case not relevant or are of very limited concern.

Q293 Dr Turner: You think that with a little tweaking the policy statements do that.

Mr Asquith: I think they could do with a bit of a tweaking, but yes.

Dr Turner: If you would like to give us your tweaks in writing, that might be helpful.

Chairman: Our final area is to talk about different technologies. Gaynor, you mentioned that very early on.

Q294 Mr Weir: Do you feel that draft NPSs deal adequately with the generation of energy from biomass and waste as an option?

Mr Asquith: Certainly one of the things I have found a little frustrating about the draft for renewable energy is the point I made earlier about the speed at which technology moves. We are promoting schemes for biomass and biomass from waste projects, and a description of what an energy from waste project or biomass project looks like in the draft is in many ways quite different from what we are proposing, even when we are proposing things above the 50 megawatts. At that level, I feel it illustrates a general concern of the pace of technology and a danger of being too specific in these documents about what the issues will be. That is one area of concern I had. Another area of concern with biomass and energy from waste is that we are ultimately talking about something, whether it be the original fuel or the secondary fuel, being burned, combusted, and that raises the issue of air emissions. The section on air emissions I think could be tighter and clearer and refer more strongly to the role of the Environment Agency in regulating proposals under the environmental permitting regime, such that, put crudely, projects simply will not come forward if there is any scope for them to exacerbate air pollution concerns at all, including effects on nature conservation, which is, in fact, one of the main areas that we do look at.

Q295 Mr Weir: Some of our witnesses have also expressed concern about the source of the biomass or waste for these and taking into account the carbon emissions of that. What is your view on that aspect?

Ms Hartnell: I know that is sometimes an issue if biomass is being imported, for example. We have put in a bit of information in our evidence that the emissions associated with ocean transport of biomass are incredibly low, some 36 grams per kilowatt hour of electricity produced, whereas coal will emit something like 800 or 900 grams per kilowatt hour. It is a very small additional contribution in terms of carbon from this overseas transport. Distance alone is not the important thing: it is the means of transport that is important. The Government did look at this in a lot of detail when it was considering whether to keep going on coal-firing back in the 2005 review of the Renewables Obligation. It commissioned quite a lot of environmental assessment of this and concluded that it should be a longer-term option because the carbon savings were significant from imported biomass.

Q296 Mr Weir: What about the other aspect of waste? One of the other issues was that if we start burning lots of waste, then perhaps that would impact on recycling and in effect add to emissions. Do you have a view on that?

Mr Asquith: Yes, I do. There are a couple of points I would like to make there, one of which is the relatively recent PPS-1 climate change supplement refers to renewable and low carbon energy. That is an important consideration, in that there are some forms of energy which, whilst they are not renewable, in that they are using short-cycle carbon, are still better outcomes for material than the alternatives, be they landfill or whatever. That is an important mindset to have when considering the carbon footprint, if you like, of a generation proposal. Indeed, we routinely do carbon footprinting analysis to answer the specific questions you have on specific projects. In terms of setting back recycling, I can only speak for the projects we are doing. We are looking at material which would be biomass. Some of it, yes, would have been paper and card in its prior life to becoming a fuel feedstock, but we are looking at material which could never be recycled as paper and card because it is of a low quality. It is important to examine the diminishing returns of recycling more and more of a relatively poor quality resource versus the energy benefits. At some point between those two is a cut-off. I do not think that we are generally at or approaching that cut-off yet, with recycling rates in most parts of the country now around 50 per cent. There is still a way we could go to achieve more good quality recycling and I do not think that should be seen as preventing energy projects which ultimately are there to replace landfill.
Ms Hartnell: Just to observe that those countries in Europe which are generally associated with being the greenest in Europe have the highest recycling rates and the highest rates of energy recovery from waste. The two things go perfectly comfortably hand-in-hand.

Q297 Mr Weir: Do you think the NPS has excluded consideration of wave and tidal power, hydro-power, and why do you feel they have excluded that from their guidance?

Mr Madigan: From the point of view of the BWEA there is currently no wave and tidal projects coming forward that are over 100 MW. However, we do see them coming forward in a reasonably short space of time. We are quite comfortable that wave and tidal has been excluded from this NPS. However, through the provision process, or at the behest of the Secretary of State, there does need to be added a section on wave and tidal at an appropriate time.

Q298 Dr Turner: Do you think it is necessary that the NPSs should exclude, for instance, wave and tide? Why can it not become a more generic requirement expressing the need for renewable energy?

Ms Grimes: Wave and tidal are referred to in EN-1 under that guise, demonstrating the types of technologies that are likely to come forward to produce renewable energy and other types of energy.

Ms Hartnell: I do not think this guidance sufficiently deals with wave and tidal. It is making clear it will come later, but why is it excluded? It does need to be clarified on that. Notwithstanding the general points we would want to make about this guidance being wider across the board, it is dealt with poorly, and I think the intention was that it should have been there, but it was a question of time and resource.

Ms Grimes: From our understanding of talking with the Department for Energy, it was the intention that it would not be dealt with in detail in EN-3 at the moment, and we understand that and accept that with the knowledge that it will be brought forward at a later stage when wave and tidal is closer to market at that kind of generation capacity. Perhaps there is a need for further clarification within the wording of the NPSs because we are in dialogue with the Department for Energy directly, perhaps there are things we understand from them that are likely to come forward but are not expressed in detail in the documents themselves.

Sir Robert Smith: Surely, given the great potential in the long run, wave and tidal must have nothing that holds it up any more and treats it as a Cinderella; so we should be getting on making sure there are going to be no barriers to wave and tidal as it comes through.

Q299 Dr Turner: It should be easy enough to produce a catch-all provision that will cover it!

Mr Madigan: It is also worth pointing out, in parallel we have seen the development of the Marine Coastal Access Act as it is implemented, and you have the Marine Management Organisation, which will be consenting projects under 100 MW. From our point of view we want to see absolute consistency between the approaches of both the MMO and the IPC so that you have a complete, smooth delivery system and smooth process, and that will greatly help delivery of wave and tidal projects.

Ms Hartnell: I think it is very important. Environmental consenting is one of the things that has the potential to really stifle the development of wave and tidal renewables, and it really could do with beefing up in that respect, we think, on this guidance.

Chairman: That is a strong point to finish on. Robert, Gaynor, Peter, Gemma, that was really crisp evidence, with a good bit of disagreement at times, which is always very helpful. Thank you all very much.

Witnesses: Mr Nick Winser, Executive Director, National Grid, and Mr David Smith, Chief Executive, Energy Networks Association, gave evidence.

Q300 Chairman: I am very pleased to welcome Nick Winser, Executive Director of the National Grid and David Smith, Chief Executive of the Energy Networks Association. Both of you heard a bit of our previous discussion. Let us start where we started before. You have read the NPSs. In broad terms, do you think they are in a position where they could be adopted by Government?

Mr Winser: In broad terms, yes. We are very supportive of the Planning Act 2008, and the NPSs are an essential part of it. The NPSs should be regarded in the context of the massive challenges ahead of the energy system, the challenge of security of supply and low-carbon affordability, which we all know terribly well is a massive challenge. Certainly the planning system that we had before the Planning Act was, in my view, completely incapable of dealing with those challenges. As a part of the package, this is terribly important in terms of giving a clear articulation of energy policy and how that impacts on needs statements, the needs for particular pieces of infrastructure, what are the issues that should be considered as part of understanding whether applications should be granted, and, very importantly, how those issues will be considered. As an applicant, those last couple are not often talked about a great deal, but they are incredibly important for us on giving us some predictability about how the planning system will work and the case that we have to provide, therefore allowing a sensible discussion with individuals, communities and broader society about these important projects. So we are very supportive.

Mr Smith: Again, we are supportive of these and believe they set out the framework within which companies can make the necessary investments to meet the low-carbon sustainable future. Again, we believe that the planning system needs to provide the three Cs: clarity, consistency, certainty. We believe that the draft NPSs should be subject to the deepest
and widest consultation process to ensure that they have got the widest agreement and legitimacy and give the right level of detail to the IPC in their decision-making process.

Q301 Chairman: Are you both convinced that the NPSs give that framework to the IPC? Are they clear enough? Do they have a clear direction?

Mr Winser: My view is that at the high level they certainly do. We have specific comments on things that might be clarified more, and there are some omissions we think; but in general, as a set of documents to consider, we think they give very strong clarity on all of those issues around policy and the need case, and how the process will work. They are in pretty good shape, in our view.

Mr Smith: Again, they are in good shape, and again there are some minor amendments that we will put forward in our submissions, but they are only minor amendments.

Q302 Chairman: I have known you both for a long time and you have been round the block a bit—several times, actually; but you have got a lot of experience about energy issues. Some people have said to me that the over-arching NPS does not really add anything new, that it is a bit thin and really does not have the direction that it should have. Is that a fair criticism?

Mr Winser: I do not think it is. I would put it in the context of the very large amounts of money that are going to need to be spent on infrastructure, in particular power generation but all of the infrastructure. According to any of the observers, undoubtedly hundreds of billions of pounds are going to be spent. To give the latitude in the NPS for, if you like, the market with strategic interventions from Government, to over time pick the most economic and sensible way of meeting those three huge challenges, seems to me to be a very wise thing to do. I am responding, I suppose—maybe wrongly—to the implication in your question: could the NPS pick percentages more? I think we have to be very serious about the very high cost of, at any time, ending up picking the wrong blend of solutions to this and creating inflexibility. I think we have to have faith that the market plus the strategic interventions will be the best mechanism over time of getting the right blend. I think they really hit that point. It is a difficult point to hit, is it not? I think they have hit that point very skillfully actually.

Mr Smith: Yes, I think they do. They underpin the Government policy, and that is what they were intended to do—and I think they have. I have nothing more to add than Nick’s points. I think they are in good shape.

Q303 Sir Robert Smith: One of the challenges is that because of the timing of when they have come out, we are having to meet as a Committee while people are still making their submissions, because we know that barring some emergency powers act there will be a general election coming; Parliament will end and start again and it will be ages again before there is another committee to look at this. You said, though, that this needed to be subject to the deepest and widest consultation; do you think they will have that secure foundation, that they will have gone through the deepest and widest consultation?

Mr Smith: I think where we are—there is obviously the pre-consultation process as well so we can go through that. I think the consultation on them—we have been through this quite a while—as the Chairman said, we have been around just a little while now. We know that the planning system did not work properly and we knew we needed to make changes. We have made representations, sometimes individually to you, to DECC and others. We believe it is in a good place. There are some things to be done, but on the question whether they are in a good enough situation to go forward, I believe they are in a good way to go forward. There are lots of things that we will still need to do. We will need to work out lots of them—obviously transmission, but distribution needs to be looked at in the same way, and we need to make sure that the difference between transmission and distribution is very, very clear and seamless. We also need to make sure that the difference between what happens on DECC consents, the Town and Country Planning Act and the IPC is absolutely seamless, and that there is not one going off in one direction and another going off in another direction.

Mr Winser: I think this is a really good set of documents, so please do not misinterpret what I am about to say. These will inevitably never be perfect. They should evolve to changing requirements, but it is important to recognise what having these in place would give us compared to what is currently in place. I know there are some very legitimate debates going on about the overall structure of the IPC and what it should do and so on but, as I read it, there is a great deal of support for the NPSs cross-party. I think that is absolutely right because they have brought this moment of realisation that we were just bereft of any useful articulation and definition of these things, and I think we have all had a sort of a real “aha” moment of how vital the NPSs are. Over the last few days I have looked through these and thought these are really good documents and they are not replacing a different set of documents that does the same work; they are replacing a complete absence of this stuff. Inevitably there will be things that we will comment on in them, which over the course of time may well need to be amended. This is a dramatic step forward, just in the situation of these documents, as they stand—really dramatic. We have very, very stark scars on our backs related to the existing planning process and trying to get infrastructure built; so to have these in place is so important.

Q304 Dr Turner: I am not surprised to find representatives of your industry supporting these planning statements given, as you say, the scars on your backs that you have suffered from the planning system; the many, many years that it takes to get a grid line established, for instance. One of the important things which has caused planning delays in the past is establishment of need every time. Do you think that the National Policy Statements...
adequately establish need, so that it never needs to be an issue for planning decisions as far as energy-generating capacity and infrastructure is concerned; or would you like to see any amendments to reinforce it?

*Mr Winser:* I think that in a different era, almost any other era looking at the developments of the energy system that—it is a good question now—it would be an even more appropriate question almost at any other time. Why do I say that? The studies we have made of the path to 2020 to 2050—and not just ours, virtually all of the other organisations that have put out public studies—we have scrutinised all of those and there has been lots of work by DECC, obviously, looking at those, and we will see some sign of that in the next few months. What comes out of it is that the targets we have got ahead of us are extremely hard to meet. They are very challenging. In saying in EN-1 that all of these types of low-carbon generation need to be encouraged on to the system broadly, the implication being that with the set-up interventions and the market as it works, if people feel that those low carbon-generation types make sense from an economic perspective, taking account of those interventions, that, yes, they should be generally regarded as a good step forward. I think the maths say that that is just right; we will need massive amounts of energy efficiency, massive amounts of decentralised generation, and we will still need very, very substantial forms of all of these types of technology to get us anywhere near to these targets. Just at this point, the way this is drafted is actually not very contentious because we need generally a following wind to get to these targets.

*Q305 Dr Turner:* What about the timing of developments? Obviously there needs to be co-ordination between provision of the grid infrastructure and the development of whatever generation source is being provided. You do not want to find a generating source sitting there isolated, and neither do you want to see a grid line being built with nothing feeding it. Do the NPSs have any bearing on this sort of co-ordinated planning right?

*Mr Winser:* They very carefully negotiate that difficult issue I think, rightly, because one of the huge benefits that can come of the Planning Act is single consideration of a total-need case. In general, to integrate the source of energy that you need to transport it therefore is a very valuable thing. What the NPSs recognise, though, is that that will not always be the best way of taking forward the applications. Why? Just to give you a simple example, I will pick a number out of the air, so do not take this to mean this is my particular view. Say, it takes ten years to build a nuclear power station and the associated infrastructure: we would very much expect that consenting the line would take longer than consenting the power station, and that building the line would take less time than building the power station. You can see that if they both start at the same point in time, you would expect the consenting to perhaps optimally be done at different moments. Why would the consenting for the line take longer? I think the engineering timescales for building the infrastructure are clear but, in terms of the consenting, the nuclear power station, consenting a particular site with all the implications of just dealing with that relatively confined issue, obviously on the line you are going across many miles of terrain through many different communities, impacting different individuals, and, indeed, traversing a lot more different environmental areas. So the flexibility built in to enable us to bring an integrated application or to bring applications that will be considered in different timescales is very important. I am sorry, this is a long answer! There is another flexibility in there which is about the need for
strategic transmission investment, and that is very important too because generally we have worked for the last couple of decades on the basis that to make sure we do not build unnecessary assets with all of the implications of that, that we do not build anything without a clear signal from a generation source that it is going to be there. The world has changed a lot, though, when you consider that some transmission investment is now prompted by a multitude of small—say, in the case of wind farms—wind farms in a remote part of the country. The need to be able to bring forward a plan for strategic transmission investment is built in here, and that is terribly important as well, without having to link that up with the individual applications, which may come in at different moments in the calendar from all of the different wind farms, which in aggregate justify the transmission lines. This is quite tricky stuff, and actually the NPS has done a fantastic job of picking up those nuances.

Q308 Charles Hendry: Could I ask a question specifically about gas. Is there not a major discrepancy between the National Grid’s assessment of the likely role of gas and the Government’s assumptions for the role of gas as set out in the NPS? In the Government’s Low-Carbon Transition paper it talks about gas by 2020 being down from 40 per cent of the generating mix to 29 per cent. There are pictures you have got and which Ofgem has set out which suggest it could be double that, 60 per cent; and that, therefore, creates a massive difference in terms of the infrastructure need which is necessary. Can you comment on whether the NPS adequately addresses the needs that you think will be there?

Mr Winser: I was puzzling a bit about this. I am not sure where those gaps exactly come from. I think it is pretty well accepted, as per the National Grid tenure statements, that we would expect gas use itself to be relatively level or maybe decline slightly year on year. I think any analysis of the generation market and domestic use and how quickly you might transition from that sort of says that seems a common-sense thing to say. I think there may be some gaps arising here because of a confusion between how much gas a country is going to need and how much it is going to import. I am not sure where this issue comes from, but I think it is agreed that gas demand will either be flat or slightly decline and actually the proportion of that gas that will be imported will continue to rise strongly. In 2003 we basically got all of our gas from the UK continental shelf, broadly, and this winter obviously we are experiencing about half of it coming from the UK continental shelf, with all of the new importation facilities having come on very, very strongly to contribute to that security of supply—a great success for the industry and for policy, in my view—but we do know that the UK gas is going to continue to decline, and that is well anticipated by most observers. The degree of importation of gas against the relatively flat profile will rise, and I think that is maybe where the confusion is arising; so more gas will be imported, and because it will be imported into places which do not line up with where the North Sea gas necessarily landed, therefore we will need to build significant new transmission pipelines to carry imported gas from, say, new LNG (liquefied natural gas) importation terminals. That is what is going on in this area.

Q309 Charles Hendry: There is some discrepancy because the Low Carbon Transition Plan says that the level of imported gas will remain static because the overall use of gas will decline significantly, whereas you are predicting the level of imported gas is going to go up to perhaps 70 per cent or 80 per cent of the total demand; so there is a major difference between where the Government starts off on this and where the National Grid starts off on this. That also has very significant implications in terms gas storage: seven pages out of nearly 700 pages of the NPSs are on gas storage. Do you feel that the NPS, both on the gas infrastructure and in terms of pipeline connections and indeed on storage, gives the significantly robust message that is necessary in terms of allowing you to develop the necessary facilities?

Mr Winser: I am not sure—what timescale are you quoting those figures over—is that 2020?


Mr Winser: Our view is clearly articulated. We will look at that as part of putting in our comments and we will try to clarify that, but our view is very clearly that usage will be flat or declining slightly over that sort of period, and that imports will rise. We will certainly go through that process, so thank you for that, Charles; we will make sure we pay some attention to it.

Chairman: Let us move on again. Apart from nuclear, the NPSs do not have a spatial dimension.

Q311 Mr Weir: We have heard a lot of evidence about the lack of the spatial dimension, and, Nick, you were talking about the transmission networks in answer to a previous question. Are you satisfied the draft NPS for electricity network infrastructure does not discuss particular corridors for the networks?

Mr Winser: Yes, that is a great question. We are satisfied again that this is the right sort of place to pitch these documents. Clearly, some things are very well defined about where the transmission lines will need to run, for a start where it will need to start in terms of where the power station is going to be, and not quite so clearly where it needs to end because there are, obviously, different points where you can then connect new infrastructure into the grid that we have got. Even the start and the end points of the corridor are not always straightforward and clear. We think the right place for this is for this to be a legitimate part of the discussions that will be made in the IPC with the NPS as a backdrop, to look at the various routing options specifically and try to balance the environmental impact on the various corridors against the cost of either taking a less direct route or undergrounding. The big message for me is that when you look at the number of permutations for the start and finish points and the
number of permutations in between all of those start and finish points, you probably cannot do that work in the NPSs, so that is a place where the IPC really needs to think about what is the right corridor against quite well-defined criteria in the NPSs.

**Q312 Mr Weir:** If the IPC is looking at a large new power station, will they also look at the line and grant permission for that line; or are you into the position where individual local planners will look at aspects of a line?

**Mr Winser:** We are certainly expecting the IPC to look at the line. We would imagine that the IPC, in granting consent for the power station, if it indeed did, would take a view on the total environmental impact of the power station plus the line. To come back to my previous comment about these things maybe being simultaneous or not, in the case where they were not, I think it is quite acceptable that the IPC would then look at, against the NPSs the power station, within its mind clearly that a line was going to have to be built, but without at the point of granting consent for the nuclear power station having settled exactly on the technology and the corridor for the line. It seems to me that just on an engineering basis that it is quite possible to do that; you would be able to take a broad view of what was likely to be needed to connect the thing in when you granted consent; and then the IPC, if the two applications were not simultaneous, would come back round and say, “And now we have granted the consent for the power station with fully in our minds the sort of impacts the line would make; but now we come back and look at the line, the exact technology, and routing the corridor, as part of the transmission line permission.” That seems to be viable and the only sensible way of proceeding actually.

**Q313 Mr Weir:** The Electricity Network Strategy Group Report 2009, _A Vision for 2020_, does focus on the spatial aspects of distribution of future generation sources. Why would that approach also not have been appropriate for the NPS?

**Mr Winser:** Where you have got some constraints on the permutations going into this, it is certainly appropriate then to look at corridors and try to work out what they might be. The backdrop to the NPS is that it is trying to provide an environment where we can bring forward applications against the very many different possible generation options and where they might connect in; and also, I guess, the combinations of generation. When you think of nuclear on the coast with potentially large offshore wind out at sea, in the same area, to be able to bring those together and say, “Okay, having looked at that together, this is the sort of thing we need to build on; these are the corridor options that seem to be available”, that seems, again, to be the right blend of flexibility and proscription.

**Mr Smith:** Following the ENSG, we have taken a very active role in the work that was set up on looking at the distribution system and the whole smart grid system, and that has been recognised in the reports that have come out recently. We know there will be, allegedly, a 31 per cent increase in population, so on the distribution system that will mean we need to look for some flexibility about where those population centres and clusters are going to be developed. That will have some impact on the lines and where those lines are built, particularly if it is in areas of low line usage in places like Norfolk and Suffolk, et cetera. Spatially it is quite difficult for us to say that is where it is going to be at the moment, but we need that flexibility, as Nick said, to be able to look at that and come back to it constantly.

**Mr Weir:** I presume the lack of the spatial element in the NPSs apart from nuclear make it impossible to have it specifically for the line in any event without altering the other ones.

**Chairman:** Could we return to an issue we talked about before with previous witnesses, that is the relationship between the IPC and the existing planning system. It is clear that there are overlaps here.

**Q314 Dr Whitehead:** David, you mentioned a little earlier today your view that there should be a seamless transition between the IPC and the planning system. The Chief Planning Officer of DCLG wrote in November to planning officers in local authorities saying they should have regard to an NPS when making their local decisions. Is that what you mean by seamless transition or do you think that is insufficient?

**Mr Smith:** It needs to take account of it because of course most of the IPC decisions are at the transmission level. We are saying that at the distribution level they need to be taken account of as well. You cannot have something that would skew decisions that we would be making on the distribution level, and that is exactly what I meant they need to take account of, and I was generally referring to that guidance—take account of, be aware of and make sure you follow that.

**Q315 Dr Whitehead:** Other witnesses to our inquiry have suggested that maybe “have regard” should be replaced by “required”: do you think that “have regard” is sufficient in terms of the infrastructural issues related to major projects?

**Mr Smith:** It is a difficult semantic one. I think you could replace “have regard”. We are saying you need to be aware that whatever sort of national infrastructure you are building, you need to take account of the fact that the grid is going to be building big infrastructure projects. We will be building projects; some of them will be big projects, some of them will be smaller projects. We need to make sure that there is a seamless transition between the two. I would be comfortable with the words I used.

**Q316 Dr Whitehead:** Clearly, as far as major projects are concerned, such as power stations and indeed transmission infrastructure to a considerable extent, the local planning authority would have the responsibility for deciding on the planning of associated infrastructure which is not necessarily transmission; things like road access and other
associated matters. Do you think that those sorts of arrangements would really create a seamless transition? I have in mind, for example, the interesting passage of the London Array under existing planning arrangements, where the question of the landing sub-station was a major issue as far as the local planning authority was concerned, and indeed it held up the progress of the application considerably as a result of the determination of that. How do you feel that sort of infrastructure consideration fits in with your view?

Mr Smith: I think that this would form a national significant infrastructure project, and it should not arise. Yes, you are absolutely right that the London Array one was there. We are committed to this very holistic approach to the planning process. There is the need to look at these on these kinds of projects. Very much as Nick talked earlier, there is a possibility of being able to include different bits and pieces and, indeed, at some times leave different bits and pieces out, based on the right thing. What we have been saying very much all the way through this process, and we will say it in our submission again, is that there needs to be flexibility around the different elements of the project, with the option for each in their own right to be submitted. Indeed, if you need connection or deeper reinforcement of the electricity work, that may need to be in; some things may need to be out but we need to strike a right balance. It is all about striking the right balance to this and making sure—again going back to my initial point—that there is clarity, consistency and certainty for the projects.

Q317 Dr Whitehead: What is your view on this, particularly in terms of infrastructure—

Mr Winser: I think it is a matter of striking a balance. I think it is a very good line of questioning. We must think through and make sure that we do not build a process here where we consent the main plant items through IPC and then we are frustrated by having got, let us say, permission for the power station, the line, the sub-station, but we cannot get the equipment to the sub-station site because we cannot get access roads. We have to be pretty serious about that. We will give that some more thought and send some comments, because it is right to try and balance that and look as much as we sensibly can to the local planning authorities and provide that flexibility; but we must not create something where but for the want of the single nut and bolt that the whole thing cannot work.

Q318 Dr Whitehead: Is it your initial view that therefore the idea of a locationally-specific NPS designation pretty much would override a range of local considerations on associated infrastructure? I received the idea from your previous answer that perhaps that requires some further thought. What is to stop you?

Mr Winser: I think as long as the applicant has the opportunity to bundle up everything that is needed into a single application, then the flexibility to not do so is fine. We need to make sure we have the opportunity to get all the bits that we need applied for together, though, to make sure that we do not fall into the hole that your question has rightly brought out. It is a good one and we will think that through a bit more and just think about access roads—which I am sure my people have—and all of those things, which are excellent examples of this issue.

Chairman: Finally, let us talk about an issue we are both familiar with, which is the environmental impact of new power lines.

Q319 Dr Turner: Are you happy with the way the NPS deals with environmental impact assessments? You have particularly strong and clear generic issues, which arise wherever you put a power line—the visual impact and the question of EMFs—so the impact needs to be measured in terms of site specificity. Do you think that the NPS makes this clear? Does it handle it?

Mr Smith: Yes, I think we welcome the approach taken. On the electricity networks the factors influencing site selection by developers, we fully support the principles of compliance with Schedule 9 of the Electricity Act 1989. On the general assessment principles, again, we come back to this point: we have always and consistently supported the holistic planning approach that I have set out, and at the same time there is a need to separate out some network projects. We welcome the recognition of that. On climate change adaptation, we welcome the emphasis on the need to adapt our energy infrastructure to the effects of climate change. Finally, we support the principles set out on mitigation. I think those are there. I will come on to EMFs in a moment, but I think on the suite of environmental impacts those four for me are the particular ones that I would want to say were there, and am glad are there.

Mr Winser: The NPS helpfully spells out for us, as applicants, which things we need to cover, and then how the IPC will consider those issues. We very much welcome that.

Q320 Dr Turner: Do you think the NPS is satisfactory in what it sets out on the question of overgrounding or undergrounding lines and balancing the environmental impact of undergrounging against the costs?

Mr Winser: I think the first question is where this should be dealt with. It seems to me that the way the NPS is drafted gives the IPC some scope to consider the local visual impacts and try to balance that in each particular locality with the very large cost differential and the disturbance and environmental impact of putting underground cables in, and the technical issues that follow. It seems to me to be a good articulation of those things, which then allows us, as applicants, to bring forward an application looking at those things and trying our best to balance those off, but very much then letting the IPC try to help make that decision as to what is the right balance between those two things. As you know, the cost differential is very significant.

Mr Smith: We are fully committed to the principles of the Holford rules that were set out in the 1950s and were reviewed by the grid in the 1990s. As
distribution companies, we have made full use of Ofgem’s underground allowances where appropriate. Again, for distribution networks it can be ten times the cost for overground to underground. We have to bear that in mind.

Q321 Dr Turner: You were going to make some comments about EMFs and the way the issue was handled in the NPS.

Mr Smith: I just want to say that we welcome the statement from the Government’s policy set out in the Stakeholder Advisory Group, which I know most of you are familiar with, which fully took on board the recommendations of the Sage Group, and which very much reflects the stance taken by the Health Protection Agency; the International Commission and the World Health Organisation. We do take these seriously. We are pleased that the Government has set out what those principles are and they have identified some quite sensible, low-cost steps to take; and, as an industry, we have already said that we would volunteer to implement those as soon as it falls to us. On the EMFs rule, Sage is there and we are glad it has been reflected. We now have something there that we all can sign up to.

Q322 Dr Turner: You have clarity.

Mr Smith: Yes.

Q323 Sir Robert Smith: Are there any research projects or technical developments that are going to improve the cost benefits of undergrounding, and how has that balance evolved over time between the cost of undergrounding and overgrounding?

Mr Winser: To answer the second first, it is surprising actually the cost differentials have remained fairly steady, but over the period there have been significant changes in the technology available. In particular something called “voltage source HVDC” has come into play as an option. It has not yet got up to the power transfer capabilities that you need for transmission, so we will keep a close eye on that over time. It is possible that that will make some difference to this; I certainly hope so. Obviously, superconductivity has been, through the whole of my career, 20 years off, but we take a very active interest in that, and the possibility of some of those types of changes coming through we need to stay right on top of. I have to say that at the moment there is nothing evident that is going to change that economic balance in the next five or ten years; it is pretty clear that you cannot get to these power transfer requirements with new technology, which is going to dramatically change those economics in the short term.

Q324 Charles Hendry: You may be aware there was a debate in the House last night when a number of MPs expressed concern about your proposals for the alternative route across Somerset, and the potential routes across the Stour Valley, Suffolk and Essex. The nature of the concerns seemed to be about the way in which the consultation process is being handled by National Grid, and in particular the issue of the comparative costings between overhead and undergrounding did not seem to be fully open. It was a public meeting in Somerset and it was referred to the fact that they were told that it was not technically possible, and then they were told it was very expensive. They said: “Either it is technically possible and therefore expensive, or it is technically impossible and therefore the costs are not relevant.” Can you tell us your approach as to how you are going to handle consultation on these issues? The greatest issue here is that people should feel they are in full command of the facts that are available.

Mr Winser: I absolutely agree with that, and just to comment on the consultation process, we started in Somerset and Suffolk. At least anecdotally I would say that, whilst quite legitimately there have been strong feelings expressed, we have also had an extraordinary number of comments about the nature of the process we are running: the openness, the willingness for National Grid staff to turn up and try calmly to answer fully everybody’s questions on these things. We had unprecedented numbers of people coming through our public exhibitions and coming along to our public meetings, and we have been complimented on our openness. We absolutely will put in the public domain in each case, and generally, the economics of undergrounding versus running overhead wires. There is an awful lot of information out there. One of the things that makes that difficult to communicate—and that is not me ducking the responsibility to do it, I know we have to do it—but it is quite difficult because it depends critically on what sort of environment you are running the various routes through and the length of them, because once you start going underground you end up having very different economics, depending on the length. Just to be able say very, very simply “each times fifteen”—I am afraid there is not a simple rule like that. You can absolutely have my assurance we will give, in a complicated technical and economic situation, the complete openness you would expect of us on that, and we will be working very hard. I think we have done that, but it may well be that we have to work very hard to communicate that complex technical balance to people who do not have a technical and economic background in power engineering.

Q325 Charles Hendry: Would that also take account of any potential reductions in transmission losses by using HVDC cables, for example?

Mr Winser: Yes, of course. That would certainly be in there but, as I have said, it is not likely to suddenly be a silver bullet so we can say, “This is all fine. It does not cost society a lot to have these things underground.” As far as the eye can see, the differential is very large and when you look at the bill for some of these schemes, which ultimately is borne by customers, there are some very real decisions obviously for politicians and society about where money is spent. Undergrounding a lot of this stuff will consume an awful lot of funds that could be spent on other things.

Chairman: Nick and David, thank you very much for that very positive contribution. We are very grateful. Thank you.
Wednesday 20 January 2010 (afternoon)

Members present:

Colin Challen
Charles Hendry
Miss Julie Kirkbride
Judy Mallaber
John Robertson

Sir Robert Smith
Dr Desmond Turner
Mr Mike Weir
Dr Alan Whitehead

In the absence of the Chairman, Paddy Tipping was called to the Chair

Witnesses: Mr Keith Parker, Chief Executive, and Mr Simon James, Head of Public Affairs, Nuclear Industry Association, Mr Richard Waite, Executive Director, and Mr Bruce McKirdy, Repository Technical Director, Nuclear Decommissioning Authority, gave evidence.

Q326 Chairman: Can I welcome our witnesses, Bruce McKirdy and Richard Waite from the NDA and Keith Parker and Simon James from the NIA. Welcome to you all. It is good of you to come and give evidence. Shall we start at the basics? The Government has produced the draft NPSs. Are they the kind of documents which in broad terms the Government can and should adopt? Keith, are you going to start?

Mr Parker: Yes, we certainly welcome the NPSs and we think there is an urgent need for them to be designated and approved as soon as possible because we think that in relation to the framework in which the IPC can start to assess applications for new energy infrastructure it is important that that is done as quickly as possible. There is an urgent need for this new energy infrastructure and I think we need to get on with the planning process. I think it is important to stress, too, that we welcome the way in which these proposals, the NPSs, have been developed with a great deal of public and parliamentary involvement because I think it is important that there is public accountability, and the Government has gone to great lengths to ensure that consultation has taken place at both a local and national level, and we certainly approve of that.

Q327 Chairman: Richard, what is your view?

Mr Waite: We believe from the NDA's perspective, particularly around the waste management arrangements, it is important that the NPSs do get published in the same light so that clarity is brought to the longer term waste management arrangements for the new build operators so that they know within which framework they are operating, so we support that.

Q328 Chairman: The NPSs you introduce as the IPC. Is there sufficient advice, a sufficiently robust enough framework for the IPC to do its job?

Mr Parker: Yes, I think the NPSs certainly set the broad framework of Government policy and establish the need for these energy infrastructure developments. In addition to that, they provide specific advice on the factors that the IPC needs to take into account when it is assessing applications and I think they do provide sufficient information for the IPC to proceed. I think it is also worth bearing in mind that when the applications are going to be made by the developers there will be a great deal of additional information provided to the IPC which will inform their decision making.

Q329 Chairman: Let me talk about the overarching energy NPS. There have been people who have commented that really it adds nothing new, it is just a restatement of Government policy and that in effect it is a bit light. Is that fair criticism?

Mr Parker: I think it is clear on the drivers, if you like, behind Government policy, the need to ensure energy security and to move towards low carbon technologies to combat climate change. We think that it could be, if you like, more emphatic on the need. At the moment need for new infrastructure is one of the factors that the IPC needs to take into account. We believe that in fact it is a key factor, given the urgency to replace and renew ageing infrastructure and we would like to see greater weight attached to that. I think it is correct that when the Government devised this new planning regime one of the main objectives was to establish the need so that it would not have to be debated at each local public inquiry and I think if it were to emphasise that factor in the NPSs that would be of benefit to the IPC.

Chairman: I think you should be chairing the committee, Keith, because you have got us to the point I wanted to get to, which is the discussion about need!

Q330 Dr Turner: Would it be true to say, given your evidence, that you think the draft Energy NPSs are not sufficiently explicit about the need for new nuclear generation? Is that a reasonable assessment of your view?

Mr Parker: I was referring more to the overarching NPS on the need. I think the nuclear NPS does establish the Government's objective of having nuclear within the mix, both for its security of supply and climate change benefits, but I think again there is some ambiguity perhaps when you are looking at factors like urgency as to whether that could potentially disadvantage nuclear development. So I again feel that there should be a more specific or substantive statement on need in the NPS.
Q331 Dr Turner: I was just going to come to that point, happily, because clearly it is something of an Achilles’ heel for yourselves that the timeline for commissioning of a new nuclear generator is so long but the climate change urgency is much greater and it will be ten years before your industry can contribute new low carbon energy, so do you feel that this is a significant and serious risk?

Mr Parker: The Government has made it very clear that it wants to move towards low carbon technology and it has identified renewables, nuclear and fossil fuels with carbon capture and storage, if you like, as the trinity of the technologies it hopes will be developed and it is clear that both nuclear and CCS, for example, have longer lead times than some alternatives. There will be a need to have new generation capacity on the bars before new nuclear can start and I think there is already investment committed towards new gas capacity, but I do not think that would preclude or discourage investment in nuclear.

Q332 Dr Turner: What is the risk that you see? Is it the risk that the gap will be filled by carbon intensive generation technologies, principally gas, or even coal were it to slip through the net without abatement, or are you seriously worried about renewables actually crowding out nuclear from the investment scene?

Mr Parker: I do not think so. I do not think there is, if you like, competition between nuclear and renewables. I think the potential developers want to have a diverse range of generating sources which would include nuclear and renewables, given the signals the Government has clearly given on the need for low carbon. There is, I suppose, a potential risk that if there were significant amounts of investment in gas-fired capacity that would—

Q333 Dr Turner: Weaken the imperative?

Mr Parker: Well, potentially, although when you look at the figures the Government is talking about in its central scenario of needing 60GW of new capacity, on that central scenario I do not think there is anywhere near the 25GW for non-renewable sources in train in gas, so I think there is still a lot of headroom for nuclear.

Q334 Dr Turner: But equally you said—this is a slightly mischievous question, I will confess—that you were not afraid of renewables crowding out nuclear from the investment scene, but there is a very real risk and a very real perceived risk that, for instance, if signals in the NPSs flagging the need for nuclear were made even stronger than they are then this would be to the detriment of renewable investment in the interim. Do you recognise that as a possibility?

Mr Parker: I have heard that argument many times and I feel that in fact it is a false argument because, as I said, there is a need for a diversity of sources. There is a strong signal with an economic benefit towards investment in renewables which does not at the moment apply to nuclear, so I do not think that argument holds.

Q335 Dr Turner: It may be a false argument intellectually, and I would expect you to say that, but it is not necessarily a false argument as far as investors are concerned. There is not an infinite investment capacity out there and, of course, nuclear investment, or investment in any technology, needs to be committed several years in advance of commissioning, so that would mean, for instance, that for a new nuclear station it would effectively be committed maybe eight years in advance of the commissioning of that statement and would therefore not be available. So your intellectual argument is fine, but the reality may be somewhat different. Have you thought about that?

Mr Parker: Yes. I do not think the reality is different. I mean, investment in renewables is going ahead at quite a pace at the same time as significant amounts of money are being spent in the development of nuclear projects, so I think the evidence is that both can be accommodated within the investment portfolio of the generation companies.

Q336 Dr Turner: A couple of other quick points: WWF argue that the Energy NPS ought to differentiate between base load generation, which is clearly your business, and peaking capacity. What do you say to that?

Mr James: Our view on that is that it is rather an artificial distinction. While it is true that nuclear tends to operate as base load, it is not necessarily true for other technologies. For example, in fossil fuels coal and gas plants will tend to swap around their base load or peak capacity, depending on the fuel price, so it is very difficult to see how you construct an NPS which says, “We must build so many base load plants and so many peak capacity plants,” because the reality is that different plants will operate in different ways. Renewables will operate in both markets as well, although in their case it is not so much dependent upon the fuel price, it is more on the prevailing weather conditions, so to try and construct an NPS which dictates that split between base load and peaking capacity and which power plants should provide that capacity is really a false distinction.

Q337 Dr Turner: It is not entirely unreasonable because in order to operate a fission reactor efficiently and economically you need to run it, ideally, flat out, so you want it to be the base load supplier, do you not? That is what you would really ideally like, is it not?

Mr James: That is the way in which you would seek to run your reactors, but the level we are talking about of nuclear capacity is below the base load capacity, so it is not that we are looking for all that base load for nuclear. In reality that is not the way the market works.

Q338 Dr Turner: Okay. The other point is that going from DEC’s own figures in the overarching NPS they suggest that there is very little need for new generation capacity in the next 15 years because so
much gas-fired power has already been consented. How do you respond to that? Is that a weakness in your case?

**Mr Parker:** It goes back, I think, to the previous question, whether gas might conceivably squeeze out the need for nuclear. I do not think that is in fact a real risk because the NPSs clearly set out the need for a diverse low carbon energy mix which includes nuclear and other low carbon sources, so I think the signals are sufficiently strong to enable investment in those technologies. As I said, we are already seeing a significant amount of investment being put into preparing for the applications for new nuclear, so the investment appetite is there despite the fact that gas is already committed.

**Q339 Dr Turner:** With or without subsidy?

**Mr Parker:** Without subsidy.

**Q340 Dr Turner:** Without long-term contracts?

**Mr James:** Well, long-term contracts are a commercial issue for the companies. Some companies will enter into long-term contracts if they can get that as a commercial advantage, as a commercial arrangement. You do find in the existing market there are some very long-term contracts, and equally there are other shorter-term contracts. It is a purely commercial arrangement. It is in the interests of some users to enter into long-term contracts. A classic one would be Network Rail. Network Rail needs its business powered up the whole time to keep the trains running.

**Q341 Dr Turner:** To cite EDF, how do you feel about the impact of carbon pricing?

**Mr Parker:** It is a pretty consistent theme of all our representations to Government during the various consultations that have gone on over the last few years that a mechanism to price carbon in the market and to recognise and reward the low carbon attributes of nuclear and other low carbon technologies is an important factor and will have an impact on investment decisions. It is something which will strengthen, if you like, the business case for investing in low carbon technology so, yes, that is something we would welcome.

**Q342 Chairman:** Copenhagen was going to produce that and it has not?

**Mr Parker:** Yes.

**Q343 Chairman:** What is your view on a floor on the price of carbon?

**Mr James:** The Government has made it clear that if effective international mechanisms cannot be made to work to produce the carbon price it would seek to take domestic measures to take that forward.

**Q344 Chairman:** I am not sure how clear it was, Simon. It was two sentences in the White Paper.

**Mr James:** As an industry, we think that the Government is serious about that and there are different mechanisms that can be looked at for that. I mean, an obvious one is carbon taxation, which has been discussed, which would be another mechanism. Essentially there are two mechanisms for providing your price for carbon. One is the market-based mechanism and the other one is a direct tax intervention method. There are advantages to both ways of doing that and it is certainly the case with all low carbon technologies that the price of carbon is the market’s signal that Government would choose to put out there to encourage low carbon, and the scale and ambition the Government has in producing low carbon technology and decarbonising the electricity sector indicates that the Government will inevitably have to look at this because it will need to produce that carbon price because the Government needs a low carbon electricity sector and that is the way they will deliver it.

**Chairman:** Let us change the focus. Richard and Bruce, you have been very quiet wise men. We are going to talk about nuclear waste management and disposal, and perhaps you would take the lead on this. We will go to Mike first.

**Q345 Mr Weir:** Obviously disposal is one of the principal concerns about a new generation of nuclear power stations. What evidence is there to suggest that effective means will exist to manage and dispose of the waste arising from new stations?

**Mr Waite:** As we noted in our evidence, the NDA supports the Government’s view that effective arrangements can be put in place based on the work that has been done in part to deal with the legacy, so the creation of the NDA itself is a key step forwards in that. But there are three aspects I think we need to consider in understanding whether existing arrangements and future arrangements can cope with new build. First of all, finding a suitable site is a fundamental part of the process. Secondly, understanding the technical achievability of disposal of new build material. Thirdly, are there going to be adequate interim storage arrangements in place until such time as disposal arrangements come along. On all three of those fronts we think the answer is a positive, “Yes, arrangements can be put in place,” so, for example, on finding the site the Government in 2008 launched the Managing Radioactive Waste Safely White Paper, which set out a very clear staged process based on voluntarism and partnership to engage communities in expressing an interest first of all to step into a siting process. Good progress has been made, we feel, on that front with three communities having expressed said interest and indeed are now working together in partnership in Cumbria to effectively take that forward by engaging the local communities, the local people, and getting their views on taking the next step, as it were, in that staged process. So we feel that process, which has been seen to work well in other countries—just about every other country that has been successful in taking disposal forward has indeed based it on the volunteerist approach, so we are quite confident that this can be extended from the site viewpoint. In terms of technical achievability, under the generic design assessment process we have actually carried out some assessments over the new build fuel, the candidate
Mr Waite: seems a very long time. Have said it could be as long as 160 years, which site interim storage to have to be in place? DECC

Q346 Mr Weir: the arrangements will be in place. Support the Government’s evidence that they believe that they contain. So on all three counts we strongly dispose facilities come along to take the material to be put in place and maintained until such time as there that new build interim storage should be able to be put in place and maintained until such time as disposal facilities come along to take the material that they contain. So on all three counts we strongly support the Government’s evidence that they believe the arrangements will be in place.

Mr McKirdy: Yes. The 100 years cooling time was based on calculations we carried out. As Richard said, we used the higher end burn up of 65GW days per tonnes as the figure, that is the peak burn up time, moving the average down to about 50, and that results in a storage period of 75 years. But all of that is based on a non-optimised disposal facility. It is just taking the disposal facility that has been designed to deal with legacy waste and just shoe-horning in new build waste. Now, there are various things you can do, so the legacy wastes are put in four fuel elements into a disposal canister for disposal. You could reduce the number of fuel elements in each disposal canister, so if you take two fuel elements per disposal canister instead of four you effectively halve the cooling time that you would need to meet the temperature constraint in the repository, which is keeping the outside of that disposal canister to 100 degrees C. That is one aspect. The other thing we can do, which we did not explore, is that you can change the spacing of the disposal canisters within the repository, so if they are further apart they are less influenced by the heat from adjacent disposal canisters, therefore the amount of fuel you can put in each canister whilst still maintaining 100 degrees C remains the same. We did not do all of this when we did the generic design assessment, disposability assessments, because we were purely looking to see whether we could dispose of the waste. So the answer was, yes, we could dispose of it and we have noted in the disposability assessments that there is room for further optimisation.

Q348 Mr Weir: Just to see if I am understanding you correctly, the cooling period you are talking about, am I right in assuming that that is before it can be moved off-site to disposal?

Mr McKirdy: The constraint is when it is in the disposal facility to maintain a temperature at the outside of the disposal canister when it is underground of 100 degrees C. There are two reasons for that. One is that the disposal canisters will be surrounded by a Bentonite swelling clay. There is a temperature constraint on the Bentonite which currently is conservatively assumed to be 100 degrees. Also, by keeping the temperature below 100 degrees C, you avoid water turning to steam, which can cause problems in the disposal facility. So that is the thing which sets the constraint. It is not being able to move it away from the site, it is actually being able to put it and emplace it in the disposal facility.

Q347 Mr Weir: How long would you then expect on site interim storage to have to be in place? DECC have said it could be as long as 160 years, which seems a very long time.

Mr Waite: If you assume that a reactor runs for 60 years and that the final core offload at the end of those 60 years has to be stored to get it cool enough to be able to dispose of it, then a pessimistic set of assumptions would see it being stored for 100 years beyond those 60, which is where you get the 160 from. That is based on a fuel burn up at the top end range, if you like, to give a conservative outer limit. The reality is that fuel burn up will probably be less than the upper limit and the 100 years telescopes back to 75 if you take an average view of fuel burn up. Having said that, there are other means of limiting the time you need the stores for by actually optimising and aligning the repository. Maybe Mr McKirdy would like to comment on that for me.

Mr McKirdy: The 100 years cooling time was based on calculations we carried out. As Richard said, we used the higher end burn up of 65GW days per tonnes as the figure, that is the peak burn up time, moving the average down to about 50, and that results in a storage period of 75 years. But all of that is based on a non-optimised disposal facility. It is just taking the disposal facility that has been designed to deal with legacy waste and just shoe-horning in new build waste. Now, there are various things you can do, so the legacy wastes are put in four fuel elements into a disposal canister for disposal. You could reduce the number of fuel elements in each disposal canister, so if you take two fuel elements per disposal canister instead of four you effectively halve the cooling time that you would need to meet the temperature constraint in the repository, which is keeping the outside of that disposal canister to 100 degrees C. That is one aspect. The other thing we can do, which we did not explore, is that you can change the spacing of the disposal canisters within the repository, so if they are further apart they are less influenced by the heat from adjacent disposal canisters, therefore the amount of fuel you can put in each canister whilst still maintaining 100 degrees C remains the same. We did not do all of this when we did the generic design assessment, disposability assessments, because we were purely looking to see whether we could dispose of the waste. So the answer was, yes, we could dispose of it and we have noted in the disposability assessments that there is room for further optimisation.

Q349 Mr Weir: Presumably—and I might be wrong—once a facility is available, is the plan to put the legacy waste in there in the first instance that already exists and is spread around the country, and what sort of timescale are you talking about then before you can put new waste in, or can it go in at the same time? Is there a difference in how it reacts?

Mr McKirdy: As I say, there needs to be an optimisation exercise and one of the things that would influence that is the thermal characteristics of
Q350 Mr Weir: Is it your view that the site would have to be agreed on or under construction, or whatever, before new nuclear stations are built or do you think it can be done in parallel?

Mr Waite: We do not think there is any linkage, if you like, between finding the site and building it and pressing on with the remainder of the programme, if that is what you are getting to, because of the existing arrangements for interim storage being perfectly adequate. Interim stores lasting 100 years are already designed and built, so there is now scope already. Sizewell B’s new store is going to be 100 year design life for PWR fuel, which is similar to obviously what new build operators will be using. So the fact that there are existing interim storage arrangements are there effectively as a buffer between the availability of the geological disposal facility and the operations going on at the moment, from our perspective and indeed the new build operation we think we can decouple the two entirely.

Q351 Mr Weir: The NPS at the moment says that the IPC does not need to consider the issue of nuclear waste. Would you agree with that?

Mr Waite: Yes, we think there is sufficient evidence around to suggest that the work we are doing to support the legacy, the progress that has been made in the volunteering process, the technical work that we have done, as my colleague has been explaining, the fact that there are optimisation solutions downstream of today that will limit the amount of storage duration, and so on, we do not believe there is any real need for the IPC to look at that all again, given the amount of scrutiny it has already had. There has been a huge amount of consultation and scrutiny already around the whole waste issue. The solutions we have are adequate for the future solutions as well.

Q352 Mr Weir: But is there an issue about, for example, the transportation of waste over distances?

Mr Waite: I think the important thing to remember today is that the fleet of operating stations, both the Magnox stations which we run and the British Energy AGRs, and indeed Sizewell but more so the AGRs, already have fuel transport arrangements, waste transport arrangements, if you like, happening already from sites across to Sellafield, and that is happening perfectly safely, perfectly adequately under the scrutiny of the Department for Transport, the regulations and so on, and has been for many years so there is no real big challenge there. It is not as if there is a huge flood gate of transportation opens up because of the timescales of these things opening. It is quite a slow process, so the infrastructure is already there. It is a case of extending and using that existing infrastructure.

Q353 John Robertson: I have to declare an interest as Chair of the All Party Nuclear Energy Group. I think everybody here accepts that our biggest problem is not just whatever the future waste will be legacy waste. You said that the present storage, interim storage, was for 100 years. Is that 100 years from today, tomorrow, or does it date back already 10, 20 years?

Mr Waite: There is a range. Some that are already in their 100 year design life being used and we carried out a study back in 2009 on those particular stores where we recognised we are going to have to extend them and we have figured out ways of actually taking out and refurbishing the elements that wear out. The civil structures generally last for as long as you need them to last, so designing civil buildings for 100 year, 200 years, is not a problem. It is more the electro-mechanical stuff inside, the control and instrumentation equipment inside where you would need to plan to replace those and we are doing that on some of our existing stores to life extend those stores. New stores that are being planned, that we have just commissioned on some of our stations are 100 years from now. New stores that are in the pipeline that we plan to build in three or four, and in some cases 10–15 years from now will be 100 years plus stores with lifetime extendibility built into their designs. So you know that you need to not have a cliff edge on the lifetime, therefore you build extendibility into the basic design by having certain elements that you know are going to wear out replaceable and maintainable.

Q354 John Robertson: I think probably most people would be more concerned about what we have at the moment and what the lifetime is of the present waste we have and other places that are already storing it. What is the oldest one and the newest one?

Mr Waite: One store that is being used at the moment, for example, for capturing or storing the vitrified product from high active liquid vitrification started operation in the 1980s. It has a 50 year design life. We are busy filling that up through the reprocessing process at THORP and we have recognised, for example, on that one that we need to life extend it and there is work going on now to change it from 50 years to probably 100 years.
Q355 John Robertson: For how many years down the road of 50 years are we? 
Mr Waite: Well, 80, so we are about 20 years in on that one. Around the world there is experience, of course, not just in the UK, of the storage of nuclear materials back from the 1950s. We have materials ourselves from that timescale where stores have been in place. New stores get built when old ones wear out and need replacing and we have a number of those in Sellafield. At the moment we are building new stores because we are monitoring the arrangements for the existing stores to make sure that when we know we need new ones we build them fast enough. So it is a case of monitoring the materials, building new stores, designing in life extension and making sure that this material is kept safe and secure until such time as disposal comes along.

Q356 John Robertson: The three sort of volunteer sites, I cannot imagine you have not done anything in regard to them so there must be some kind of studies that have already been done? Are they similar geological ground where we are going to put them in, or are they all different? Where are we in that respect? 
Mr Waite: The three communities that have expressed interest are Copeland District Council, Alledale and now Cumbria County Council, so it is effectively a large part of Cumbria is in the process. Bruce, maybe you would like to say something about the geology in those areas.

Mr McKirdy: Yes. Very generally, there is some basement under sedimentary cover, which is sort of a hard fractured rock with a sandstone overlaying on it. There are also some carboniferous rocks which would probably be ruled out because they may contain mineral deposits which could be sought after, and then there would also be basement rock to surface in the Copeland and Alledale area, so you have got sort of hard, fractured rock that will go all the way to the surface and either the basement to surface or basement under sedimentary cover are potentially suitable for a repository, but we would not want to pre-empt that. The next stage in the process is that the British Geological Survey will look at any of the candidate areas who have expressed an interest and screen out some or all of those areas based on criteria which were published in the white paper. Following that, if a decision to participate is made by those areas there will be a need to go from the very big areas, the Copeland and Alledale areas, out to about 2,000 sq km between them. We are looking for a repository site of 5 sq km, so there would be a need to look at what had got through the BGS screening process, what volunteer sites or areas were still involved, and then identifying with those communities specific sites within those areas for investigation.

Q357 Chairman: What is the planning process for a deep facility? Who gives the planning consent? 
Mr Waite: I believe the final planning authority in the Cumbria area is Cumbria County Council, although the local district council obviously have their own process as well and one of the arrangements that have been set up at the moment, because we are talking about a two tier council structure in Cumbria, is exactly what is our process going to look like and the Cumbria County Council people, Alledale and Copeland, have just formed a partnership, an MRWS partnership at the back end of last year to work through those sorts of issues, which we think is a really strong development.

Q358 Chairman: So for a big new nuclear plan it is the IPC, but for the back end it is the traditional planning process? 
Mr Waite: I believe that is the current arrangement.

Q359 Chairman: Okay. Do you think that makes sense? I can see some of my colleagues looking a bit astonished at that. 
Mr Waite: I think given the voluntarism approach and given that it is all about getting local communities comfortable about hosting one of these facilities, I think the reliance is more on the local arrangements through normal planning arrangements rather than a national approach using the IPC, so it would be more consistent, I guess, to use the local arrangements if you are relying on the local communities to give you the support that you are looking for. I believe that is the philosophy behind that.

Mr McKirdy: I suppose I could add to that and say at the time at which the Government consultation leading to the Waste White Paper in 2008 was carried out the whole IPC arrangements were not fully in place and so the consultation had not covered those, and also given that it is going to be a long time before a planning application for a repository is likely to be put in place, there is time for that decision to be made. The White Paper did not rule out the new planning arrangements applying to a repository, but because of the fact that they were not in place at that time we could not say that they would apply.

Chairman: If you could just drop us a note to clarify that point that would be helpful. We are going to suspend this sitting for ten minutes.

The Committee suspended from 3.40 pm until 3.55 pm for a division in the House.

Q360 Chairman: Richard, you have just promised to write us a note on the planning, and about the rationale behind it as well would be helpful. 
Mr Waite: Yes, we will make that clear.

Q361 Chairman: Keith and Simon, you have had the opportunity to listen to colleagues from the NDA. Is there anything you disagree with, which I think is unlikely, or that you want to add to? 
Mr Parker: No, I do not think so. We are confident that the arrangements are now in place for a satisfactory resolution to the waste issue and the Government is pushing it forward and we have confidence in the NDA being able to implement it.

Chairman: Let us turn to the site specific nature of the nuclear NPS. Its unusual sites we talked about.
Q362 Mr Turner: Indeed. The Nuclear NPS obviously is the only NPS which is site specific. Is that something you welcome and are happy with?

Mr Parker: Yes, I think the reasons for that are clearly stated, that given the level of interest in nuclear it is important that the Government has undertaken the strategic siting assessment and looked at a range of issues relating to each of the nominated sites, so I think it is important in terms of, again, accountability, public confidence in the process of this and this has been done.

Q363 Mr Turner: But Dungeness is not in that list, which I think you are not happy with?

Mr James: Yes, we do have an issue with Dungeness being excluded. I think the key issue is that the NPS clearly states that nuclear should be free to contribute as much as possible up to 25GW of new capacity on the central scenario and it could actually be more, depending on the overall demand scenario rises, which with decarbonisation of transport is possible, but even so if nuclear is supposed to be unconstrained in providing as large a proportion of that as possible then this actually constrains that by reducing the number of sites and it is removing the Dungeness site on a discretionary criteria. There are other issues under discretionary criteria, for instance, on other sites, which the Government clearly says could be mitigated against. On Dungeness they say they believe it cannot. I think from our point of view there are two existing stations at Dungeness and a third one would not significantly cause further impact on the site; indeed some of the measures that are taken on site in terms of coastal protection actually serve to protect the shingle beach and the issue which English Nature has had on the site is around the shingle beach. Now, that shingle beach is largely protected because there are two nuclear power stations at Dungeness, so the mitigation methods likely to be employed can potentially be beneficial. Also, the percentage of the Sites of Special Scientific Interest that is within the boundaries is tiny, according to Shepway District Council it is 0.3 per cent of the site, and indeed most of that site would not actually have a power station on it, so (a) it is a very tiny proportion, and (b) mitigation methods do exist, so it seems to us premature, to say the least, to exclude the site at this time. That is not to say if someone had an application in on this site the IPC would not have to spend a considerable amount of time looking at those mitigation methods and actually ensuring itself that mitigation is possible. Of course that would have to happen, but to exclude at this stage we think is singularly premature.

Q364 Mr Turner: What mitigation do you view as appropriate in terms of the sites that are in the NPS as a general view? What sort of mitigation would you envisage would be a reasonable arrangement as far as a nuclear power station siting agreement was concerned?

Mr Parker: I think it might vary from site to site, but the environmental regulations surrounding the development of new nuclear sites are pretty extensive and each of them will need to be examined in terms of how any impacts can be avoided or mitigated. You can envisage, for example, the visual impact of sites having to be addressed in the design of the power station. Noise impact, for example, during construction would have to be addressed. So there is a wide range of environmental requirements which will have to be looked at on a sort of case by case basis, but the developers will abide by those regulations and ensure that the mitigating measures are taken to ensure that the environmental and other impacts are reduced as far as possible.

Q365 Mr Turner: Would mitigation, in your view, include protection against the danger or the likelihood over the life of the site that it would flood due to rising sea levels?

Mr Parker: Yes. I think that is a requirement that would have to be looked at and I think it is identified in the appraisal of sustainability assessments that were done for each of the sites, which are published in the NPS.

Q366 Mr Turner: But are you confident— which I am not sure has been completely concluded prior to those sites being included in the NPS—that those sites are protectable at reasonable cost and with reasonable measures from flooding over what would be the next hundred years, particularly, as I would understand it, in terms of the surface storing of future waste material, those stores that you presently have built, the NDA, and which are to be built in the future, will all be within those sites. So presumably we are talking about 100 years guaranteed floodproofing?

Mr Waite: Absolutely. Those arrangements will be made, as indeed they are today for existing stations and existing storage, and predictions are available from the Environment Agency and the Met Office as to what might happen in the next hundred-odd years. Conservatisms are added to those before they are then built into the designs to make sure there is enough headroom as it were, in the design to cope with any impact of climate change.

Q367 Mr Turner: If the strategic planning body decided they did not agree with you on the ability to do that, you would then have no other sites to go to inasmuch as because the NPS is site-specific there is no plan B in it, is that right; i.e. if any of those sites were to be rejected on planning grounds because there was concern, for example, about flooding, they would then presumably go the way of Dungeness, i.e. they would be excised from within the NPS for future reference and no other sites can be brought in?

Mr James: Well, they would not technically be taken out of the NPS, they would still be there. In terms of there not being a plan B, it is technically possible that you could submit an application for a site which is not one of the ten listed sites. The IPC would not be able to take a decision on it. They could hold the hearings on that and they could make a recommendation to the Secretary of State, but they could not take a formal decision on those. So theoretically there is a plan B, but I think the chances of all of the sites being ruled out on those grounds are very small indeed, not least of which all but two of them are existing sites which
have existing flood management measures in place, which have been through a public inquiry and have been found to be sound, and they already look 100 years plus hence. So from that point of view, I think the chances of that happening are very small indeed. Of course, the ability to protect one small location on the coast is a different issue from the point of view of trying to protect an entire coastline. If what we were faced with was having to protect the whole of the Suffolk coast, for example, then yes, that would be an enormous cost and technically a difficult challenge. Depending on one point on the coast, however, is certainly technically possible. It is done now and those measures are in place.

Mr Parker: I think it is worth pointing out that all of these sites that were nominated in the NPS have undergone a Strategic Siting Assessment, which the Government carried out, which is fairly extensive, and they looked at all of these issues. I think the view the Government has taken is that these sites are suitable for new nuclear development.

Q368 Dr Turner: As far as repositories are concerned—this is a question to Mr McKirdy and Mr Waite—you have mentioned the question of buying from the communities concerned and therefore the presumption that such repositories would be dealt with by the flood or planning authorities. It has been suggested to us that one of the issues which might be involved there is, as it were, not to put too fine a point on it, the showering of benefits on such communities as a quid pro quo for accepting the existence of a repository in that community. Do you see that as a potential planning hurdle inasmuch as it is not normal to take into account the showering of benefits within planning applications?

Mr Waite: I think the Government in the White Paper recognised the potential need for, as I think they call it, the community benefits package to recognise the national importance of the role that the host community would have in serving the nation, if you like, with this facility. What that looks like over and above the benefits of having it there in the first place in terms of jobs, economic activity, and so on, is yet to be determined and that is something which certainly further downstream in the process the host communities would want to have that discussion with the Government to understand what exactly is meant by “community benefits package”. I think that can probably fit in within the existing planning framework or indeed the IPC framework, but it is certainly something that is brought up in the White Paper.

Q369 Colin Challen: I note the NIA’s disappointment over Dungeness and perhaps you will be fighting a rearguard action to get it onto the list, but I wonder if you could characterise the nature of your discussions with Government ministers and officials in the creation of this list generally speaking?

Mr Parker: We did not have any direct discussions with officials or ministers on this list. The developers were invited to nominate sites into the strategic siting assessment process and that is what was done. EDF Energy, British Energy, nominated all its sites, the NDA nominated sites into the process. The NIA as an organisation did not have any part in that.

Q370 Colin Challen: As part of the nuclear industry generally, were you aware of discussions going on in the creation of this list?

Mr Parker: No, other than I think it has always been the view generally of the nuclear industry that the existing sites, because of the advantages they have, would be suitable for further nuclear development. That has been a sort of presumption on our part, that they would be suitable.

Q371 Colin Challen: I can understand why that is, but I also recall that ministers have said that there is no limit, at least the market is putting no limit on the number of new nuclear power stations that could be built, and yet just looking at this list, which is one less site than already exists, that seems to be putting a limit on the range of new nuclear power stations that could be built, albeit that some of those new power stations could have a higher capacity than their predecessors. Is that how you see it?

Mr Parker: I think it goes back to the question of urgency, if you like, the need to get new nuclear capacity on the system, and the judgment was made in the NPSs that the nuclear stations would be those which had the potential to come on stream to address security of supply and climate change objectives in a relatively short period of time. So we are looking at a period between sort of 2018 and 2025 and building on these existing sites would fulfil that requirement. I agree, however, that if there was seen to be a need for additional or expanded nuclear capacity beyond that timescale then you would need to be looking at potentially new sites.

Q372 Colin Challen: So here we have what is effectively a course of least resistance, either technically because you have the skills in certain locations and sites set up with certain facilities already available, and in terms of public opinion I know that the NIA thinks that at Dungeness public opinion is so much in favour of a new build that that could possibly trump the dangers which climate change poses? You might not agree with the characterisation of that. What other sites do you have in mind, apart from these 10 or 11?

Mr James: Deciding on Dungeness is not just us saying that, Shepway Council, the local council in the area, is also very keen to point out the backing of the local community for it. It is not that it has been ruled out on climate change grounds, it is around the issues of the protection of the beach, which, as we were saying earlier, is something we believe is technically possible.

Q373 Colin Challen: Have you got a longer list, and what is that list?

Mr Parker: We do not have a longer list. The Government did look at alternative sites as part of the NPS process. There is Dru ridge Bay, for example, in Northumberland. Kingsnorth was also looked at. There was one other which I cannot remember. So
there were three sites which the Government regarded as potentially suitable, although they came to the judgment that they would not be able to be developed within that timeframe I mentioned earlier, up to 2025.

Q374 Colin Challen: To what extent does the choice of site constrain the development of new nuclear power?

Mr Parker: There would certainly need to be requirements, for example, around cooling water, which is why most of the stations—all of the stations—are on the coast. So it needs adequate supplies of cooling the water. Of course one of the advantages of the existing sites is that they already have the grid connections available. It would help if those were available to any potential new sites. So there is a range of issues, but I do not think in principle there are any additional challenges to developers in moving to sites which do not already have nuclear facilities on them.

Q375 Colin Challen: So we could look at new nuclear taking place on existing power station sites, Didcot, or Drax? That would not be a problem?

Mr Parker: Well, cooling water might be an issue.

Q376 Colin Challen: How much of an issue is that?

Mr Parker: I think it is quite a significant issue. I believe Richard has more technical knowledge of these issues than I do.

Mr Waite: There are examples in the States where cooling water is supplied not by coastal facilities but by rivers or very large lakes, or cooling towers, but generally speaking the coastal facilities are better given security of supply and so on. It is not technically impossible to put cooling tower structures in place, but I think the regulators certainly prefer to see static bodies of water. Those are more reliable means of providing that facility.

Mr James: Peak demand is increasing year on year as more people, for instance, use air conditioning. The problem with using rivers is that, yes, you can use cooling towers but you are still dealing with the water which is going back into the river and in the middle of summer that can be an issue in terms of that becoming too large and that is, for example, what has happened on a couple of summers in France where they do have inland power plants and the inland power plants have had to reduce output in the summer for exactly that reason, whereas the coastal plants do not have to. That is another reason why the coastal sites are preferred.

Q377 Colin Challen: Just finally, could I ask how long will it be, do you think, before we get these extra three or four sites coming into the system before that become necessary? These are coastal sites, I understand, obviously, but how long is it before these extra three or four sites come into this planning process?

Mr Parker: It is difficult to predict at the moment because a lot of it will be down to the commercial decisions of the operators and, if you like, the perceived demand for new nuclear on the system. At the moment I think we are confident that the development of the 10 or potentially 11 sites will get us up to a reasonable contribution from nuclear to the mix, but beyond that I think it is very difficult to predict because we do not know what the demand requirements are going to be or, for example, the success of developing renewables or carbon capture and storage. That will all become clearer, I think, in several years’ time.

Q378 Dr Turner: If I could go back to Dungeness because it is a site I know quite well because I used to be a member of the Dungeness Local Liaison Committee and visited it quite regularly at one time in my chequered career. Firstly, I find the reason for its exclusion somewhat surprising because I would not have thought that an additional station would have any significant impact on the Site of Scientific Interest, and in fact the footprint of the current site is so large that I think it could comfortably accommodate a third station within it without going outside the boundaries. So it makes me wonder about the validity of that assessment and it also makes me then wonder about the validity of the assessments which have included some of the other sites, because if we are going to have a nuclear station Dungeness is a good place because it is pretty remote, and so on and so forth, much more remote from centres of population than many of the other sites, so it slightly makes me question my faith in the selection process.

Mr James: I think we would agree with you on the fact that it is a suitable place for a new nuclear facility. In terms of why that site has been excluded, the nature of the vociferousness of the objections from English Nature have obviously played very heavily in that decision. You would probably have to ask them why they particularly objected so strongly to that site on those grounds, because those are the grounds on which they have been excluded. I think the site assessments are very thorough on all the sites and if you actually look at what has been gone into on those sites—and it does include the population criteria, for example, and you can see that in some of the sites, how that would play on the sites and possibly change the footprint of new reactors within those sites. So I think they have been thoroughly assessed and I think that is a question you could probably legitimately ask of English Nature, as to why English Nature particularly has an issue with this site, it seems more so than they did with other sites.

Q379 Dr Turner: But it was not English Nature who actually excluded it. It was not English Nature who made a judgment on the other sites.

Mr James: No, it was not. However, it was on the basis of their representations that that decision has been made. If you look through the Strategic Siting Assessment review of Dungeness, you can see the discussions that have been had between the site owner and DEC and English Nature around that site, so it is difficult for us. We can read those discussions as well as you can. It is difficult for us from outside the process to know the decision making process within that.
Chairman: If we could move on fairly quickly, please, Simon. A couple of questions from Charles and then we will talk about the appraisal of sustainability, and then you will be relieved to know that we have finished!

Q380 Charles Hendry: To go back to some of the evidence we had from the NGOs over the last week or so, they were talking in terms of the lack of consultation and therefore the constant lack of potential public buy-in, commitment to some of these projects. I want to tie that in specifically to the consultation and therefore the constant lack of evidence we had from the NGOs over the last week, so they were talking in terms of the lack of evidence we had from the NGOs over the last week.

Mr Waite: We have considered whether or not we should have a separate block characterisation facility or whether we should actually have the actual construction itself able to be used for that kind of public engagement and we decided the latter was probably a better course of action, so as the facility finally finds a site and we start constructing it, open access to the public, public engagement, building stakeholder confidence by doing so, as indeed you quite rightly say the Swedes have done very successfully. We believe you can integrate that type of activity into the actual facility itself rather than having a stand alone test facility, if you like, or a practice facility. We do not actually believe we need that test facility or practice facility to prove the acceptance of the site, we can actually do that while we are constructing the actual site, so we would combine both of those things together would be our current view.

Q381 Charles Hendry: Also in terms of public confidence, the whole of the decommissioning programme, which is slightly removed from the NPS, but a lot of this debate we have had has been about public confidence and carrying the public with us, where there is a nuclear power station which has stopped functioning and a new one is now planned to be built how important is it for people to see decommissioning work being carried out on the redundant plant in order to give them the confidence that there is a complete lifecycle approach being taken and that eventually the land will be turned back into useable land?

Mr Waite: I think the good progress on decommissioning is essentially in those communities, particularly when they see the potential job impacts, and so on, and there are obviously synergies between jobs that may not be required in an operating station that may be a an NDA station decommissioning facility where those people could be re-skilled, retrained, recycled into the new build environment, so on a local socioeconomic basis it makes sense to join the two together. That can only happen if we have made good progress on decommissioning, of course.

Q382 John Robertson: Moving on to the appraisal of sustainability, do you find the actual appraisal itself in relation to the nuclear NPS satisfactory?

Mr Parker: Yes.

Mr James: Yes, we do. We have noted some of the comments that have been made in earlier evidence sessions along the lines that when considering alternatives they have only considered alternative forms of NPS, and it is certainly true that, for example, it goes into whether or not that is the level to which you should take into account the spatial planning element, i.e. the site specific nature, and looking at those. But it also looks at the alternatives of energy choices as well and of, for example, not having nuclear in the mix. That is actually considered in there, so it is certainly not true to say that other energy alternatives have not been looked at. As part of that process and to comply with the Strategic Environmental Assessment directive you are required to look at all realistic and deliverable alternatives, and certainly our view is that that has been done. There is an inexhaustible supply of alternatives you could possibly think of and there are plenty of those that are not going to be considered to be realistic or deliverable, so we think the realistic alternatives have been looked at and therefore it does meet the requirement. It has also looked at some of the socioeconomic benefits as well, so we think it is actually a very thorough assessment.

Q383 John Robertson: Yet the NGOs argued about the AoS that it did not comply with the requirements of the Strategic Environment Assessment?

Mr James: Our view is that we think it does. It is required to look at all realistic and deliverable alternatives and we believe it has done that.

Q384 John Robertson: So how would you respond to the NGOs then?

Mr Parker: Well, we disagree with them on that.

Mr James: They are factually wrong when they say that the energy alternatives have not been looked at in the assessment. You can plainly see them within the assessment. They are right in that part of the alternatives that have been looked at are about alternative forms of NPS but that is not to say, just because it has done that, that that is the only thing it has done. It has looked at energy alternatives also, so we think they are factually wrong on that.

Q385 John Robertson: The NGOs felt that the conclusions were of very poor quality. Is that fair?

Mr James: It depends on their definition of “poor quality”. I mean, I disagree with the outcome.

Q386 John Robertson: Should they have been deeper, should there have been more in it, or is it just done with the bare minimum of assessment? That was the reason why they said it died not comply with the SEA.
Mr Parker: I think in general terms the assessment and amount of discussion and consultation on nuclear generally since the new build proposals really emerged in around 2006 it has been really extremely extensive involving national and local stakeholders. The Government has done a tremendous amount of work in ensuring that these discussions have taken place and that they are confident that the public has been taken along and I think the appraisal of sustainability has been as thorough as other elements of the overall process in looking at nuclear and having got to the stage where we are now in a position to designate a nuclear NPS.

Chairman: Bruce, Richard, Keith and Simon, thank you very much. I am sorry our proceedings have been interrupted but we are very grateful and, Richard, you are going to drop us a note. Thank you.

Witness: Professor Dieter Helm CBE, Professor of Energy Policy, University of Oxford, gave evidence.

Q387 Chairman: I am very pleased to welcome Professor Dieter Helm to the Committee. Thank you very much for your written note and I am sorry we kept you waiting. Most of our witnesses so far, not quite without exception but almost without exception, have been very positive about NPSs and believe the Government should move quickly to adopt them. That is not your view?

Professor Helm: It is not my view. I would not want to take bits of that and say what they mean for one. It drives even further. In the overarching NPS and then the satellite NPSs will complementarity. There is an issue of needs and then complimentarity. That presumably means that the policies fit together?

Professor Helm: It is not just that the policies fit together, it is the investments. What is the point of building a nuclear power station if we have, say, 50 per cent wind and at times of the day needs are rationed off? What is the point of building a transmission grid to bring offshore wind onshore scaled up to the 30 per cent requirement if those wind farms are not built? At another level, what is the point of having a policy in respect of CCS or nuclear if unconventional gas means that we will have a very low price of gas and there is no carbon tax or carbon price in between? Indeed, at one point in the documentation it says the EU ETS is the core mechanism for establishing that price. Well, it is unlikely to do that job. So both from the point of view of individual investments they have to mash together. It is a system and unless you have a coherent need in respect of the system, then which particular bits of Lego you want to put onto that system, their economics depends on all the other parts. It drives even further. In the overarching statement and in Government’s energy policy overall rather than have a coherent policy, we have a separate policy for each technology, so we have an RO for renewables but we do not have an RO equivalent for nuclear or CCS. We have a CCS levy
in the bill but no carbon tax in respect of nuclear or renewables. This process of driving through each particular technology with its own specific policy opens that wide open to the possibility that this thing does not add up and it clearly, in my view, does not.

Q390 Colin Challen: I am just trying to get to the bottom of this. You are saying that the NPSs are, let us say, sloppy because the policies that predate them are themselves sloppy and not joined up. That leads me to wonder whether the NPSs could actually be put right, or whether indeed the NPSs could put right pre-existing policies by actually bringing a bit of order to the system. Do you see any hope at the end of this tunnel or should we just write these things off?

Professor Helm: No. I hope I stressed at the beginning that this idea of specifying out need through the process of designing policy is in principle a pretty good one. When it comes to sloppiness, there are different dimensions to this. At one level it is just in the document itself. There are bits where, as I say, the English does not even add up. It is not well written and in a legal document that is the minimum kind of requirement. Then there are statements which the IPC is supposed to take seriously. Let me give you an example. It says, under security of energy supplies: “We need sufficient energy to meet demand at all times.” How could that be a Government policy? At all times, in all circumstances? How does the IPC interpret that, one in a 30 year winter? One in a hundred year winter? Nobody has ever had an energy policy which says that we must always at all times meet energy demand. A proper energy policy says, “The security of supply margin we have in mind is the following,” but a blanket like that translated into a need—it says that anything that is needed up to a more than one in a hundred winter. That is the sort of incoherence that is in here which has to be sorted out in the drafting if it is to give a clear instruction to the IPC—and the word is “instruction”—as to how it should interpret “need” in respect of particular investments. I could find for you lots of other examples and that, when you are drafting something with a purpose for specifying need is, with respect, much better worked out in things like the dreaded Sizewell Inquiry where people were actually examined as to what “need” meant in that context: “What was the margin? Why was it justified? In what form?” Here it is just a blanket statement.

Q391 Colin Challen: Perhaps if we are trying to speed up developments that kind of detailed analysis does not really matter? It is the overall outcome.

Professor Helm: On the contrary, if you wanted to speed up development you could have just implemented a guillotine on existing regime. There is nothing in this regime which in itself is required to speed up the process. A guillotine on decision timetable with existing planning regime would have achieved exactly what is required here. On the contrary, the problem with this is that these sorts of statements—I am not a lawyer, but it would seem to me they are wide open to judicial challenge, wide open, and that is before we come to the point that if you are trying to make something predictable you want to have something where there is sufficient agreement that it is not going to be easily changed. We will probably come on to this point, but it is trivial for an incoming Secretary of State to withdraw one of these statements. I do not know if it takes five minutes, but it cannot take many days to do it, and then of course the policy is changed. Now, again if the documentation, if the supporting policy had the degree of incoherence within it and it has bland statements like this, “At all times we must have sufficient capacity,” then it would be unsurprising to me if this thing is not changed—many of these documents changed—pretty quickly and extremely regularly, and that is not what people wanted when they went for a planning reform.

Q392 Dr Turner: I would just like to take you up on your assertion that the great weakness is a lack of coherent energy policy. I have been one of those making stringent criticism of energy policy for years, however your statement that 30 per cent of renewable energy by 2020 is highly unlikely, surely that is in the context of business as usual and the whole point about evolving energy policy is to change from business as usual to a different scenario and these NPSs are part of that process. So do you wish to see us move to the realistic possibility of 30 per cent renewable energy by 2020 or not, because if you do we need instruments like this? What would you do instead?

Professor Helm: I think the starting point of this is that if you are going to have joined up development of energy infrastructure you have to have targets which people can in principle achieve—not existing business as usual but can in principle achieve. You may have seen some evidence to suggest that there is in place a framework within which (including this NPS) that target is going to be achieved. I have not. Let me give you some examples if we are talking about 30 per cent. Having competitive networks offshore, having a lack of joined-upness between the Regulator and five year periodic reviews of the transmission system, and the timetable of the requirement of the transmission system offshore and its integration with onshore in order to meet that target. Think of how many wind turbines you would have to put up a day to meet that objective. What I would say is when we think about practically trying to deal with these low carbon issues if it turns out that most of the key players do not in their heart of hearts think that the outcome is going to be delivered, with or without these NPSs, it probably will not. That is before I add the credit crunch and various other things in the frame. So from my perspective if I was really interested in decarbonising the economy—as an aside, I would not spend £100 billion on wind farms in ten years, but that is an aside—if I was seriously intent upon doing that I would want to put in place a set of targets which were stretching but “achievable” and the point I make in
this particular regard is that I do not think they are achievable, but if you push in one direction to build the infrastructure as fast as possible for, say, transmission but you do not do the other components, then you want a compacted regime with respect to networks, think about a compacted regime for networks offshore, think about all the negotiations, all the companies. Imagine if Helm Energy had one of these transmission networks and went bust. How would that work out? The target is really like thinking about—and I think this is the right analogy—if you were in 1935 or 1936 and you had a peacetime economy and you wanted to have a wartime economy and fight the Battle of Britain by 1940, if you were not to go about it like this. It would be a matter of national urgency and what I am saying is taking the policy framework we have got at the moment, we are in no position to imagine that that is going to develop to produce that particular answer. Now, a more pragmatic thing is to say, “Well, supposing we produced, say, half of that target and did it in a coherent, timed, dare I say planned way.” There would be a coherent National Policy Statement that goes with that, there would be investments that fit together in a coherent way, UK plc would be well suited and, by the way, we would do quite a lot more for achieving our CO2 targets. That is really my point.

Q393 Dr Turner: Let me put the question another way then, Dieter, because it is clearly desirable from a climate change perspective that we should meet these targets. Do you think these targets could be achieved with the right energy policy instruments, and if so what would those be that are different from what we have?

Professor Helm: Okay. Let me very carefully give a reply to the first part of that. I do not think this is either a good or a necessary way of achieving the CO2 reductions that were set up. This is not how I would spend £100 billion to get to that particular outcome of maximising the reduction of CO2 or to make a contribution to climate change. I would do some wind, but this seems to me to be actually quite damaging overall. However, it is not for me to make that choice, it is for democratically elected people like yourselves to decide what it is that our climate change targets are. If a democratic process leads to the idea that we wished to achieve this objective in ten years. That is the instruction. It is a bit like my analogy of making a wartime economy for a peacetime economy. You would take many more directional powers. There would be no messing about of Ofgem and periodic reviews. There would be no competitive tenderings offshore, there would be no competitions for CCS, you would simply get on with it. That is not what is going on here. We are supposed to have, on the one hand, a liberalised competitive market. Then we are supposed to have a separate policy for each of the technologies. We have a number of overarching institutions, a Regulator who engages in policy activity, we have got policy delegated to various parts of the institutional structure. We have not got much of the architecture in place if you really want to achieve that objective.

Q394 Mr Weir: Yes. You made the point that an incoming Government could change the NPS. Do we accept there might be a need for them to be able to change it in the light of changing circumstances?

Professor Helm: Oh, yes, of course. I mean, to give you an example, in paragraph 2.6.98 it says: “Soft start procedures during pile driving may be implemented. This enables marine mammals in the area disturbed by the sound levels to move away from the piling before significant adverse impacts are caused.” Now, of course we may discover there is a new form of piling. I have no idea what piling means, by the way, but that is just an aside. Of course you have to revise this stuff. Okay. The question is whether you should be giving directions from the Secretary of State via the NPS to the IPC about whether soft start procedures should be used. It seems to me that is a nonsense. That is not what you want the Secretary of State to go around revising. You want a process which is probably the IPC doing that kind of stuff.

Q395 Mr Weir: on that basis, you are objecting in a way to the detail that in the NPS there. Would you prefer to see a planning statement or framework that is less detailed and perhaps just somewhere to go or a process to go through rather than lay down the energy policy?

Professor Helm: Let us remember why this is detailed. This is detailed because it is an instruction to the IPC because the IPC, which is unelected, makes the decision. There is no democratic check at the end of this process whatsoever, okay, and the worry is that you give to an unelected body discretion. Okay—you do not mind giving—I say “you”—one might not mind giving discretion to unelected quangos if there if a check upon that discretion, for which the obvious one is a final democratic stamp on the decision, and this matters extraordinarily because in the planning process you are getting planning permission to build assets which might last 50, 60 years. It is absolutely vital that those people who lose by the decision—and the fact that it is controversial means there are gainers and losers—accept the process was fair. So what are they going to do, given this level of detail in here? They cannot simply say, “We want to bear down and lobby the IPC to take a slightly different line.” They might make submissions. They are going to go back to the political process and that is why it makes this a revision-prone procedure. So I am quite happy to delegate these things to the IPC, but only in the context that the IPC’s major decisions are subject to some form of democratic endorsement.
Q396 Mr Weir: But what form of democratic endorsement? Do you see it being done at a local level, something akin to the current process, or do you see it being done at a parliamentary level?

Professor Helm: It depends on what kind of decision is being made and I know that the existing planning system comes into much abuse, but we manage that reasonably well at the moment. The losers do not generally go around disputing the process that got to the outcome. In this they will. Now, that leads to the revision issue. I would rather a world in which the overarching NPS is the thing that politicians and governments and elected people focus on, what is the framework, and from time to time we will need to change that. I will give you two examples. The first is, if it is true that non-conventional gas or unconventional gas is going to radically change the energy market in a way that nothing else has done for about 50 years, that we are going to have abundant and cheap gas for the next 30, 40, 50 years, including in Europe, in the UK, in Poland as well as the US, that world, that datum is very different from a world in which many people currently assume the oil price is going to go to 200 and the gas price will follow it. In such circumstances it would be pretty crazy not to reassess this. This is like Sizewell. At Sizewell we discussed a coal station versus a nuke. That was the debate. Gas stations were not even considered, yet within three years gas stations were the technology of choice. So there are going to have to be things of that ilk. The bits that I am less keen on being changed from a day to day basis are bits about the soft start procedures for pile driving, the detail. Now, you would want politicians, I would hope, if you are making investments lasting over a long period of time, not to change these things very often and there are two ways of achieving that. One is clearly to have cross-party endorsement of the major components of these and we have experimented that with the Climate Change Committee Bill, and so on. The second thing is—and this is where the parliamentary accountability becomes very important—things that are voted through in the House of Commons or approved by elected politicians have a status in respect of the property rights that are thereby created, which is much greater than things created by these statements. I can change this tomorrow morning if I was, God forbid, Secretary of State. If someone had had a parliamentary debate, I cannot rip up someone’s property rights so easily. If I was an investor in a new nuclear power station, in a CCS plant, or a big wind farm, I would like in my documents for my borrowing and my financing a line which said, “and this was approved by the House of Commons,” or “by elected officials.” That is my property right. Here it is just easy, really easy. Maybe I have misunderstood it, I am not an expert on these things, but you just suspend the statement. Could you do that on May 7th, all of them? Somebody ought to notice the implication of that for investment decisions.

Q397 Mr Weir: But a cynic could also say that a Government with an absolute majority could easily push through a change as well by the parliamentary route?

Professor Helm: Absolutely, but there is a difference in our democracy between things that are pushed through by a parliamentary vote and things that are simply done by administration. I do not know precisely how you do this, but do you arrive as the new Secretary of State on May 7th and say, “I’ve scribbled a note here. Please withdraw six statements”? Is that what you do? That is very different from going to the House of Commons and on Hansard explaining, criticised by the Opposition in our democracy, your decision for doing that. I do not know if I have understood this properly as to how easy it is to revise, but I am not a procedural person and not a lawyer, but it seemed to me pretty trivial from these documents.

Q398 Chairman: We have talked quite a lot about a debate and I suspect there will be a debate about the policy statement. Whether there will be a vote I think is a different matter, but you would advocate a vote?

Professor Helm: Yes.

Chairman: Okay. Alan, are you going to talk about need?

Q399 Dr Whitehead: I am going to talk about the coverage of NPSs, yes. Forgive me, but you seem to be saying two essential things. Firstly, a sort of paraphrase of the joke about the person asking the person at the side of the road for directions as to where they go to and the answer is, “Well, firstly I wouldn’t have started out from here in the first place.” Secondly, you appear to be suggesting apropos of not starting out from here in the first place that a command economy, given the emergencies that we are thought to face in energy, is likely to be the only way to reach any of these kinds of targets, if one wishes to meet those targets?

Professor Helm: Okay, let me unpack it into the two component parts. Would I re-write the overarching NPS? Yes. First of all, I would make it coherent within itself. I quoted to you the example of the statement on security of supply. I would make it meaningful, but obviously there is scope to tighten that up considerably. So I might tell your person at the side of the road I would not start from here, but I would say, “Actually, I would start from here and, by the way, you would find it much easier to get to where you want to if you did start from here, and here’s the practical ways you can do it.” So that is the first point. On the planning, I am not in favour of planning, I am in favour of markets. I am in favour of things like carbon taxes, carbon prices, capacity markets, capacity payments, low carbon obligations. I am not in favour of technology for specific kinds of policies. All I said was, if you really want to pursue a technology specific policy and you want to do it in ten years flat from start—remember we have a lower renewables target because only Malta and Cyprus have achieved less renewables than we have so far—if you want to achieve that in ten years you have no option but to take directional powers, and hopefully you will not do that, so Government will not do that. That is why I think the
outcome will not be achieved. Do I think it is a good thing that the outcome will not be achieved? Yes, because it does not address the £100 billion on wind farms, it does not address the climate change problem very coherently at all, and there are much better ways in which, if you are serious about climate change, you could spend that money. But that is not for me to decide, that is for you to decide. I am simply saying that if that is what you want to do and you want to achieve it in that timetable, then you have to take the powers to do that, and my view is, particularly in a credit crunch, you have to start directing people to do things. I hope you do not do it.

Q400 Dr Whitehead: But are not a number of these issues to some extent determined by, for example, the fact that we now have carbon budgets within the UK system, we now have a Climate Change Act which appears to suggest that we should be—well, more than appears to suggest, it does suggest that we should be required to reach certain carbon reductions, indeed effectively decarbonise the energy economy not just by 2050 but effectively by 2030, and that therefore certain things presumably follow from that. If, at the same time, one wishes to keep the lights on—and you have mentioned earlier one of the statements in the NPS that one of the ambitions is to have enough energy to effectively keep the lights on at all times—then presumably that produces certain imperatives at the basis of whatever energy policy follows?

Professor Helm: Okay, but let us unpack that. The first thing is the carbon budgets and the carbon targets. We have discovered a really good way of achieving the carbon budget. You just have a really good economic depression and low growth to follow. So we are now much more comfortably inside than we were before.

Q401 Dr Whitehead: Yes, but I presume you are not in favour of the economic recession?

Professor Helm: Of course not. I am simply saying if your objective is to hit this carbon target by 2020—and just for a moment assuming the EU do not ramp it up to 30 per cent—we are well on our way—you do not need £100 billion spent on wind farms to achieve that target. So that is the first thing to do.

Q402 Dr Whitehead: Forgive me, I think I would rather have wind farms than permanent recession.

Professor Helm: Even if you do not have permanent recession you can achieve your objectives without building 30 per cent of your capacity of wind and in the process deterrenting a whole streak of other low carbon investments which have to deal with the intermittency of wind that will follow. That is a separate debate, but you could be really serious about decarbonising the economy and not think that you ought to spend £100 billion on wind farms as your main, almost only policy to 2020. The second thing to say is that you have to think of the relative targets. So if you really want to decarbonise by 2050 there is a host of opportunities in technologies which will help you do that. We sit on the cusp of enormous change in the energy sector. Quite possibly transport will be produced from electricity. That will have massive effects on the storage of the electricity system and the role of intermittent generation technologies. It will increase the demand for electricity a lot, by the way. We have finally got to the point where IT might actually touch the electricity industry, having touched everything else, smart grids, smart meters, driven from distribution not supply. At the moment we are going to put them in supply, which is one of the craziest things one could do in this kind of context if you really want to get on to the dynamics of managing demand, and we have got new nuclear technologies. We have got CCS, which is crucial for the global warming picture, next generation renewables, and all the R&D that goes with that. Then we have got unconventional gas on an enormous scale, potentially.

Q403 Dr Whitehead: Are you therefore suggesting, or might you suggest that if you had an ideal set of NPSs rather than the present set of NPSs that they would substantially not only specify the energy mix that one might get to but also include the sort of room for development of what the energy mix might look like that you are suggesting?

Professor Helm: No, it does not follow from what I am saying that we should go around specifying that we should have X amount of renewables and Y amount of nuclear power. On the contrary, what I am stressing is a world in which the technical change is substantial. We are very much in danger of the Sizewell mistake of comparing two technologies and not thinking about the third. That was a fantastic mistake and it took them three or four years to make that mistake, too, in the process. This is why I am in favour of using things like a common low carbon obligation so we do not pick winners. I am in favour of using capacity markets to ensure that the right amount of capacity is on the system. So my NPS will be a capacity auction.

Q404 Dr Whitehead: It is rewards for capacity?

Professor Helm: Yes, and you would identify how much capacity you wanted at auction. If you won the auction, that passes the needs test with regard to the NPS. Then it is just down to all the environmental assessments, and so on, that follows.

Q405 Dr Whitehead: How would you then balance the system after that?

Professor Helm: Well, the system is balanced by ensuring that we have got a margin of capacity of, say, 10, 20 per cent, whatever is decided as the margin that is appropriate.

Q406 Dr Whitehead: But the Betta system, as it stands at the moment—not that I am a great defender of the Betta system—to some extent migrates economically unviable plant to the margins
and then bids them back in on the basis of peak demand? The sort of mix that we are now talking about, that would no longer be possible?

**Professor Helm:** To go back to my overarching point about energy policy, if you think that Neta is going to provide you with the incentives to make the investment to deliver an excess supply of capacity—

Q407 Dr Whitehead: I do not, I am wondering if you do?

**Professor Helm:** No, not at all. I have advocated since well before Neta was put in place that it would have some fairly, not disastrous but difficult consequences. It produces short-term volatile prices and rewards people for capacity being short. It does not provide a long-term signal for investment and therefore we are left with having to define through this NPS process what need is, whereas the obvious market solution which has been adopted for most of the twentieth century, most markets, is to have a capacity market, an energy market, and separately I have worked out how you graft on a capacity market onto the Neta framework we have, so it is evolutionary. This would identify when there are contracts for capacity required. This is a long-term capacity market which suppliers would have to sign for. That establishes need. You do not need an NPS for that. If you win the auction or the contract there is a need for that capacity. Now you have to go through the process of ensuring that the planning is lined up with that and the only criteria that should be used in the planning process is not that it is not needed but that it fails these other tests, local tests and all the other parts which are part of the framework. You do not need all this paraphernalia if you have a sensible way of designing your market. Because we do not, we have this pretense that on the one hand we have a competitive market and on the other hand the Government is fixing the renewables investment, the nuclear investment, the CCS investment and then worried about what will happen to gas on top of that. So we have intervention in each of the areas, picking each little winner, and then we pretend it is a competitive market at the end and of course therefore we have to write an NPS which tells us whether we need stuff because the planning regime has not got a frame in which that operates.

Q408 Dr Whitehead: So CCS, which you regard as very important, as I do, too—

**Professor Helm:** Extremely important.

Q409 Dr Whitehead: You would consider could be incorporated into that particular system in terms of bringing it on as part of the consequence of an energy policy?

**Professor Helm:** This goes to the issue of what is missing in here. The main focus of what Government should be in the business of helping to define for the planning system through the NPSs is the infrastructures, the networks, and I can think of three that really matter, only one of which is in here: the electricity transmission as a smart system with smart metering. It is a system. Markets cannot decide that. Secondly, the system for providing electrification of transport, which is the great challenge, and that is what we should be getting on with in this decade and nothing in here at all tells me how that operates, and thirdly of course the system for running a CCS regime, the pipeline system to dispatch all that stuff. So there are three core things that Government should be doing in the energy area through the planning process, defining the NPSs, are transmission and distribution, electrification of transport systems and the CCS systems. We only have a bit of one of those, which is tied up to those renewables targets which, as I said, I think are strictly non-credible.

Q410 Dr Whitehead: How would you organise the electrification of transport through the planning regime or through NPSs?

**Professor Helm:** First of all, you have to have a view about how it is going to happen. It is a bit like thinking, how would you have organised a natural gas pipeline system, given you have found some gas in the North Sea? You need to start thinking about the roll out, which bits develop where, what requirements come into place, how it interfaces with the existing system. This is how you define the need of that network. That is what Government policy should be.

Q411 Dr Whitehead: That is planning it, but how does that then work within the planning system?

**Professor Helm:** Once you have that it translates naturally—and this is what this framework is well designed for—into a statement which is the National Policy Statement on that network and that goes to the IPC and when planning, et cetera, comes forward—and you have to do some things to encourage people to bring forward these investments—it fits in that framework, coherently, complementary to each other, bits of investment, and it is done on a coherent system basis, because remember with things like electric cars it is not whether you or I want to do it, it is not whether I want to put a bit of cable in my particular network, it depends on everybody else doing it in a sequenced way. Now, the development of natural gas transmission in this country was one of the most brilliant projects conducted. It was done to time, to budget, it is extremely efficient and it has lasted us a long time. That is because, to be blunt, when it comes to networks it was planned and all the bits were joined up together.

Dr Turner: It was an old Labour Government!

Q412 Dr Whitehead: On that planned network did you plan on going to the latest phase of the network of all the imported stuff?

**Professor Helm:** Well, the fortunate thing is we have a single company overseeing the transmission network so they have to take a system view. That is good. Previously we had a separate electricity transmission company, a separate gas transmission company, and by the way the assets were valued differently so the pricing was wrong so, for example, many of the CCGTs are in the wrong place simply by virtue of the two things not being done in an
Integrated Way. It is a bit more planned, but you have to say that the ability of the grid companies to develop this infrastructure depends upon two things. First of all, it depends on having an overarching view about where your energy supplies are coming from, and that is an engagement with Europe, with Nabuco, with pipelines with Norway and so on. Secondly, of course they cannot decide. It is up to Ofgem, and of course Ofgem’s powers are in respect of its five year periodic reviews and until recently its statutory duties are not the same as ensuring the security of the overall system and thinking through these bits. So it broadly has not been joined up and that is why we find ourselves with a lack of gas storage despite the rapid run down of the North Sea, we find ourselves with a lack of interconnection with the Continent to the degree we need, certainly on the electricity side but also on gas, and we find ourselves in this complete mess of no long-term contracts in a world where Germany has lots of storage and long-term contracts and somehow we imagine we can tell Gazprom that they will have to have contracts of the sort we would like.

Q413 Dr Whitehead: We liberalised the energy markets in the UK. Do you think that was a good idea?

Professor Helm: Let us be careful between liberalisation, competition and how we did it. There are many people who go around who think that liberalisation means having just short-term spot markets and Neta and that is what it means. Now, to say that that may have served us very badly is not to draw the conclusion that necessarily competitive liberalised markets are a bad idea, it is to draw the conclusion that this one is. I give you an example. We set about breaking up long-term contracts. You cannot build a nuclear power station or a windmill or a CCS plant, or buy gas against the development of gas fields without a long-term contract. It is in the nature of the sunk costs of those assets. Only this morning I was listening to the Energy Regulator berating Europe for having long-term contracts. Long-term contracts are essential to a competitive market. If you take those away, then no liberalised market is going to work very well, and that is where we are. So I am very critical of a form we have but that does not lead to the conclusion, I think, that necessarily competitive—generation, supply, and so on—and networks. Networks have to be planned. There is no other way of thinking about it. They are natural monopolies. There is no competition. The Regulator might like to have competitive networks offshore. As I think I have indicated, I think that is a very, very bad idea. But basically the core networks do have to be planned and decisions have to be made about those. I made an additional point about planning, which is if you really want to build that amount of wind farms that quickly you have not got time for anything other than the equivalent of instructing the industry to produce Spitfires at a particular rate and you go and you direct it. I am not in favour of that, but I am not in favour of the overall overarching objective being met.

Q414 Judy Mallaber: I am bewildered, quite frankly. I do not know whether I am really thick, but I actually do not really understand what it is that you want and what you would have in the energy policy and whether we would have these policy statements and how that ties in to a planning structure. Can you help me?

Professor Helm: Okay. I obviously have not explained myself very well. I am not in favour of a planned energy sector as a whole—

Q415 Judy Mallaber: But you keep saying there are things which we need, which we have not got?

Professor Helm: Let me finish. As a whole. However, there is a distinction between the bits that can be competitive—generation, supply, and so on—and networks. Networks have to be planned. There is no other way of thinking about it. They are natural monopolies. There is no competition. The Regulator might like to have competitive networks offshore. As I think I have indicated, I think that is a very, very bad idea. But basically the core networks do have to be planned and decisions have to be made about those. I made an additional point about planning, which is if you really want to build that amount of wind farms that quickly you have not got time for anything other than the equivalent of instructing the industry to produce Spitfires at a particular rate and you go and you direct it. I am not in favour of that, but I am not in favour of the overall overarching objective being met.

Q416 Judy Mallaber: Just going back to what you said before, who is it that should be making the decisions you say do need to be made?

Professor Helm: The overarching view about the networks in particular should be taken by Government and that should be driven by departments of state and by the Civil Service and the normal policy process.

Q417 Judy Mallaber: So that is what you would like to see in the Energy Policy Statement?

Professor Helm: I am not thinking that we should throw all of this process out. I make an aside comment earlier that you could have achieved many of the things you wanted to achieve just with the existing planning system. You did not need to do all this, but we are where we are. I would like to see a re-writing of the overarching statement in a coherent way and as a minimum I would like it at least to be coherent in the terms it is already put.

Q418 Judy Mallaber: But do you not want it to include an energy mix? It should not be saying that?

Professor Helm: To say what should be in that document, the overarching things that should be in that document are the energy networks, the systems, and I put three in there that I had in mind, two of which are missing. I do not think it is the job of the Government to decide how many windmills and how many nuclear power stations there should be, and actually I think it will not work anyway. If the Government, however, wants to meet the carbon targets and the carbon budgets through the climate change process, it is perfectly plausible to set a low carbon obligation which requires a percentage of the
electricity to be produced from low carbon sources through a transition without specifying it has to be windmills, or whatever. I would like in the short-term to have the substitution of gas for coal in that process because that would be the fast track route of getting our carbon emissions down fast. If that is what you are really interested in and you are really worried about the constraint of the carbon budgets, you would do the gas for coal substitution in the short-term because that is the obvious way of getting emissions down. So I would have a low carbon obligation and I would say that is the Government’s policy to do so. When it comes to the statements, the satellite statements, I would have one satellite statement for each of the networks. They would be joined up through the overarching one. To the extent that there is a low carbon obligation, then that has to have a format. If there is a capacity market to deal with the security of supply side and a carbon tax to set a price that is appropriate for carbon to achieve those objectives, much of the other stuff actually drops away. Now, that is not to say that you should not have National Policy Statements, that is not to say you should not have an overarching statement, but it is a rather different structure than the current one, so what I have tried to do is two things. One is to try and describe a structure that might be more coherent and efficient but also even within the existing framework to try and make some constructive comments about what might be done with what is actually on the table, and that has been at a series of levels, at some levels just tidying up the English so that it reads properly and sorting out some of the statements which are, in my view, meaningless, but at another level there are some substantial bits that you would want to put in now anyway and of all the things I have mentioned the CCS network and infrastructure seems to me to be extremely important.

Q419 Judy Mallaber: What would be the framework for how decisions would be taken on large infrastructure projects?

Professor Helm: It is for Parliament to decide what it wants to do, but my view is that I would want to leave quite a lot of discretion to the infrastructure planning body. That is why I kept coming back to this example of soft start processes and piling. These are things that cannot be made by departments of state, it seems to me, but I would only want to have that discretion there—that is what makes these things work and that is why you can delete the clauses from here because you can leave it to the IPC—if there is an accountability of the IPC, and through that kind of process. That is why we need something in the system which gives that discretion, but it is only possible, in my view, if there is democratic accountability after it because the IPC would not be instructed as per currently for many of these issues, it would be left for the IPC to assess them in coming out with its recommendation as to whether planning should be approved or not, but its recommendation would not, in my view, be a decision. The decision would be taken either by the Secretary of State or in really massive national strategic and controversial issues like nuclear power stations my own view would probably be that you need some parliamentary support, probably to approve at least the overarching framework of that. But the ultimate decision would not be taken by an unelected official, however good they would be, and it is only in those circumstances that I think you can give that person discretion in respect of these things in making their recommendation and that enables you to cut out a lot of this stuff in here which otherwise will have to be revised regularly by the Secretary of State by changing and withdrawing these documents. I come back to the point that as I understand it—and tell me if I am wrong—the Secretary of State will have to withdraw—I think it says “the document” but maybe they withdraw clause 2.698 to introduce the idea that semi-soft start procedures might be used. This is a nonsense, that this would have to be done through that kind of process. That is why we need something in the system which gives that discretion, but it is only possible, in my view, if there is democratic accountability after it because the IPC should make recommendations, not take decisions.

Chairman: We are going to finish with Colin.

Q420 Judy Mallaber: Who to?

Professor Helm: To Parliament, and then there is a hierarchy of possibilities here. One is that we could just go back to the existing system and the Secretary of State has the responsibility, they have the guillotine timetable to make the decision, so a politician has finally decided and they could be given two months to do it, or a month, or a week, or whatever is required.

Q421 Judy Mallaber: Hang on a moment here. You have left discretion. You said there should be discretion to the Infrastructure Commission and power to the Secretary of State or Parliament to then decide if they have exercised their discretion properly?

Professor Helm: The IPC would not be instructed as per currently for many of these issues, it would be left for the IPC to assess them in coming out with its recommendation as to whether planning should be approved or not, but its recommendation would not, in my view, be a decision. The decision would be taken either by the Secretary of State or in really massive national strategic and controversial issues like nuclear power stations my own view would probably be that you need some parliamentary support, probably to approve at least the overarching framework of that. But the ultimate decision would not be taken by an unelected official, however good they would be, and it is only in those circumstances that I think you can give that person discretion in respect of these things in making their recommendation and that enables you to cut out a lot of this stuff in here which otherwise will have to be revised regularly by the Secretary of State by changing and withdrawing these documents. I come back to the point that as I understand it—and tell me if I am wrong—the Secretary of State will have to withdraw—I think it says “the document” but maybe they withdraw clause 2.698 to introduce the idea that semi-soft start procedures might be used. This is a nonsense, that this would have to be done through that kind of process. That is why we need something in the system which gives that discretion, but it is only possible, in my view, if there is democratic accountability after it because the IPC should make recommendations, not take decisions.

Chairman: We are going to finish with Colin.

Q422 Colin Challen: Thank you, Chair. I think I am not necessarily with Julie here, but I am certainly at one end of the mixed ability class so far as this question goes. My original understanding of the creation of the NPSs and the new planning regime was that they were going to remove bottlenecks. It was going to make things simpler and faster to implement, so the Government can get all its nuclear power stations built in three months flat, we can have an end to the blockages to 3GW of green power, et cetera, et cetera, et cetera. From what you have been saying this afternoon it seems to me like the whole new regime has been over-designed, is over-concerned with complex details and that given the number of things that can be revised in this system people will be continually held up waiting for the next revision. Is that how you would characterise it?

Professor Helm: I could not have put it clearer and this is an example of the intention that was put. The intention was to speed up the process and get these things done, and we need this infrastructure. It is not as if we are in a position whereby we have got massive extra capacity as in the 1980s and 1990s, and we have got to decarbonise this system quickly. We have an enormous quantity of investment to be done
very quickly and we have a planning system which has produced delays, of which the stylised example, the caricatured example, is the Sizewell Inquiry and all its follies. So we need to speed this process up and get things done. The trouble is that we could have been achieved these objectives, by guillotines and timetables and a number of other ancillary changes. What has been put in place has been an amazingly complicated structure with all these NPSs whereby Government now finds it necessary, as I say, to describe what sort of piling system we can use on offshore wind farms. In a world in which, because we do not have democratic accountability for the decisions, we have allowed an unelected body to take the decision, we have not got any discretion in the system. Therefore, my guess is the detail will be added, but if we wait for two or three years we will have twice or three times the volume of documentation and lawyers will crawl all over that stuff. What I say is, this is the opportunity to stand back for those people who are desperate to get their projects approved. They just want to get on with it. I have enormous sympathy, but remember in the end if you start building lots and lots of nuclear power stations and you have not got the consent of a legitimate process, you could go back to where we were in 1981 when the then Secretary of State announced that there would be ten nuclear power stations, one a year. One got built eventually, Sizewell. The rest did not happen. We can announce four CCS plants, we can announce hundreds of offshore wind farms, but the problem is how are they actually going to be delivered, through what process? How is it going to be joined up? In the past we have not needed an energy policy. We have been awash with energy—North Sea oil, North Sea gas, coal, more power stations built in the 1970s than we could possibly imagine. Now we are in a desperate position whereby we need a lot of investment in a coherent way which is going to be extremely expensive. It is going to raise consumers’ bills and in that context these sorts of decisions have to be made in a way in which people can accept the outcomes. This is massively complicated.

Q423 Colin Challen: Perhaps just to end on a philosophical note, really the problem that we have is that we are setting objectives as politicians which then other people have to deliver. If we cast our minds back to the mid-nineteenth century, 1844, when the first railway mania began, is it likely that the entrepreneurs and the capitalists and the rest of them who built the railway system in virtually seven years flat had set themselves an objective apart from making a profit, do you think that would have happened and should we start re-examining whether the state is interfering too much? I am all in favour of objectives about nuclear power, energy efficiency, and so on, but then we are not backing it up with a carbon price, or we are not giving people the incentive to go out and do it except to say that it is a very fine thing to do. It is a socially worthwhile objective, but nobody else seems to be very interested, so how far back do we have to go and why all this bureaucracy and regulation and red tape to actually get the kind of achievement in the system that we actually want, to tackle climate change, but seem to be endemically incapable of getting very far with it?

Professor Helm: Let me answer that in two ways. In the example of the railways, of course anyone could have planning permission for virtually anything then and if you did not you could buy people to get the appropriate special bills, and so on, for it and it was chaotic and it took a long time to sort out the mess of infrastructures put in place to produce a coherent railway network, and we still probably have not got there yet. On the broader question, my view is that what politicians should do, what the democratic requirement is, is to set the objectives, to set the security of supply requirement, to say how much decarbonisation we want and what is more they cannot avoid being involved in what kind of networks we are going to have, but to get involved in picking technologies, especially when things are moving so fast, as I described, information technology, the electrification of transport, unconventional gas arising, second generation renewables, it is utterly hopeless to start specifying in each technology what you want. It will not work. It will not get delivered. The question is, how long it takes to realise that that is not going to happen and how much we spend in the process, and the wind example is clear. It will cost at least 100 billion. For the British economy that is a big requirement and some of the time none of that, or virtually none of that capacity will be operational. So you need an enormously larger total capacity to meet that. It is not just that you have got to build all those wind farms, you have got to build all the back up technology as well at the same time.

Chairman: Thank you very much for that. It has been very challenging at times and we are grateful for you coming and giving us your time and giving us a different and, as I say, very challenging view forwards. Thank you very much.
Mr Brian Seabourne,

Witnesses: Mr Brian Seabourne, Head of Regulation and Government Affairs, E.ON UK, Mr Paul Spence, Director of Strategy and Regulation, EDF Energy, Mr Simon Wells, Head of Planning and Environmental Law, RWE Npower, and Mr David Porter, Chief Executive, Association of Electricity Producers, gave evidence.

Q424 Paddy Tipping: Welcome to everybody. We have a full house. Welcome to Brian Seabourne from E.ON, Paul Spence from EDF Energy, Simon Wells from RWE Npower and David Porter from the Association of Electricity Producers. We have one hour. I know most of the witnesses and also that you have a lot of experience and knowledge and, dare I say, a lot of history too. Do not answer all the questions individually but share them out amongst yourselves. Thank you very much for coming. Let us start with the NPSs that have been published. At this stage are they in a form that you think that the Government could adopt them?

Mr Porter: Broadly, of course we are very strongly in favour of the NPSs and we want to see the Infrastructure Planning Commission work successfully because we have a vast programme of investment to enter into and it is probably true to say that unless the planning system is seen as robust, business like and operating in a timely way, it could even be the case that some people are put off actually seeking planning consent. There is not a good record of dealing with planning in the UK and that is really where we are coming from. We want to see this work. The national policy statements meet with broad approval but it is fair to say that there are aspects of them that I think we might like to see tightened up.

Mr Seabourne: They provide us with a clear and practical policy framework. We think it would give confidence to investors to invest and, as David has said, all of us are looking at some fairly hefty sums to invest in order to meet the targets. Equally, it gives the IPC the opportunity really to consider the issues which are important on each application. It gives them the basis for considering the local impact and the involvement with the local community.

Mr Wells: Yes, they provide us with a clear and practical policy framework. We think it would give confidence to investors to invest and, as David has said, all of us are looking at some fairly hefty sums to invest in order to meet the targets. Equally, it gives the IPC the opportunity really to consider the issues which are important on each application. It gives them the basis for considering the local impact and the involvement with the local community.

Q425 Paddy Tipping: We have written the evidence. Some of you have raised issues, particularly about the need for CCS. We will come back to those. In broad terms do you think it is in the right area?

Mr Wells: Yes, they provide us with a clear and practical policy framework. We think it would give confidence to investors to invest and, as David has said, all of us are looking at some fairly hefty sums to invest in order to meet the targets. Equally, it gives the IPC the opportunity really to consider the issues which are important on each application. It gives them the basis for considering the local impact and the involvement with the local community.

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Q426 Paddy Tipping: Are you confident that there is enough material and guidance for the IPC to make informed decisions?

Mr Spence: I think our view is that they are substantially correct; that there is sufficient. It is a well-considered set of policy statements. It lays out the position on the policy effectively, and, given the urgency of the need to get on with the investment programme, we think that they provide a good basis for the next step in the process.

Q427 Paddy Tipping: Some witnesses have said that really there is not an awful lot in the overarching statement, that there is nothing new; it is a restatement of policy where it is at the moment. Is that a fair comment?

Mr Seabourne: In a sense, it is not necessarily intended to provide statements of new policy. It is intended to set out really the Government’s energy policy objectives and its climate change goals, which include the reduction of carbon emissions by 80 per cent by 2050 and that is the right context for the IPC to be making its decisions, against the impacts which would arise in the case of individual projects.

Mr Wells: We found it quite a helpful document in the sense that it actually consolidates a lot of policy and information that is out there and that has not been consolidated in one place before. From that point of view, we find it useful. Clearly the NPS itself is not there to set policy. We also find it useful because it is addressing all the impacts and how those impacts have to be assessed, how they are to be mitigated, and, if need be, how the IPC is to address them. I believe it is quite a strong document.

Paddy Tipping: Can I turn directly to the question of need, which some of you have written to us about?

Q428 Dr Turner: There seems to be some degree almost of unanimity amongst witnesses that need is not adequately expressed in the NPS as it is currently drafted. Would you like to comment on your view on that?

Mr Seabourne: Our view was that the overarching NPS does set out the need; it describes the need adequately for new low carbon capacity and generation, the need to maintain security of supply. What it does not really do is say to the IPC what weight the IPC should give to that need when it is making a judgment about balancing the need against adverse impacts. For example, in the nuclear NPS...
there is a clear statement that the IPC should give substantial weight to the need for nuclear, and we think a similar statement should be made in the case of renewables, coal and CCS, and indeed for gas storage, for example where we feel the statements on the need for new gas storage are not strong enough.

Q429 Dr Turner: That is helpful. Another question is that by DECC’s own figures in the overarching NPS there is not a lot of need for new conventional generating capacity in the next 15 years and above that which has already been consented, particularly principally gas, which of course your companies will be responsible for, by and large. How do you respond to that?

Mr Spence: The NPS makes clear that by 2025 there will be a need for around 60 GW of new capacity and a substantial proportion of that needs to come from conventional generation, potentially 25 plus gigawatts. That in itself is a substantial gap. If you look further, if you start looking to about 2050, we have an objective to reduce our carbon output as a country by 80 per cent. To get there, the Climate Change Committee has said that we need substantially to have eliminated carbon from the electricity system by 2030. When you look at it in that context, the NPSs provide a clear framework for the need for the investment and we would like the IPC to be able to take account of that in the long-term future as well.

Q430 Dr Turner: As the statements are drafted, the worry which several witnesses have expressed is that some of the future gaps may be filled not by low carbon or renewable energy but by further gas, which clearly would go against the principles that you have just set out. Do you think that the statements give an adequate defence against that happening?

Mr Spence: They move us in the right direction and they give the IPC and articulate a policy that does make clear the need for low carbon generation. That could be strengthened by allowing the IPC to make reference to the longer term targets.

Mr Wells: Could I add to that? Clearly consented capacity does not equate to built capacity. The consents may be going through the system or may have been provided. That does not necessarily mean that all that capacity will be built.

Q431 Dr Turner: What percentage of that capacity do you think will be built? Given the fact that it is the lowest capital expenditure, you would think there is a probability that a high proportion of it will actually be built.

Mr Seabourne: The thing is that the conventional policy framework put in place by government build to incentivise renewables and nuclear and coal and CCS: if that is successful, then there will be less gas plant built and we will have a more diverse mix of generating capacity. So the onus really is on the policy framework to deliver that capacity. We do not see it as the role of the IPC to act as a sort of last ditch climate change regulator, if you see what I mean.

Q432 Sir Robert Smith: On this establishing of need, one of the statements talks about sufficient generating capacity needs to be available to meet demand at all times. Surely even in the most robust state planned system you would have a bit of demand-side management as well built into the system? You would not gold plate to the point of having the ability to meet in all exceptional circumstances.

Mr Porter: Even in a Stalinist system you probably could not guarantee that demand would be met.

Q433 Paddy Tipping: Stalin was a good manager!

Mr Porter: He probably had somewhat unorthodox methods for dealing with people that failed to meet the demand. Our process is probably rather more likely to deliver what is wanted.

Q434 Sir Robert Smith: It is not overstating the case of need there, though, in the sense of saying “meet demand at all times”.

Mr Porter: You cannot actually have that, so in one sense it is a slight over-statement. Of course the industry strives at all times to meet demand but everyone involved knows that there are occasions when that might not be possible. It was true in the days of the Central Electricity Generating Board and it is true in the more liberalised market today.

Q435 Sir Robert Smith: On an earlier point you made about the gas storage and CCS maybe not getting a strong enough hint or drive within the statements, what are the consequences of not giving them a strong enough drive?

Mr Seabourne: The consequence would be that the IPC would not give sufficient weight to the need for new gas storage projects when they came forward and we might have less gas storage than we would otherwise have had. I think the Government is projecting that overall gas demand will fall between now and 2020 because of more renewables and energy efficiency measures, but we still think there is a need for additional gas storage as the UK becomes more dependent on more external sources of gas. I think the Secretary of State, after a rather difficult 2005–06 winter, when we were all asking ourselves whether we have enough storage, made a rather strong statement in favour of the need for gas storage, and we would quite like to see that reiterated in the NPS.

Q436 Sir Robert Smith: There would be quite a lot of objection pressure against gas storage that would need to be weighed against that more strategic need?

Mr Seabourne: Yes.

Q437 Charles Hendry: With the need for energy security and also the move towards a low carbon economy, do you think that we actually need to see new nuclear facilities being built on all of the sites which have been identified in the NPS?

Mr Spence: Certainly our view is that at this stage the list of sites that are able to be considered for new build should be as long as possible. We would certainly make the case that it is inappropriate at this
stage to omit Dungeness from that list of sites, or
premature to omit it at this stage. Once we are clear
on the scale of the need and the precise local impact
on that site, but on each of the sites, then we would
expect the IPC to take that judgment and decide.
Whether all of the sites come through that will be
fore the IPC to decide at that point.

Q438 Paddy Tipping: It will be the market that
decides.

Mr Spence: The market will propose the projects.
Whether or not all the projects achieve consent is
where the benefit outweighs the impact.

Q439 Charles Hendry: In terms of your ability to
deliver that investment, would you be looking to
build more than one plant at once or would you
build one plant and then start on the next one? That
has a very significant impact in terms of what the
delivery of new nuclear could be, say, by 2025.

Mr Spence: Certainly my own company’s proposal
at the moment or plan is to construct four reactors
on two sites, so that is two twin projects, which
would be running in a step-by-step sequence with
some space between each of those being completed
to allow us to learn the lessons and be as efficient
as possible.

Q440 Charles Hendry: By step by step, you mean
finish one before you start the next?

Mr Spence: There is a gap between the
commissioning of each. Because they would take five
years for the full construction to complete, it will not
be a five-year gap between the commissioning of
each. We would expect all four reactors to be on
stream before 2025 on our current plans—

Q441 Charles Hendry: Does that apply to the other
companies as well?

Mr Seabourne: Horizon Nuclear Power, which is the
joint venture set up by E.ON and RWE, would
probably have a similar phased approach.

Q442 Colin Challen: When you are building a new
nuclear power station on an existing site, is it
envisaged that that will be of a greater generating
capacity than the existing plant and, if so, by how
much, generally speaking?

Mr Spence: The design that we have selected for our
sites is a 1650 MW design, which is larger than the
capacity of the existing stations and so the four
reactors that we would propose to build replace a
substantial component of the existing capacity from
a larger number of reactors at the moment.

Q443 Colin Challen: If that was replicated across the
industry, on the existing sites you would be
generating, you would assume, more electricity than
they are at the moment?

Mr Spence: It depends and the other consortia have
still to decide which reactors they wish to build. The
other design is a smaller design.

Colin Challen: If that is the case, you would have to
look for new sites in addition to the ones that have
already been listed?

Q444 Sir Robert Smith: You have just answered the
Chair on the market interaction with the planning
process. Given how much we are using market
mechanisms to drive our energy and our low carbon,
surely if a private investor is sitting there with a
planning application before the IPC, it is almost a
demonstration of need, the very fact that they had
decided to put that money at risk?

Mr Wells: Putting the application before the IPC is
not putting any money at risk at all other than the
cost of the application. What the applicant is
looking to do at that time is as much as anything to
develop options which it may or may not choose to
pursue subsequent to the grant of planning
permission.

Paddy Tipping: One of the issues that people talk to
us about is how far the IPC should take carbon
emissions into account?

Q445 Mr Weir: I think Npower has some criticism
of the timeframe in the NPS for looking at the need.
What timeframe do you consider they should be
looking at for new investment? Should they be
looking beyond 2025?

Mr Wells: I think what we said was that we felt that
the NPSs themselves did not go much beyond 2020
or 2025. We feel that maybe that is a short-term view,
given the nature of these investments and the
financial size of these investments and given the
carbon targets going forward. I think we felt that
maybe the NPS should be looking to go beyond
2020/2025 and looking towards 2050 in line with
clim ate change requirements.

Q446 Mr Weir: One of the things that some
witnesses have said to us is that the IPC should look
at the carbon role of the new stations for which they
are giving permission. What is your view on that? Do
you think they should have a role in considering the
carbon emissions?

Mr Wells: No, it has nothing to do with a planning
application going forward. The carbon impact of
that particular application in terms of overall
climate targets is not an issue for the IPC. Clearly to
some extent the carbon impact is something that is
reflected in the environmental statement and the
environmental analysis that support the planning
application but it is not the IPC’s role to monitor
carbon impact and carbon targets. That is the role of
the Government and probably the Climate Change
Committee.

Mr Seabourne: The most effective contribution the
IPC can make to delivering low carbon targets is to
provide an efficient and timely process for
progressing applications for development consent
and maybe Investors will have more confidence in
the process and they will face less risks in bringing
forward projects. Perhaps the other point is that the
IPC obviously needs to have a very clear
understanding of the need for low carbon
investments. I agree with the point about going up to
2050. Perhaps that case would be strengthened if the
Mr Seabourne: intensity of any developments before that? purely at planning matters and not at the carbon Q447 Mr Weir: In your view the IPC should look framework within which the IPC could consider decarbonised by 2030 and reflect that in the national recommendation of the Climate Change Committee Government more formally accepted the including Sizewell. you elaborate on these concerns? carbon capture readiness as set out in the NPS. Can some concerns about the Government’s position on Mr Weir: We did express concern and that is consistent with some of the concern we had expressed previously in response to the consultation responses last autumn. We support CCS’s potential technology. RWE is investing quite a lot of money in demonstration plants to try and prove that CCS can work and indeed we have the largest demonstration plant in the UK at Aberthaw, a 3 MW scheme. That in itself helps to demonstrate why we have concerns about the carbon capture readiness element. That is a 3 MW scheme and it is the largest scheme in the UK at the moment. That helps to show that CCS is a long way from becoming technically viable and commercially viable on anything like the scale on which it is needed. Although we support the concept of carbon capture readiness, we do have a concern that the NPS may need to be strengthened to be consistent with the ongoing light touch to demonstrate a no barriers approach to CCR, which has been the Government’s line so far. I think we just need to ensure that CCR does not effectively constrain development in anticipation of CCS development, which may or may not happen. That is the basis of our concern; it is to ensure that the CCR requirements do not end up effectively anticipating something which may not happen or which will happen in a different form to that which is currently thought. Q448 Mr Weir: Mr Porter, your organisation also said that the Government should attempt to determine the energy mix. What is your assessment of the risk of us getting locked into high carbon infrastructure if the Government does not give the IPC further guidance on the desired energy mix? Mr Porter: It is a fairly low risk provided that the other drivers that surround the industry in the hands of government are used properly to direct the industry in the low carbon direction. Q449 Mr Weir: So you would be fairly confident then that the companies will react to that and only put forward those plans to the IPC, just picking up on what Mr Seabourne was saying? Mr Porter: I do not think we should lose track of the reason why we are going to have a new planning system. If you imagine the number of applications of different types that are going to come forward in the industry in order to keep the lights on and green the generating industry and you put that against the old system that we had, I think hardly anything would happen. I can imagine things such as the nature of the last Sizewell inquiry happening all over again and there would be endless debates about the level of carbon emissions and so on. Paul will correct me if I am wrong but I think that took six years. That would be completely intolerable. We would get into quite a mess energy-wise. Mr Weir: I have one final point. You have raised also some concerns about the Government’s position on carbon capture readiness as set out in the NPS. Can you elaborate on these concerns? Paddy Tipping: I suspend the sitting. The Committee suspended from 9.40 am to 9.42 am Paddy Tipping: For the record, we are hearing objectors from all the sites this afternoon, including Sizewell. Q450 Mr Weir: I was asking about carbon capture readiness. As Npower, you have had some concerns about the Government’s position on CCR in the draft NPS. Would you tell us more about that? Mr Weirs: It is not necessarily as absolute as that but clearly to develop new coal with that potential uncertain CCS uncertain requirement is not something that is going to be necessarily attractive to investors. It is that element of uncertainty which just cannot be made any more certain at the moment simply because the technology is a long way away from being proven on a commercially viable or technically viable scale. Indeed, the NPS itself it reiterates the position of Government report in 2018 and they want CCS requirements kicking in from 2020. We do not know what will be in the CCS report yet; it is a long way away and there is a lot of work to be done to get there. Q451 Mr Weir: How does that sit with what you were saying earlier about how the market will move forward with low carbon generation if the signals are correct? The NPS sets out that any fossil fuel, gas or whatever must demonstrate the technology and that CCS can be fitted to before they can get planning permission, if I have read that correctly. I think there is some concern about gas because there is not enough research into that. It would seem to me that there could not be any new coal or gas unless CSS was demonstrated. Is that correct? Is that your interpretation of it? Mr Wells: It is not necessarily as absolute as that but clearly to develop new coal with that potential uncertain CCS uncertain requirement is not something that is going to be necessarily attractive to investors. It is that element of uncertainty which just cannot be made any more certain at the moment simply because the technology is a long way away from being proven on a commercially viable or technically viable scale. Indeed, the NPS itself it reiterates the position of Government report in 2018 and they want CCS requirements kicking in from 2020. We do not know what will be in the CCS report yet; it is a long way away and there is a lot of work to be done to get there.
Mr Wells: I could not say that in reality but certainly greater confidence is required.

Q453 Sir Robert Smith: How tough is this planning guide? Is it just really meaningful that if you do build a power station, there has to be enough space available for the equipment to go in? Mr Wells: It is a little bit more precise than that. The concern was raised in the sense that we read into the NPSs that maybe that the IPC can move into position where they can put other requirements or constraints on which may or may not be appropriate, but we do not know whether they are appropriate until the technology has been developed.

Mr Seabourne: If I can just add to that, I think in our view the key priority is to demonstrate CCS at scale. We are very pleased that the Government is going to support four demonstration projects between now and 2020 and we are part of the first CCS competition. So the priority is to demonstrate the technology. What is lacking is an investment framework for an investor in a new coal plant, which, in addition to funding the demonstration phase, will provide some sort of assurance that the further CCS retrofit required under government policy will in fact be funded either by the market or by government policy intervention. That is the uncertainty we have at the moment. The CCS levy which is being introduced through the Energy Bill is a very helpful development but we do not think the policy is quite complete yet in terms of incentivising coal and CCS.

Paddy Tipping: Of course we know the nuclear NPS is site-specific. We will discuss that now.

Q454 Dr Whitehead: Particularly E.ON have welcomed the non-spatial nature of non-nuclear NPSs and equally strongly welcomed the spatial nature of the nuclear NPS. Is there any contradiction do you think between those? Mr Seabourne: I think in the case of nuclear there was clearly a need for a national debate on the identification of those sites because clearly nuclear is a controversial issue, as we have seen earlier this morning. In the case of other developments, such as renewables, I think the technologies vary significantly; the means of mitigating them can vary significantly; and so you cannot really have a black and white approach which designates particular parts of the country as suitable and other parts as unsuitable. I think what is important is that the IPC is given guidance on how it should view applications for development in environmentally sensitive areas, or indeed in areas which impact on other issues like radar or military installations and so on, and that they have the right guidance to make a judgment in that particular case. There are quite a lot of statements in the overarching NPS which do give them guidance on how they should view developments, say in sensitive parts of the country.

Q455 Dr Whitehead: Is that the view of everybody this morning?

Mr Spencer: We would certainly agree with Brian. I think the overall approach that has been taken on the policy statements and the non-spatial nature of the majority and then the spatial consideration of nuclear is a practical response to the reality of the differences between the different technologies and in the case of nuclear the fact that there is a relatively small number of sites and that there is a viable process that the Government could go through to examine and to identify the candidate sites in a sensible timescale. To try and do that for the other technologies would risk introducing the delay that would take us in the wrong direction. So it is a sensible and practical set of guidance for the IPC.

Mr Wells: We would endorse everything that has been said. We do strongly support the criteria based approach. There is also the practical element. It is an element of spatial planning and the resource intensity and time involved in undertaking that exercise, both in central and local government, in some fairly complex investigations will only serve to delay the NPSs and have a knock-on effect in terms of bringing new projects forward.

Q456 Dr Whitehead: The implication of course of that position is that any sites in England and Wales would therefore be suitable for any new construction development, subject obviously to the maintenance in the overarching document of sensitive sites. Others have argued that that implication flies in the face of what a number of people reckon is the reality as far as sites are concerned and that you may well impede public involvement to buy in to the process of infrastructure development. Mr Porter: I would like to come back to the question of public involvement before the session finishes, Mr Chairman. I think the companies have things to say about that that you will be very pleased to hear. Coming back to this spatial issue, I can only repeat what I think has been said before that different technologies have different requirements; a thermal power station may require a fuel supply of a particular type and cooling water has to be available; a wind farm does not have the same issues. I do not think we would want to get things too bogged down because, as I think possibly Brian said, we would become engaged in such a depth of work with local authorities that we would never get this off the ground.

Mr Wells: The technical and environmental siting constraints are such that in practice you could not say that any site is potentially suitable. Maybe as developers we should be saying “never say never”. It obviously depends on the technology, but each technology has different requirements and there are some fairly basic requirements for a site to be suitable—grid access, fuel import, transport, cooling water access, et cetera. There are some fairly heavy constraints there which of course obviously suggest that it is not the case that any site would be suitable.

Q457 Dr Whitehead: Could you conceive shall we say of a middle way position as far as the non-nuclear NPSs are concerned? Without actually
specifying sites, it might specify likely areas and likely areas that should not be considered for major infrastructure developments, perhaps for precisely the reasons that Mr Wells has mentioned, that actually everybody knows that there are clearly constraints on certain sites and areas and indeed advantages to other sites and areas?

**Mr Wells:** Again, we do not believe that works either because obviously there are potentially quite large areas which might be suitable for some form of development, depending on the technology and the constraints. I think there is also quite an important issue there which is the potential planning blight against those areas. You could be talking about swathes of the country.

**Mr Spence:** Can I go back to the point David made about local involvement? Before I came today, I took the liberty of asking our team who are developing a project at Hinkley to give me just some examples of the scale of local engagement and local involvement in the new IPC process. That started back at the stage when we were intending to identify the site into the process. At that stage we consulted locally. We ran a series of events. More recently we have just been through our stage one consultation on the new proposals. That has been a nine-week consultation; we have issued 36,000 newsletters to the local residents; we have had nine exhibitions with about 1,100 visitors to those exhibitions; we have held 22 meetings and more than 600 people came to those meetings; we had 400 questionnaires filled in from the attendees at those meetings and had 150 other submissions. Anyone who is saying that this is a process that does not involve local communities being engaged in the project is missing the fact that there is very intensive local engagement alongside the scrutiny of the national policy statements.

**Q458 Paddy Tipping:** Let us talk about scrutiny of the national policy statements because some of the evidence we have received suggests that it is not really engaging the public. In Hartlepool, for example, there was very late notice of the meetings. Do you think that the consultation that itself is taking on the NPS is satisfactory?

**Mr Spence:** It is always easy to criticise the scale of consultation. Certainly at the absolute level we think that DECC has made a lot of effort and has done a lot to engage with the communities that are affected and to engage on the policy statements. They have run a lot of events. They have encouraged a lot of people to go to those events, so again I think we would say they have done the job that is required.

**Paddy Tipping:** Let us turn now to another issue that is quite interesting, which is the relationship between the NPSs and the current planning system. I am not entirely clear about the nature of that relationship.

**Q459 Mr Anderson:** Are you happy that the draft NPSs provide sufficiently clear guidance both to the IPC but also to local planning authorities?

**Mr Wells:** It certainly does provide some guidance but clearly there is potential for inconsistency between the IPC regime and the Town and Country Planning Act regime. That is partly inherent in the nature of the IPC process. It is major infrastructure we are talking about and the Town and Country Planning regime is dealing with smaller developments. The smaller developments equally play a big part cumulatively in helping achieve government targets. We do believe that there should be greater consistency between the NPSs and the TCPA, for example. At the moment, I think I am right in saying that the NPSs may be used by the LPAs as guidance; it is the guidance in the NPSs themselves. The LPAs have a whole raft of guidance that they have to use. They have their own development plans; they have planning policy statements; they have the national policy statements. We need to ensure that national policy statements are given sufficient weight so that there is consistency between the IPC regime and the TCPA regime.

**Q460 Mr Anderson:** If they are given sufficient weight, what would happen if you had a dispute, if the NPS said “we want to go consultation on X” and they said, “yes, we will go for that” but the local authority, which might not be directly in X but in Y that will not be affected except perhaps by connection to the grid and pipe work, and that goes to court? Do you think the NPS should have the power to overrule that?

**Mr Wells:** Being a lawyer, obviously I would say that this is a bit of a grey area! Clearly, our expectation is that the development plans will in time be aligned with the NPSs and the process to enable those to be aligned is under way and will happen as development plans are revised. Clearly there is that opportunity for conflict. At the end of the day, the way a dispute is resolved ultimately is through the law, I suppose, but how it is resolved will depend on the weight given by the local authority to the various plans it has to take into account.

**Q461 Mr Anderson:** Until such time as they come into line, do you think that that fills in an almost automatic risk of delay and challenge and therefore more legal challenge?

**Mr Wells:** There is always the risk of legal challenge. The risk of successful legal challenge is the same; it depends on the weight to be given. It is probably worth bearing in mind that it could be developers who are challenging this; it could be anybody involved in the process who may end up in that sort of challenge.

**Q462 Colin Challen:** Correct me if I am wrong but I think there is something like 3 GW of wind held up in the planning system. That figure might be quite different. Do you know what proportion of those applications for wind that is held up in the planning process would fall below the threshold to be considered by the IPC, do you know? Is it a significant amount?

**Mr Seabourne:** I do not know. We could let you have a note on that. We would have to look at the projects and see what capacity they were.
Q463 Colin Challen: It would be interesting to know. Leading on from that, by the very nature of the new technologies, they start off on a fairly small scale and wind is now well established but looking at other renewable technologies, to go through research, development and deployment, they start at a fairly small scale. Is there a danger that this planning system, by setting a threshold at the level it is, could actually work against new technologies which may get bogged down by the local planning process? Should that be addressed?

Mr Wells: I think that is consistent with the point you have just made on the status of the NPSs and how that is reflected in the TCPA system. Clearly the IPC process has to have a threshold somewhere and whether or not some tunes could be played on the threshold that has been put in place is another debate. By having the NPSs and the importance of emerging technologies identified through the NPSs as something which will contribute to renewables targets, decarbonisation, et cetera, is another reason for integrating NPSs into the TCPA regime. A lot of the smaller scale renewables that you are talking about are offshore. Clearly, it is not just the relationship between the new planning regime and the TCPA; it is also to ensure that the relationship with the new marine management organisation and the marine policy statement and the implications there are fully matched up as well.

Mr Seabourne: I support that.

Q464 Paddy Tipping: Are you confident that the relationship with the Marine Bill and the NMR is clear? They are both new bodies that are going to emerge. Does seem a potential for overlap and possible conflict here.

Mr Wells: Yes. There is also the possibility of a gap as well. There is certainly some possibility for conflict because the marine policy statement is being progressed on the same timescale as the national policy statements. The MMO is looking to be in operation shortly after the IPC is set up, so clearly there is a lot of dialogue and dovetailing to be done. Until all of those bodies are in place and the marine policy statement is further developed, I do not think it is possible at this moment to be confident either way.

Mr Seabourne: It is very important that the marine and coastal access regime does give due weight to the need for energy developments in the marine environment, including smaller scale projects which are not covered by the IPC. The IPC has to take account of the views of the MMO when it considers projects, but when we have a marine policy statement designated by the Secretary of State, that needs to be consistent with the NPSs under the Planning Act.

Mr Porter: Mr Chairman, we can let you have a note in response to Mr Challen’s first question about the number of wind applications that are held up.

Colin Challen: That should be on those that fall below the threshold.

Q465 Paddy Tipping: You are the experts. I think that there are only five applications for on-shore wind farms that are above the threshold.

Mr Wells: That is correct. There have obviously been one or two which have gone under the old Section 36 regime. You are correct that there are very few applications of that size on shore.

Q466 Colin Challen: How many gigawatts or megawatts do those five represent? We may get towards the answer to my question this morning.

Mr Wells: I cannot say. We would have to incorporate that in the note to you.

Q467 Paddy Tipping: Just looking at it a different way, all of the wind farm applications that go in, only 29 per cent were approved by local authorities. Is that right?

Mr Wells: I could not tell you whether that is right or not. It certainly feels as though that might be in the right ball park.

Q468 Paddy Tipping: Again, it would be useful if you could let us have some information around that. Turning from wind power to nuclear, the NPSs are silent about the disposal of radioactive nuclear waste. Is that a sensible approach to take?

Mr Spence: I am not sure it is fair to say that they are silent about the disposal of the waste. I think the first point I would like to make is that the industry here in the UK has had a history of managing its waste safely and effectively for the last 50 years, for the life of the existing stations. What we have in the NPS is the statement that says that essentially we have been through a process to identify what the UK should do with the waste that we create and that has reached the conclusion that deep geological disposal is the right answer for us as a country. That is in line with international standards. There are no apparent technical show-stoppers to achieving that. There is a process set out by the Government’s White Paper as to how we are going to march towards having that in place for this country, and that provides sufficient basis to move ahead for nuclear power. We support that position. We think it is important that we do continue to move forward to address both the legacy waste and to find the solution and the site for that solution for the new waste as well.

Q469 Paddy Tipping: What does that mean in the short to medium term, in terms of on-site storage? It is going to take quite a long time to develop a deep repository.

Mr Spence: It means that for that interim period we as the developer have to make allowance for the interim storage of the waste on site, which is what we do today. For example at our station at Sizewell we have had waste from the years of production already gone through and we are ready to do that for the whole life of the station. We will do that. We will do that safely. That will be part of the application that
we make. It is certainly an area that we have heard that people around the sites are keen to understand and keen to be reassured on that it is safe. We believe we can give them that reassurance; we can give them that for the time that we have to hold the waste locally and then it will move to that national site as and when it is ready. That is where I reach the point that says the sooner the better for that national repository.

Q470 Paddy Tipping: Just supposing, and it is a bit supposition, that the site were to be in West Cumbria, I am right in thinking that the authority that would give planning permission for that would be Cumbria County Council and not the IPC?

Mr Spence: I would have to give you a note on that. Mr Seabourne: This point was raised last week, as I recall. If you look at the Managing Radioactive Waste White Paper, it does say that the Government will intend to ensure that the deep geological repository would come under the new planning regime. They stated that as their intention, although at that time the new regime was not in place. As I understand it, it is the Government’s intention to bring that facility within the remit of the Planning Act and the IPC.

Q471 Paddy Tipping: Perhaps you could just write that down for us, Brian, because there is conflicting advice.

Mr Seabourne: I will.

Q472 Colin Challen: What the Chief Executives of E.ON and EDF told the Trade and Industry Committee in 2006 was that the long-term solution to the disposal of radioactive waste would be a prerequisite for the approval of new nuclear. That is no longer the case, I take it?

Mr Spence: I think we would look to see that we are still making progress at the time we make our application and at the time we make our investment decisions. We still need to see continued progress towards having that final repository available but at the moment we are seeing sufficient progress to give us the confidence to move ahead with our plans.

Q473 Colin Challen: How do you define “sufficient progress” because I have to say that is a very political statement? When politicians say “we are making progress towards our targets” it does not really make any difference to anybody what they are saying; it is just a fudge. You are just repeating a fudge that would have been given to us 30 or 40 years ago.

Mr Spence: I do not think I am repeating a fudge because I think that since 2006 we have seen the publication of the White Paper; we have seen the CoRWM process reach its conclusion about the technical solution. Those are two tangible steps in the right direction. There is a process laid out.

Q474 Colin Challen: “Tangible steps”, with respect and on the ground, not government reports and reports of government committees ad nauseum.

Mr Spence: I think statements of intent are important from government; statements of policy are important.

Paddy Tipping: I think that is a good point on which to finish some lively issues here. We are grateful to you all for your evidence and particularly grateful that it was so concise, succinct and to the point. You have been extremely helpful. You are going to sort out the number and about who is going to give consent to the repository. Thank you all very much indeed.

Witnesses: Mr Sarwjit Sambhi, Director of the Power Business Unit, Centrica, Dr Keith MacLean, Scottish and Southern Energy, Mr Rupert Steele, Director of Regulation, Scottish Power, and Ms Jane Smith, Planning Consultant, UK Business Council for Sustainable Energy, gave evidence.

Q475 Paddy Tipping: Can I welcome our second set of witnesses. I know some of you have been following our proceedings. Welcome to Sarwjit Sambhi from Centrica; Jane Smith, the UK Business Council for Sustainable Energy; Keith MacLean from Scottish and Southern; and Rupert Steele from Scottish Power. You are all very welcome. We will cover some of the same ground as before to check out whether there is consensus within the industry. Let us start with the question I asked at the beginning, which is that we now have these NPSs, which have been widely discussed. Broadly, are they fit for purpose? Are they documents that the Government could and should adopt?

Ms Smith: Yes, I think they should adopt them. We believe that the documents generally do the job that they are designed for, which is to provide a stable policy framework, but also to definitively address all the key questions that come up time and again in inquiry, so that more time can be spent on considering and satisfactorily addressing the local issues. Of course, there are a few areas where you would expect that we would advocate some tweaks, but generally they are in pretty good shape.

Dr MacLean: I think there is general consensus on that, certainly; and I would not have anything to add to what Jane said.

Q476 Paddy Tipping: Are they sufficient for the IPC? This is a new body that is coming along that has been formed; is the guidance appropriate for them? Can they do the job with these NPSs?

Mr Steele: We would be content that the NPSs have the right sort of level of detail. We think that the structure of assessing and debating the kind of national issues at a national level and having a kind of objective process to address the local issues with the specifics of the site in question is a good process that should work well.
Dr MacLean: That is the qualification that these fulfill or help the IPC with part of the role it has to do with providing information about the background policy framework. They do not and cannot provide the detailed information about the environmental impacts or wider impacts in the locality; and that has to be seen as the other part of what they will need in order to do their job.

Q477 Paddy Tipping: The overarching policy, people say to us it is nothing more than a statement of the obvious; it is Government policy writ large. Is that right? Does it add anything new?

Dr MacLean: I think it is writ large in a way that integrates well with the planning framework. I think that was the problem in the past. We have had the policy background and it has always been clear that if anybody wanted to clarify that they could always do that; but it has always been questioned, and it has always been the subject of lengthy debate in the planning process. In the framework of the Planning Act, this is saying, “These are the givens in terms of the policy; these are what the IPC needs to take into account in coming to a decision on that, and we are not going to reopen the debate or we are not expecting the IPC to reopen the debate about any of these policy areas.” It is about providing that integration into the policy arena through the legislation which was not previously there.

Ms Smith: We would agree. In general it provides the IPC with sufficient information. In terms of improving it still further we would also like to see greater emphasis on the Climate Change Act 2050 carbon targets, and in particular recognition that 2020 or 2025 is not the end of the journey. There is also a need to recognise that the transition to a low-carbon economy, which of course we all support, requires a phased transfer from higher carbon energy technologies, and the speed of that transfer will need to take into account affordability but will also depend on security of supply and the speed of deployment of renewables. It has to be a phased and managed transfer.

Paddy Tipping: Let us talk about some of the tweaks that you said needed to be made. Let us talk initially about need.

Q478 Dr Turner: Various witnesses, including yourselves—and Jane in particular—have indicated a preference for clarity in the statements of need within the NPS. Would you expand on that?

Ms Smith: Obviously, clarifying the urgent national need for a range of energy infrastructure is critical, and whilst the NPSs go some way to stressing that we would like to see the need cases strengthened from “significant” need to emphasising the critical importance of delivering investment in each technology. It would be also helpful to provide clarity on the weight that the IPC should give to the respective need cases. Finally, on a specific point, CO2 pipelines are not included in the NPSs, and these of course are vital to carry carbon dioxide from power stations to a secure and safe underground storage location. I think this is probably just a small omission and we would expect that to be picked up.

Q479 Dr Turner: The overarching NPS expresses the need for fresh energy capacity, but it does not in any way specify the mix of generating capacity that is going to be required; it leaves it to the market. Do you think it wise to leave it to the market alone, or do you think there should be some guidance within the NPS as to, if you like, a desirable hierarchy of energy sources?

Dr MacLean: What is outlined is giving an idea of the order of magnitude of the challenge ahead. The conclusion that comes out of that is that we need a lot of everything in order to go ahead, and that as such there is no quota that the IPC needs to fulfill, or that when it gets towards it, it needs to think again about whether it should be consenting that type of project. I do not think, again, that the planning process is the right way for Government to have policy determined on what the mix would be. If the Government wishes to determine the mix, then, as it is doing at the moment through things like the renewables targets, it will intervene to create further clarity about the contribution a particular technology or technology type is going to make. Indeed, it is doing that now with the CCS as well, with the CCS levy in the four projects. I do not think it is the place for the planning system to decide. At the moment I think it is sufficient in quantitative terms, although I do not disagree with Jane that we need to strengthen the position of the needs case, but I do not think it is the place for the IPC to be deciding on how much of any particular type, and therefore guidance to it on that would be inappropriate.

Q480 Dr Turner: You have yourself expressed the need for a step change in the rate of deployment of renewables.

Dr MacLean: Yes.

Q481 Dr Turner: Do you not think that the NPSs could add weight to that, if they give a firm expression of the desirability of renewable developments?

Mr Steele: The problem we are addressing is what symbolic logicians call the law of the excluded middle. The NPS is about what people are permitted to build. That is not quite the same thing as what people want to build or can finance building. I do not think that restricting one technology through the planning system will necessarily get another technology advanced. So restricting the amounts of CCGTs in the NPS would not build any more renewables; it would merely increase the risk of the lights going out. I think our view would be that there is a place for influencing the mix, and that is through Government policy, but it would be dangerous to use the NPS to limit the ability of the electricity industry to meet reasonable demands for power through whatever technology can be built in the time.

Q482 Dr Turner: That was not quite the question I was asking. I was asking whether there is an opportunity with NPSs to give an extra impetus to renewables.
Mr Steele: For wind, onshore wind in particular, there could be some reinforcement beyond what is in the NPS at the moment. In terms of the difficult decisions, onshore wind is still likely to be quite controversial, and I think a stronger statement of need for onshore wind than is in there at the moment could be helpful in reinforcing that message. I agree that it will probably send those positive signals, but it will not then create the distributional impact or give a precise mix, which I think would be wrong.

Mr Sambhi: I have two observations. One is that the overarching statement does directionally give an indication of where the mix needs to be. The second observation is that you cannot look at the NPS in isolation; you have to look at it together with other instruments and things that are happening. In your scenario on renewables, we have the Renewables Obligation, which gives the economic incentive for wind farms to be built; and we have recently had the award around free licences for wind farms. That creates the opportunity and the incentive to build more renewables. The NPS is there to ensure that planning of those pieces of infrastructure is done in the most expedient way, and I think that it does fulfil that.

Q483 Sir Robert Smith: The earlier witnesses this morning commented on this, and I wondered what your comments were, that maybe the NPS does not recognise in stating the need for energy the role of demand management and interruptible supplies.

Mr Steele: Our position on this is that you have to be careful as to the amounts of demand management you can assume. One person’s demand management is another person’s power cuts. There are clearly some things that can be done, but not all loads are as time-insensitive as one might think. The example that I think I have possibly given in this forum before is that you can switch off a fridge for an hour but it would not be a good idea to switch off a fridge for 24 hours. There are many other examples. The amount of demand management you will be able to achieve will depend on the extent to which there are non-intensive, long work that would be needed to be done if you are running a factory and you have to send the workforce home for a day because there is not enough power, that is a very major disruption to your business, and it might not be something that people would want to do very lightly.

Q484 Sir Robert Smith: There is a market, is there not, for people who decide that rather than paying the premium for a permanent supply, they would prefer to take the gamble of paying less?

Mr Steele: There is a market where people have got alternatives or where they believe that their bluff will not be called. How big the market is where there is no alternative remains to be seen.

Q485 Sir Robert Smith: Scottish Power, you referred to the Climate Change Committee's progress report in your evidence, and in there they talk about, “The current combination of markets and market instruments is not best designed to deliver the required long-term decarbonisation.” How do you respond to that?

Mr Steele: I am not sure that was in our evidence, but I will respond to it.

Q486 Sir Robert Smith: I think you maybe referred to the Climate Change Committee, and that is one of their views. I do not think you necessarily endorsed that view.

Mr Steele: There are further things that the Government can do, and should be doing, to drive forward the low-carbon agenda. Clearly, there are issues about visibility, going forward, of the carbon price and matters of that kind, which I think will be on the public agenda in one form or another.

Paddy Tipping: Let us return to a widely discussed area, the spatial/non-spatial mix of the NPSs.

Q487 Dr Whitehead: Jane and Rupert, in your evidence you on the one hand say, “What a good idea is the spatial nature of the NPSs; however what a good idea is the non-spatial nature of the non-nuclear NPSs—and, by the way, would it not be a good idea if the semi-spatial nature of offshore and the Crown Estate’s licensing arrangements should all be included as at least a statement in the overarching NPSs?” How do you reconcile those positions?

Ms Smith: You are quite right that we support the spatial approach for nuclear. Nuclear is quite unique in terms of energy technologies. We suggest that the spatial nature of the Crown Estates leasing process could also helpfully be included in the renewables NPS and referenced in the overarching NPS. Quite clearly, the award of licences has been based on a geographical area, so therefore it would seem sensible to represent that and recognise that in the NPSs. However, we believe the non-spatial approach for the remaining NPSs is probably the most sensible solution for a number of reasons: obviously, the importance of the market in determining where and when to develop energy projects, but in consultation—quite correctly—with statutory consultees, local planning authorities and the communities. As Simon Wells mentioned in your earlier session, the resource-intensive and time-consuming nature of undertaking detailed spatial planning could potentially delay the NPSs themselves but even more importantly delay developers bringing forward projects which are urgently needed, given that we have significant 2020 targets and we are ten years away. Our experience is that a criteria-based approach is to deliver all those benefits of guiding developers towards what is most appropriate in terms of areas, without the labour-intensive, long work that would be needed to be done if we were going to do it properly. Lastly, probably any national spatial mapping approach cuts across the plan-led system that is enshrined in the local democracy issue that was mentioned earlier. Therefore, we believe that a criteria-based approach would give you all those benefits without the disbenefits.
I think if you look at the Marine and Ms Smith: infrastructure is concerned? principle not be applied as far as land-based universally as very helpful. Why could such a and the exclusion of certain areas and inclusion of areas of the seabed and not other areas of the seabed; idea to concentrate on market research on some Act identifies areas in which it would be a good idea different legislation, the reference of instance by di V.

of the Crown Estate’s licensing process in NPSs. concerning the need to incorporate mention at least by the Act seems to be regarded universally as very helpful. Why could such a principle not be applied as far as land-based infrastructure is concerned? Ms Smith: I think if you look at the Marine and Coastal Act it includes two areas really. You have marine plans, which will look holistically at a geographic area, not just look at whether it is suitable for energy technologies, but all the relevant economic, social, and environmental considerations. You also have marine conservation zones, which will go through a specific process that will look at protecting environmental considerations within the marine environment. So there are two different processes there, and the marine planning one looks holistically at all the issues within a geographic area. If you look onshore, you have a similar process with the local development frameworks, the regional spatial strategies and the local development plans; so they do not undermine one another. The processes are already there and mirror one another largely onshore and offshore. They are not looking specifically at energy planning when they are doing the marine planning or the marine conservation zones, they are looking more holistically.

Dr MacLean: I would just add one point with regard to networks and the necessary transmission infrastructure that would be needed to support many of the other developments. It is very helpful that there are references in the NPSs to the work of the Energy Network Strategy Group, the ENSG work. I think that could be made more explicit. If you look at the example of the Scottish National Planning Framework, they have adopted within that graphically a representation of the areas where the lines may need to be developed. It is consistent with the nuclear, the offshore wind and the networks. There are only limited spatial areas where those can and will be sensibly developed, and that is sensible then to specify in the NPSs. But if you look at the other extreme, as Rupert said, a lot of work has to be done through environmental impact assessment and so on, in order to determine whether a site is indeed suitable. It would seem crazy to give local authorities or other public bodies the need to spend all of that money to then try and pre-empt decisions that business will make and will weigh up before they spend that money. It is a question of scale, and there is a sensible separation between the three examples of nuclear, offshore wind and networks, where you can specify degree, and the others where you do not. Backing up the spatial requirements and where you should and should not develop are the references already to things like SSSIs, SACs, SPAs, and giving clarity that those must be taken sensibly into account in coming to any decision. That is only a few of the examples that are already given in the document of guidance, not only to the IPC but, ultimately, to developers as to where they should or should not develop.

Ms Smith: Of course, under the new planning regime the local planning authority has a key role in terms of feeding in their views. They are a statutory consultee under the new regime, and of course we rely very heavily on statutory consultees themselves, particularly in regard to the environment and Natural England and so on and so forth. They are absolutely invaluable to the process in terms of individual applications, and we rely very heavily on their advice.

Mr Steele: I would certainly agree and say that in the case of nuclear the list of sites that people think would be suitable is a fairly short list, and it is fairly well known. We would like to see Dungeness added back to that list, but it is essentially a fairly finite and well-understood universe that you can discuss and get your mind around. In the context of other types of plant, a lot of the effort in development is about finding suitable sites. There is a kind of cart-and-horse problem in trying to define that in advance in the planning system.

Q488 Dr Whitehead: As far as the Crown Estate is concerned, perhaps we can explore briefly the reference that has been put forward in evidence concerning the need to incorporate mention at least of the Crown Estate’s licensing process in NPSs. Although this is obviously governed in the first instance by different legislation, the reference of large-scale offshore wind to IPC is clear. The Marine Act identifies areas in which it would be a good idea to put offshore wind; the background of that precisely relates to the idea that it is rather a better idea to concentrate on market research on some areas of the seabed and not other areas of the seabed; and the exclusion of certain areas and inclusion of other areas by the Act seems to be regarded universally as very helpful. Why could such a principle not be applied as far as land-based infrastructure is concerned? Ms Smith: I think if you look at the Marine and Coastal Act it includes two areas really. You have marine plans, which will look holistically at a geographic area, not just look at whether it is suitable for energy technologies, but all the relevant economic, social, and environmental considerations. You also have marine conservation zones, which will go through a specific process that will look at protecting environmental considerations within the marine environment. So there are two different processes there, and the marine planning one looks holistically at all the issues within a geographic area. If you look onshore, you have a similar process with the local development frameworks, the regional spatial strategies and the local development plans; so they do not undermine one another. The processes are already there and mirror one another largely onshore and offshore. They are not looking specifically at energy planning when they are doing the marine planning or the marine conservation zones, they are looking more holistically.

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Ms Smith: Of course, under the new planning regime the local planning authority has a key role in terms of feeding in their views. They are a statutory consultee under the new regime, and of course we rely very heavily on statutory consultees themselves, particularly in regard to the environment and Natural England and so on and so forth. They are absolutely invaluable to the process in terms of individual applications, and we rely very heavily on their advice.

Q489 Dr Whitehead: Rupert, in your evidence you have indicated that you consider that the need for gas infrastructure is likely to be somewhat greater than the NPSs suggest in terms of the distinctly possible levels of gas importation that may be required. That does imply, does it not, that some pretty site-specific directions might need to be given, particularly in areas that might be identified as additional places for that sort of gas infrastructure that you envisage may be necessary?

Mr Steele: Yes. The amount of gas imports is like the difference of two large numbers. It is quite difficult to predict the number because it depends on the demand for gas, the success or otherwise of coal and coal with CCS and nuclear development by 2020, the precise delivery on renewables. It is quite an uncertain number as to how much gas we will need to fill the gap. I guess we are a bit concerned that the NPS assumes a hundred per cent success in all the other areas, which is a great aspiration but I do not think it would necessarily be sensible to size your gas import infrastructure on that assumption because if it did not come to pass we would have a problem. In terms of where gas import infrastructure is built, clearly you can import gas either by pipeline or by ship. By ship you are going to be directed to harbours; by pipeline you are going to be directed to pipeline landing points. In principle you could be more spatial about this perhaps, but until people have a bit more idea of the kinds of projects that they are thinking about, it may be as well to leave this one
open. You are not going to be able to bring LNG tankers into somewhere that does not have a deep-water port that can take them.

Mr Sambhi: In our statement we said there is a need for gas storage, and perhaps this could be further emphasised in the NPS. However, we are not advocating a spatial approach, and the reason for that, like all other land-based infrastructure apart from nuclear, is that looking at gas storage as a case example I would not know which projects to put in because we do not yet know which types of gas storage facility we need. Is it summer gas storage facilities where we are pumping gas in in summer and taking it out in the winter; is it a facility where we are pumping it in one day and taking it out the next; and in terms of the relative cost is that facility cheaper than the other one? So there are many more options both in terms of location and in terms of the type of facility, and that is why at this stage a non-spatial approach is more appropriate.

Q490 Charles Hendry: Rupert Steele made a distinction earlier and said that the NPSs are a statement of what is possible or permissible to be built, and not necessarily what will be built. Where it is non-spatial there is clearly great flexibility, and if a gas storage facility is not built in one part of the country it can be built in another part and the national need can be met. Where it is spatial, as in nuclear, we do not have that flexibility. Your companies and those we saw earlier and a few others own the sites that have been identified: if you decide not to deliver on those sites, not to invest in those, then there is no recourse, no other way of meeting the national need because of the spatial nature of the policies. Should there be some requirement or should there be some financial penalty, or should the sites be reallocated in the event that companies decide not to build where they have been permitted?

Mr Steele: That is an important question because it is important that progress can be made on the nuclear side. In some cases the Government has incorporated provisions relating to this very point in the sale of land from the NDA. That was perfectly sensible where they felt that that was appropriate. Clearly, there are still some sites likely to be changing hands over the next few years. EDF Energy has to sell an option between Heysham and Dungeness some time this year under the EU competition requirements. If they successfully develop Sizewell and Hinkley, they will be required to sell the Bradwell site. There will continue to be opportunities to match the nuclear sites to developers. It is important, given the possibility that some sites will not be developed for one reason or another, to have an adequate supply of sites. Dungeness has a good opportunity for grid connection and for cooling water. We think that the issues around the sites of special interest can be adequately addressed, and may in any event be a matter of overriding public interest. We think it would be very important for the Government to seriously consider putting that site back into the NPS.

Mr Sambhi: There are a couple of things in terms of that question. The first is that if we look at why a consent has been given to a particular site, let us say a gas-fired power station, and then the developer decides not to build, one has to assume that the reason they are not building is either it is uneconomic to build or that that developer is capital-constrained. In the second case the developer is likely to sell the asset to another developer. My view is that we have to some extent trust the market in terms of building plant when needed if the economic signal is there. The other point is that in the case of new nuclear, before consent is given there is a lot of money that the developer has to put in to get to the point of making a final investment decision, and that is the nature of new nuclear in terms of the investment on the design work prior to final investment, the preliminary site works. It is a significant sum. So the developer already has skin in the game at the point that they are awarded consent. The third observation is in the case of wind. To take the recent award of round three as an example, if consent is awarded and the project is not built, at some point the lease expires. There are incentives in various mechanisms and agreements that guard against the outcomes that you are describing.

Q491 Charles Hendry: In round three as well there are financial penalties if they do not develop, so the principle has already been established in other aspects of energy policy. It would be possible for people not to build because they want to drive up the price of electricity, and by restricting supply that could be a reason for not developing particular facilities, but that has a knock-on effect on the Government’s ability to meet the carbon reduction requirements, so it seems to me that the cards are all in the hands of the developers and they are the ones who can make the decision whether we have that low-carbon economy or not.

Mr Steele: I think you would only be able to drive up the price of electricity by declining to invest if you had sufficient market power to do so. I think that there is no reason to believe, given the structure of the electricity market at the moment that any single company could do that, or indeed the consortia of nuclear operators. We did think it was very important that there should be three strong consortia in the nuclear business and not just two. That was one of the reasons why we made representations to the European Commission to ensure that there was an adequate supply of sites for a third consortium to be formed for precisely this kind of reason.

Q492 Paddy Tipping: Can I pick up an earlier discussion, which was about network corridors? Would it be possible to define network corridors in England?

Dr MacLean: I believe they already have been done, if you are referring to the transmission network. In that report that I referenced earlier, the ENSG report, there is a very clear outline there of the network developments that will be required. The question is not really which ones are required; it is
when each one of them is triggered by the development of offshore wind, of nuclear, of other technologies going through. There are some where it is already clear that the investment needs to go ahead, and there are others that are subject to a number of things happening. So that is already there and could be utilised. It is already referenced, but we would like to see something more specific.

Paddy Tipping: Let us turn to the NPSs and the relationship with the present planning system that is still going to continue into the future.

Q493 Colin Challen: Reflecting back on the statement from Jane that some parts of the infrastructure that are essential to applications that would fall under the IPC, like the gas pipelines, outwith the defined application, could that lead to a conflict between local planning authorities and a major application that is not being considered by them?

Ms Smith: Currently the NPSs, as I mentioned earlier, only state that they may be used by local planning authorities. As you heard in the earlier session, we believe that at the very least they should be strengthened to “will be a material consideration”. The reason you need consistency both in terms of the process and the efficiency of the two regimes is that you do not skew the market so that developers bring forward very many more large projects and no smaller scale projects. The Government’s policy and indeed the industry’s view is that you need lots of everything, big and small, onshore and offshore, gas and electricity, so therefore you need regimes that complement one another but that are both efficient and consistent in approach. That is why the NPSs should be a material consideration, at the very least, within the local planning authorities and the Marine Management Organisation which has been mentioned previously.

Q494 Colin Challen: The IPC could approve an application and it may well be that the NPS would be a material consideration for the local authority; but it could still refuse permission for related infrastructure.

Ms Smith: Okay.

Mr Steele: There is a process, as I understand it in England at least, which relates to associated development where in effect the developer can bundle up the bits and pieces with the principal thing, and the IPC can then consent the whole lot in one go, which should be more efficient. I understand that those provisions do not apply in Wales, which is a little bit of an issue for us because we have a network in Wales and so therefore we have to deal with the interaction between the IPC and local planning in the way you describe. Obviously, in Scotland the Planning Act does not apply so the NPS is no more than a material consideration.

Ms Smith: One of the key benefits of the new regime is the opportunity for developers to bundle up all the different associated developments in an application, if they choose to do so. There are obviously benefits for the communities and the local planning authorities in understanding the holistic impact of a development. One thing we would welcome to improve the NPSs still further is some sort of definition of what “associated development” is. That could be improved potentially by an indicative list, not an exhaustive list, which gives people an idea of the types of things that could be bundled up, and those, quite clearly, that would not be.

Q495 Colin Challen: There is a danger that too many things might be bundled up, is there not?

Ms Smith: No, because the definition of “associated development” within the Act talks about it having to be specific to the development for it to be able to operate. You could not have something that was very peripheral and it would not matter whether it was needed or not. I think the Government has put sufficient safeguards in there to ensure that it is necessary and required by the main development; but it would be useful to have an idea of what those were so that everybody—stakeholders, statutory consultees, planning authorities and developers—understood that.

Q496 Colin Challen: Fairly common practice in local planning is the concept of “development ransoms” where people can own a small strip of land and hold a major development back because they have the rights over that. Will that change with this regime, or does it need to change? People can extract large amounts of money from holding a major development up, so does this regime change that at all?

Ms Smith: I think that by having pre-application consultation being made statutory it gets any issues that are likely to arise, such as the one you have identified, out in the open much earlier. Of course, developers always look to reach agreement with landowners or grantors because that is by far the best way of building a project. The other thing is that by bringing the options out in the open much earlier in the process, which again is another requirement, and involving the local planning authority and statutory consultees, then hopefully there is much more scope in the flexibility of the design of the project and in terms of reaching resolution earlier.

Mr Steele: Obviously, ransom strips have a role to play in the property market because if you sell the land for one purpose at one price but it would have a different price if it was developable for another reason, it may be that the only way the transaction can proceed absent the decision to go for the development is if the vendor holds back some means to extract further value if the use of the land changes. That is why sometimes these things—

Q497 Colin Challen: Should the guidelines be strengthened to the extent that it would make it far easier to obtain compulsory purchase orders? If there is a determination by a local person—I am not thinking of energy here; I am thinking of Donald Trump in Aberdeenshire—if there is one local person who wants to hold it up, should they be just swept out of the way, and given a bit of compensation? We
are talking about national infrastructure, not some local peasant who wants to object—in the case of Donald Trump!

**Dr MacLean:** Even with the existing consenting regime, section 36 or section 37, if it goes to an inquiry there is generally a conjoining of the inquiry to look at all of the issues and for the planning permission, compulsory purchase orders and so on, all to be seen in one place. In terms of process, what we are hoping for with the IPC is that that will all happen in a more transparent and time-bounded manner than it has been until now. Overall, you raise an important point. We are all talking here on the assumption that the local authorities will be trying to block something which we think at the national level needs to go ahead. There is a real challenge overall to get local authorities to understand the need for this to happen. The Climate Change Act already places a requirement on them to put forward how they are going to contribute towards this; and we feel that the more the National Policy Statements can be reflected in the local plan, so that it then has a higher position in the hierarchy, the better. Ultimately it will be through the decision-making process that it is made clear that these things must go ahead. If there is prevarication and doubt, which there is at the moment, then people will continue to use whatever blocking tactics they can. We need to start showing that these things are important; we need to push them through, and more quickly than the normal process is capable of doing. Taking a long time to say “no” is no better than taking a short time to say “no”, and the same goes whether it is a “yes”. We want to have the debate, but it needs to be over a reasonable period of time.

**Ms Smith:** The other really important thing is that industry is not about railroading these developments through at any cost because once they are built we still have to work and live in those communities; so this is about taking the community with us, looking at what they are suggesting, and using those suggestions to revise and refine developments. Obviously the IPC’s role, as an independent IPC, is to bring some objectivity to that and to weigh up the national need and the local impacts. If those local impacts outweigh the national need, then that project would not be consented, and that is quite right. It is a balance.

Q498 Mr Weir: It is interesting what Jane was saying about related infrastructure and power lines and CCS pipes and whatever. It seems to me it takes us back to the argument about the spatial nature of these, because the argument put forward to us is that without the spatial nature of the non-nuclear ones, it is very difficult for local people to know how they are going to be impacted in any development. In the case of a power line and a CCS pipe, people from a considerable distance from the development will be affected by it or potentially could be affected by it. Is that not an argument for having some spatial element in these plans?

**Ms Smith:** Again, in the new regime if you are building a generating station or an LNG gas terminal, it may well be that the associated overhead line or associated gas pipeline is not appropriate for any number of reasons, to put that in the application. However, the generator or the LNG terminal developer will have to make reference and demonstrate that there are viable corridors for that to take place. Therefore, you are getting a much earlier view of the holistic impact of the development. You mentioned gas earlier: there are some indications of where gas is likely to come onshore, but equally, with the changing market—and the gas market changes very dynamically depending on political and economic circumstances—we need to have that flexibility to look at where appropriately developers think is the best place to build this infrastructure.

Q499 Mr Weir: If I understand you correctly, you are saying if a new line is required it may not necessarily be dealt with at the same time as the generating station. Given the experience of putting up new line—and Beauly to Denny in Scotland is a classic example—is this not a recipe for disaster later on down the line if it is not all dealt with at the same time?

**Dr MacLean:** That goes back to the point I was making earlier on about the ENSG work. In terms of the transmission network, the motorway system we need, of which Beauly to Denny forms a part, the impact of all of these projects are already fairly clear on what is going to be required. Anyone can look at that ENSG report and see the corridors or the existing lines that need to be redeveloped in order to provide that capacity, and here are one or two new areas where lines will have to be developed in order to harvest the offshore wind or nuclear plants that are going to be built. That is already there. That is something that, for England and Wales, National Grid will do; for Scotland it is ourselves and Scottish Power. That is slightly different from the individual connections you might have to an individual power station, which might not form part of that and will only become clear when you have got the exact siting. They can be developed by the generator rather than requiring the transmission owners to build the motorway; so the A roads, or up to people’s drives, may still be done as part of that project, and are most likely to be conjoined as an associated development in the application.

**Ms Smith:** What is important is the flexibility.

**Paddy Tipping:** I do not want to stop you, but I am going to! We have got about ten minutes left and I want to talk about carbon capture and storage, which we have had some very useful information on.

Q500 Mr Anderson: Dr MacLean, in your evidence you suggested that the NPSs should not contain proposals for CCS readiness. Why do you say that?

**Dr MacLean:** We believe that the advice that is given in the NPS at the moment to the IPC sets a hurdle which it is just not possible to get over at the moment. That particular point is the reference to the need for the developer to show the commercial viability of the retrofitting of CCS to any combustion plant. We all know at the moment that we are struggling to get four demonstration plants put forward in order to
demonstrate the technical and commercial viability of the technology. Therefore, if you have a requirement to have shown that as part of the advice to the IPC, at the moment that is not something that anybody can demonstrate. The logic for us of having that in there is that at the moment it will not be possible to gain consent for any combustion plant project other than the four demonstration plants where the Government has said it will provide the commercial viability through the CCS levy. For all others, whether it is biomass or gas, that hurdle cannot be met, and technically saying to the IPC, as it does, “Without the developer having proven that to you, you must turn down the application”, means that there is effectively a moratorium on the development of gas or other combustion plant projects at the moment, which I am sure is not the intention but is the logical conclusion that we have come to in reading the NPS as it is currently drafted.

Dr MacLean: Absolutely.

Q504 Paddy Tipping: Because we have not got a clue, to put it bluntly in my terms, whether things are going to be commercially viable in the future.

Dr MacLean: Absolutely. To clarify, we are not opposed to the carbon capture readiness clause or a requirement in terms of having the physical space and those aspects; but it is particularly, as Mr Tipping is saying, setting that hurdle of being able to demonstrate commercial viability. We just cannot do it.

Ms Smith: What we are saying is that it needs a phased approach. Until you can prove that it can work at a commercial scale, then the industry is just not in a position to comply. We support it; we want it to work, and we are going to be actively involved in making it work, but let us have a commitment in the NPS that says that, and as soon as it is commercially viable, then it comes in.

Q505 Mr Anderson: The question is about getting the words right rather than the intent.

Ms Smith: Yes.

Q506 Mr Anderson: Clearly, you are very much aware that some of the opposition, to do with anything on coal or gas, the real intention is to build some power stations and then say, “Oh, because we are desperate for supply we will let them go unabated.” We are clearly not going down that line by suggesting taking this out.

Dr MacLean: Absolutely not.

Mr Sambhi: It is in the overarching statement at 4.71, the last bullet point, where we are saying the criteria is that it has to be economically feasible. It is either elimination of that or significant re-wording that is required.

Q507 Mr Anderson: Can I ask you about the specific other issue, which is not in here, and that is about guidance on the transmission and storage for gas in particular. Do you think that should be in?

Ms Smith: Yes, absolutely. CO₂ pipelines and storage are absolutely essential, as I mentioned earlier. As far as we understand, we believe it is just a simple omission, and that DECC will certainly look to include them, because obviously we need to take the carbon dioxide away and store it in a secure underground storage space.

J08 Sir Robert Smith: What needs to be done and how long do you think it is before we will be able to say that there is commercially viable carbon capture, because without that coming across the horizon then we are going to be locking ourselves into a high carbon generating system.

Dr MacLean: If you look back at the records of the Energy Bill Committee discussion we had on this one, none of us were drawn on a date on that because it is not clear yet.

Mr Steele: We have a proposal around Longannet power station, which will have a demonstration up and running by 2014, and that will give people a great deal of information about the costs and
performance of CCS if it goes ahead. We think that is the fastest and surest way of getting the information. Whether ultimately we will need to fit a lot of CCS on gas, I think is a moot point. It depends how intensively the plants are used. If you envisage a world where you have got a lot of nuclear and a lot of renewables and gas is filling in the gaps, then your overall CO₂ across your electricity portfolio could be quite low, even if the gas was not abated, and the cost per tonne of CO₂ of abating a gas-fired power station that is only used 25 per cent of the time might be truly scary. I think that is a debate that we will need to have as we evolve our knowledge of what is happening in the future.

Q509 Mr Weir: When this issue was debated in the Energy Bill Committee the Government’s response to gas was that research had been done elsewhere rather than in the UK and gave Norway as an example of that. Are you following research on gas abatement from other areas as something that may be necessary to secure, or is it the case that you would only put in CCS in your stations if there was a subsidy for it?

Dr MacLean: As a general principle we are obviously following international developments. I do not have anything specific on that but we would want to look at that. Centrica and ourselves had quite advanced plans for some initial demonstration work on gas, and we want to see that progressing. If it is not possible under the CCS levy in the UK, then we will have no alternative but to look at international developments.

Mr Sambhi: From our perspective, we exited our clean coal project, and whilst we are still looking at the long-term feasibility of it our view is that we have to see the demonstration plants work before we have a clear view of whether we would re-enter.

Q510 Paddy Tipping: I just want Jane to coordinate things and drop me a note after the meeting about when these NPSs should be reviewed. What would be the trigger point for the review? Secondly, how far can the Secretary of State come in and change the NPS by directive? It is an area we have not had a chance to cover today. Jane, would you talk to your colleagues about that? If you need more information, Rob will supply you with the questions but not the answers!

Ms Smith: I think, Mr Tipping, we can provide you with some helpful answers.

Paddy Tipping: I am grateful to you all for coming. It has been quite an interesting discussion, particularly around CCS, where clearly we have got a lot more work to be done. Thank you all very much indeed.
Wednesday 27 January 2010 (afternoon)

Members present:
Mr David Anderson
Colin Challen
Charles Hendry
Miss Julie Kirkbride
Judy Mallaber
Sir Robert Smith
Mr Mike Weir
Dr Alan Whitehead

In the absence of the Chairman, Dr Alan Whitehead was called to the Chair

Witnesses: Dr Carl Clowes, Pobl Atal Wylfa B, and Mr Jim Duffy, Stop Hinkley, gave evidence.

Q511 Dr Whitehead: Good afternoon, welcome to our evidence session this afternoon on the national policy statements, their content and effect. We are this afternoon particularly concerning ourselves with the national policy statement on nuclear power for the future and we are charged as a select committee with looking at the fitness for purpose of those national policy statements, whether they need revision, whether they cover the points they are required to cover and whether indeed the applications that come up in front of the Infrastructure Planning Commission arising from those national policy statements will therefore be properly informed and properly serviced in terms of the work that that Commission will do. I appreciate that that sounds as though it narrows the particular scope of our discussions here this afternoon but I trust we will have time this afternoon for all the relevant points to be made by our witnesses and from the questions. What I would like to do this afternoon—and I understand all our witnesses this afternoon are in the room with us now—is we have a schedule of witnesses from a number of different parts of the country, campaigns and organisations concerning particular local nuclear power plants and local developments of nuclear power plants. I would ask each witness to avail themselves of up to ten minutes to make a statement to this Committee; obviously you do not have to take ten minutes if you do not wish to. We are very grateful for the written evidence that all our witnesses this afternoon have provided this Committee with and you may wish, therefore, to rely to some extent on that written material and add to it rather than taking an entire ten minutes, but you are welcome to take up to that period of time, after which each group of witnesses will be questioned briefly by our panel here this afternoon. We will then proceed to the next group. Could I first welcome Dr Clowes and Mr Duffy; Dr Clowes from People Against Wylfa B and Mr Jim Duffy from Stop Hinkley. Dr Clowes, would you start our proceedings?

Dr Clowes: Thank you Chairman. Thank you for the opportunity in the first instance to present this afternoon. As you rightly say I am from PAWB, which is a useful acronym, it works in both languages, Pobl Atal Wylfa B, People Against Wylfa B. It had been my intention, I had indeed asked, that I give representations this afternoon in my mother tongue, in Welsh; that was an opportunity that was not afforded to me so I will continue in English if I may. The response from PAWB is in two parts; firstly more general arguments against nuclear new build but, secondly, arguments against the location proposed. It is fair to say everybody is beginning to appreciate by now that the waste from the high burn up fuel proposed in the new reactors will be far hotter than previous waste, and high burn up fuel will use more enriched uranium and leave it in the reactor for longer. As a result it will be twice as hot and twice as radioactive as the legacy fuel. At the moment we have a process for dealing with that but no solution. It will be twice as radioactive and will take twice as long to cool down, not surprisingly. Then it will be stored on site for up to 160 years, and of course this is of great concern. There are real uncertainties about disposal, the nature of that final product and indeed the economics of who will deal with it in the long term future. I do not think that has been addressed adequately. Despite this the IPC will have no remit to consider the question of waste and this absurd statement—everybody is focusing on it—in the NPS, that the Government is satisfied that “effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider the question.” That I find quite remarkable as we are as a society are being urged to reduce waste and recycle and yet here we see one of the most toxic waste products being stored in a multiplicity of sites for an indeterminate period. This proliferation of sites also of course proliferates the number of opportunities for an attack or terrorist response. It was on the basis of these concerns in relation to waste that Wales’ Minister for the Environment, with responsibility for all waste management in Wales it would seem, except this particular kind of waste, called for an inquiry, under the terms of the 2005 concordat. This concordat was signed by all the waste that will be produced from new nuclear power stations. As a result the IPC will need not consider the question.” That I find quite remarkable as we are as a society are being urged to reduce waste and recycle and yet here we see one of the most toxic waste products being stored in a multiplicity of sites for an indeterminate period. This proliferation of sites also of course proliferates the number of opportunities for an attack or terrorist response. It was on the basis of these concerns in relation to waste that Wales’ Minister for the Environment, with responsibility for all waste management in Wales it would seem, except this particular kind of waste, called for an inquiry, under the terms of the 2005 concordat. This concordat was signed by all the home countries; Wales was deemed a justifying authority under that concordat and the minister, as I say, called for an inquiry in that regard. Unfortunately, that has been rejected by Minister Lord Hunt, a decision that seems contrary to the democratic process. Correspondence from the Welsh Assembly Government to PAWB, to our organisation, makes it quite clear that Wales has no need for new nuclear build in its energy future. In their words “Wales’ electricity consumption is around 24 terawatt hours per year currently. With sufficient innovation and investment [these are all key words] the right government framework [again,
and public support Wales could produce over 33 terawatt hours per year [in other word, nine terawatt hours in excess of consumption] from renewable sources with about half from marine, a third from wind and the balance from sustainable biomass.” This is the Welsh Assembly Government’s considered view. I must also say in relation to new nuclear build that it is proving a huge distraction from alternative sources of energy which are sustainable, I must say also in our part of the world that the county of Ynys Môn, Anglesey which has the lowest GVA in the United Kingdom—it is also proving a major distraction for any sustainable socio-economic development strategy because it is paralysing any meaningful discussion. In terms of concerns in relation to the local siting, the siting at Wylfa, one of the main concerns that does not appear to have been addressed adequately is that relating to the fact that one minute flying time from Wylfa is RAF Valley where pilots from around the world are trained. There have been several instances, sadly, in the last six months where we have seen individuals in positions of authority throughout the world, from France to Afghanistan to the US, turning on their colleagues with disastrous consequences. In a similar vein, the near miss of two RAF Hawk jets from Valley recently is salutary; just 15 metres from one another when they had to take emergency measures to avoid a collision. I do not think there is anybody here willing to taking a bet that there will be no untoward incident involving the Valley site for the proposed Wylfa B location within the 160-year timeframe. Prevention is better than cure it seems to me, we must consider that as a possibility at the very least. Seismic faults, there are words that were said in public. This is a major international practice that had to be addressed, in her words, “in remote areas”. Perhaps this was an admission, if one was required, that safety is not all that it is proclaimed. The environment around Wylfa is of huge importance. An appraisal of sustainability identified the potential for adverse effects on sites and species considered to be of European importance. There are many designated sites: Cemlyn Bay Special Area of Conservation (SAC) and then there are three SPAs all within the immediate vicinity. In addition there are nationally designated sites of ecological importance: three SSSIs within five kilometres of the proposed site and Tre’r Gof, actually a site within the curtailage of the proposed development, so habitat in the words of the appraisal study that could “clearly suffer effects associated with the development”. It is not acceptable for the government to say that despite the inability to rule out adverse effects there is an imperative reason of overriding public interest. I see very little purpose in designating an area of huge significance environmentally if it can be overridden in such a cavalier manner. Tourism is the single most significant economic activity on the island today. Almost the whole coastline of Anglesey is a designated Area of Outstanding Natural Beauty and 17 miles of Heritage Coast lie adjacent to the existing station and a 200 kilometres coastal path has recently been developed around the island. In the opinion of PAWB there would be a significant blight on tourism if major new nuclear build took place on this site which, incidentally, is four times the size of the existing acreage of Wylfa A. Seismic faults, again, are something that seems to have evaded those who are responsible for the consultation document. Wylfa lies in close proximity to several major geological faults: the central Anglesey shear zone, the Berw shear zone, the Llyn Trawfyll fault zone. In addition it lies adjacent to the Menai and Dinorwic faults and it was here in 1984 that the UK’s largest land-based earthquake occurred since instrumental measurements began. Measuring 5.4 on the Richter scale its effects were widely felt as far afield as Dublin, Liverpool and across all of

1 Note from the witness: “The Office for Nuclear Development”

27 January 2010 Dr Carl Clowes and Mr Jim Duffy
Gwynedd and Anglesey. There was damage at the Wylfa site and we are currently awaiting further information under a freedom of information request in that regard. In spite of this—and this is concerning of course—no seismological or geological survey has been done in relation to Wylfa to date. In concluding, perhaps allow me to refer again to the whole question of new nuclear build. The petrochemical industry it may have been but the Buncefield incident should be a reminder to us all that Murphy’s Law applies. In the words of that inquiry “mechanical and human error was to blame”. If something can go wrong it will, somewhere at some point. Wylfa was closed in the 1990s for two years following a breach in safety regulations and fined £500,000 including costs by the Nuclear Installations Inspectorate. 350 farms in Gwynedd remain subject to orders on movement of sheep following Chernobyl 24 years ago; still a living memory for those involved. The increased incidence of childhood cancers of course are seen in the KiKK study of 16 stations in Germany and a metaanalysis of childhood cancers of course are seen in the KiKK study. First of all the all of the DECC exhibition was announced at very short notice. We had ten days from the first email that I got to the event occurring, at a remote location by the side of the M5 motorway, near the Bridgwater exit. Nobody that I knew actually knew of the location and I have had connections with the area for 25 years yet I did not know it. The exhibition was staged in the middle of lots of other meetings. In the past three months there probably have been something like 60 meetings that members of the public could go along to which included quite a lot of EDF consultation meetings, parish and town council meetings as well as district council meetings and also, if you were really keen, you could go along to the pylons meetings as well, all related to the infrastructure around this new project. On top of that there have been campaign meetings, not only our campaign but other groups that have set up in the area who are opposed to the project, even if they are not opposed to nuclear power, a group in Cannington in particular has raised an 800-strong petition saying that they do not want their village to be traumatised by the local infrastructure. The event was poorly advertised and when people got there, there was no sign by the side of the road. What I am building up a picture of here is that DECC really did not seem to want to engage the local people, and it seemed to be an accident if you happened to run across this event rather than something that DECC really sincerely wanted to involve people in. It was poorly attended. A colleague of mine got to the first day of the exhibition and stayed there for three hours while he was talking to DECC officials and explaining our position. During that three hours there was just one other so-called member of the public who turned up and that happened to be the site project manager for the Hinkley C project from EDF, so not really a member of the public. On the day of the meeting itself about two dozen people only turned up to the public meeting, a public meeting which relates to the policy of West Somerset and Bridgwater. I should say that the meeting was held in such a place that you could not get to it by public transport and one friend cycled there and another friend took a car. It is unfortunate that the department related to climate change should be pushing people into their cars to
get to meetings which could easily be held in, for instance, Bridgwater or Cannington, which are towns very near to Hinkley Point where people would not have to burn more carbon in order to get to the meetings. I fed this information or my feelings about it into a meeting with DECC on 17 November. NGOs and community groups had asked DECC for a meeting on 17 November during which we covered a lot of policy areas such as Carl has just talked about, but we were concerned about this particular meeting. Since then DECC have actually agreed to hold another public meeting, not an exhibition, in Stogursey which is a tiny village right underneath Hinkley Point. We are a bit concerned again that they have chosen the wrong location because it is a long way from the centres of population at Bridgwater with 30,000 population, or the other bigger villages, and it is likely to bring in people who work for the industry, and so the meeting may be skewed really in what people hear or what people have to say. There were no public meetings in Bristol, which was a city that was very closely involved in the previous Hinkley C inquiry in 1988 and 1989, or in Taunton, Minehead or Weston-super-Mare, all big conurbations which really will be affected by the building of two monstrous nuclear power stations, the biggest nuclear power station project in the country so far. Before I move on I should say that there is a burden on people who have any campaign interest in the project in as much as the reading that is involved is humungous and the number of meetings that you might want to go to is really daunting. The people I have spoken to have said that it really is disrupting their family and home life when you have to work as well as be involved in what really, for many people, could become a fulltime occupation. Moving on to the Infrastructure Planning Commission we have wider concerns but one specific concern is that the nuclear policy statement guidelines to discuss the so-called interim storage of spent nuclear fuel, the high burn up fuel that Carl was talking about, are not up for discussion in the local planning debate. We find that Carl was talking about, are not up for discussion in the local planning debate. We find that for those reasons Wylfa would not be a suitable site that you would recommend to be included in the list. Dr Clowes: I am not sure I fully understood the nature of the question, Chairman, but if I did then yes is the answer in the sense that for a variety of reasons, as I referred to—the environmentally sensitive nature of the area, the impact on tourism, why locate it 200 kilometres from where the bulk of the energy will be used, the health concerns that we have both referred to now—these are all fairly...
compelling cases in their own right for not developing (a) nuclear energy and (b) locating it at that site.

Q515 Colin Challen: Mr Duffy, is the health information that you referred to relating to inside Hinkley in the public domain or has it been the subject of an FOI request or is there some way that the Committee could obtain that information?

Mr Duffy: The Somerset Area Health Authority published three reports in the 1980s which I can supply to you—I do not know whether they are in the public domain or not—which all said that there was a high incidence of leukaemia, 24 per cent, in youths and children under the age of 25 over a 17-year period and in one three-year period it went as high as 67 per cent. I am happy to supply you with that. This was in the days before computers and the internet so I do not know how widely available that is. We have also commissioned about five studies ourselves looking at the health issues which are available on the internet, either through our website stophinkley.org or the Low Level Radiation Campaign. The information that I had on the inside was basically just by knowing people who worked in the health service. A friend of mine was a paediatric nurse and she said to me that her consultant, a paediatrician, said—this was for the Somerset area, he worked at Musgrove Park Hospital—there is a problem with Hinkley Point and childhood leukaemia. Certainly we have now a 12-year old daughter who, at the age of four, had suspected leukaemia. We took her to the same consultant and she said “Maybe it is Hinkley, maybe it is not”, so what health personnel might say privately to one another is very different to what they would say publicly.

Q516 Mr Weir: Mr Duffy, you mentioned that the public meeting was very poorly advertised and you also mentioned that there seemed to be quite a wide area from Bridgwater up to Bristol with concerns about Hinkley Point. Can you tell us what advertising was made and how widely it was advertised within that area?

Mr Duffy: As far as I know there was an advert that went out on one of the local radio stations on the hourly bulletin and in a couple of the local newspapers. I think the problem was that the government announcement came out on November 9 and this meeting was set for November 19. It does not make it easy for people to make arrangements to come along to something at such short notice. The newspapers are weekly newspapers so if you miss the deadline then the adverts will come out just a day or two before a meeting like that.

Q517 Mr Weir: How wide is the circulation of the newspaper? Is it something that a lot of people in the area would look at or is it restricted to, say, Bridgwater or something?

Mr Duffy: There is a problem in as much as there are a lot of newspapers in the area. There are two newspapers in Bridgwater; I do not think both of them were advertised in—and there are also two newspapers in West Somerset, there are two newspapers in Burnham-on-Sea so people might read one newspaper but not necessarily read the other newspaper, so there needs to be a wide trawl basically with advertising. It works both ways for us as a campaign group because our press releases quite often get out in a variety of different newspapers but if we have to advertise then we find that we have to advertise in a lot of newspapers and it is very expensive.

Q518 Mr Anderson: Dr Clowes, you said in your evidence that the waste would be twice as hot and twice as radioactive, and that is repeated in the written statement. The written statement quotes Mr Hugh Richards of the Wales Anti-Nuclear Alliance saying “We would be entering completely unknown territory if we use high burn-up uranium fuel.” How do you know and is there anything we can look to that shows this fuel will be twice as hot and twice as radioactive, if it is completely unknown what we are getting into?

Dr Clowes: Hugh Richards I regard as an authority by now on this subject. The point he makes is that the fuel is burned for longer to a higher capacity and therefore becomes twice as radioactive. It is the company’s way, I suppose, of trying to ensure greater productivity from the existing fuel.

Q519 Mr Anderson: Is there any evidence that shows it is twice as hot and twice as radioactive?

Dr Clowes: That I believe is the case, yes.

Q520 Mr Anderson: Is there any formal evidence that shows it?

Dr Clowes: I will refer that back to my colleague but I would certainly suggest that there is evidence. Hugh Richards is a very credible authority, I am sure he would not have said that otherwise.

Mr Duffy: If I could answer that, the NRA, the Nuclear Regulators in America, have written about this, it is on their website as far as I know.

Q521 Mr Anderson: Could you send that?

Dr Clowes: Certainly.

Q522 Dr Whitehead: We have run out of time as far as questions are concerned. Mr Duffy, you very kindly said that you would send further information to the Committee; we would be grateful to receive that through the Committee clerk.

Mr Duffy: Sure.

Q523 Dr Whitehead: Also Mr Anderson a moment ago mentioned the question of data relating to the hotness of the fuel and the radioactivity, so if that could be sent to us I would be grateful. Thank you very much Mr Clowes and Mr Duffy for your evidence this afternoon.

Mr Duffy: Thank you.
Witnesses: Ms Marianne Birkby, Radiation Free Lakeland, Ms Pauline Preston, Kirksanton Residents, Mr Imitaz Mohamed, Kirksanton Residents, and Ms Jenny Hawkes, Braystones Residents, gave evidence.

Q524 Dr Whitehead: Good afternoon Ms Birkby, Ms Hawkes, Mr Mohamed and Ms Preston; perhaps you would introduce yourselves, please, for the record this afternoon.

Ms Preston: Yes, of course. My name is Pauline Preston and I am representing the residents of Kirksanton in West Cumbria.

Mr Mohamed: My name is Imitaz Mohamed, I am a resident of Kirksanton and I have come to keep Pauline company.

Ms Hawkes: Hello, I am Jenny Hawkes, and I am here to represent the residents of Braystones in West Cumbria.

Ms Birkby: I am Marianne Birkby and I am here to represent the group Radiation Free Lakeland.

Q525 Dr Whitehead: Perhaps, Ms Birkby, you would like to start your presentation to us.

Ms Birkby: Radiation Free Lakeland was formed in 2008 following Cumbria County Council’s expression of interest in the geological disposal of nuclear waste and then, following on from that, the proposed three sites in Cumbria. We have supporters from all walks of life in Cumbria and further afield including the State of Nevada who spoke on Radio Cumbria urging councillors not to just take the advice of government and the industry but to look at other advice as well from other sectors. With regards to Sellafield, we feel the consultation process for that, rather than being consulted really we feel we have been insulted. The actual date of the meeting was on January 13—this was the public consultation meeting—and that was when it was really quite snowly and a lot of people in rural areas of Cumbria, although they wanted to go to the meeting, could not actually go. With regard to the submissions of evidence a lot of our supporters and people who really want to say no to new building in Cumbria, they have not got easy access to computers. As you probably know, in rural Cumbria quite a lot of libraries are being closed so it is not quite as easy to actually get to access all the huge amount of documents—if you wanted to print off the documents it would cost you a fortune in a library. That is just one of the issues. A big thing really is that we feel the whole consultation is a way of promoting the national nuclear policy statement, which we really see as a dodgy dossier on a par with the one that led the country into war with Iraq; it is promoting new build as being carbon free, climate friendly, it is promoting new build as being safe for the environment, it is promoting new build as being safe for human health, it is economic, sustainable, home-grown. All these things are just not the case. Just to take one instance, it has already been mentioned before about all the hidden subsidies but there is also the issue of insurance, just insuring the existing waste at Sellafield. Just to give you an analogy, I am a wildlife artist and I have to take out £5 million worth of public liability insurance just to be able to set foot in a field, a show field, for example the County Show in Cumbria, or the Eskdale Show or the Gosforth Show. That is what I need to take out as public liability insurance as a wildlife artist, and if you attend a show in Cumbria there are maybe 30 artists within that tent. Their insurance is far greater than the public liability that Sellafield has to pay for its high level waste tanks and the waste at Sellafield. Nuclear power is at the top of the industrial food chain, it is a top polluter. Being a wildlife artist is kind of a fairly benign occupation and yet I have to take out £5 million just in case my easel falls on somebody at a show. The injustice of it is one thing. It is quite extraordinary really that while the nuclear industry is not required to insure itself for radioactive waste liability—and we have just heard that the new build would include waste that is much, much more hazardous—the Department of Energy and Climate Change is promoting the building of these new reactors—there are several reactors now planned for the Sellafield site and they will produce radioactive waste that is much more hazardous than the existing waste. They have really got a blank cheque as far as that is concerned. As far as being carbon free and climate friendly we know, living in Cumbria, that Sellafield has a back-up power plant at Fellside, a combined heat and power plant, and that is the case with every new nuclear power plant that is proposed, it is going to need some sort of back-up power because it is not like other sources of energy—wind turbines or hydro-electric. If the energy supply to them stops there is not going to be a catastrope but with nuclear power there may well be. We wrote off to the NDA under the Freedom of Information Act to ask about exactly how much Sellafield purchases in terms of gas every year, and it is £30 million. That is pretty substantial. Sellafield stopped producing electricity in 2003 and every year since then it has bought in at least £30 million worth of gas. It has to over-purchase, so any that is left over is sold on to the National Grid, so to actually say that nuclear power is carbon free is quite an untruth. The CO₂ emissions from Sellafield since 2003 are in excess of three million tonnes and when we ask the NDA how a secure energy supply would be met or how Sellafield’s own energy requirements would be met post fossil fuel they have no reply to that. Apart from producing all this carbon Sellafield also produces greenhouse gases thousands of times more potent than carbon dioxide. They actually produce hydrofluorocarbons and, for the period 2007 to 2008, they actually produced four times more than the previous year which seems pretty inconsistent with what we are being told at the consultations when we ask questions or make comments that nuclear power really is not carbon free. The usual bland statements come back, that compared to other sources of energy it is. Patently it is not and it is at the very top of the industrial polluting food chain. Also, you get these big banners up at the meetings saying “sustainable”. How does that work when at Sellafield the waste that is already existing there needs to be cooled every day and every day—this is again information that has been received under a Freedom of Information request and it is not really anything that has filtered out to the wider media, the wider media is not picking up on anything like this—four million gallons are abstracted from Wastwater, which is Britain’s favourite view, every day, and this is essential to cool the nuclear waste and provide...
核工业实际上运行其补偿方案的目的是为了运行该方案的行业是其拥有自己的补偿计划。该计划支付了数百万。该计划的实际目的在于为辐射相关的疾病和其优缺点。今年在英国有多起辐射相关的疾病。前塞拉菲尔德的前工头，他是一位诗人，他希望公司在其去世时能有一首诗。这首诗的标题是《计数箱》。这些箱子被偷走，结果就导致了对安全的忽视和偷窃者。这是一首关于在工作场所偷窃的诗。
to be rude now when I make this statement but we, the Kirksanton residents, do ask how insufficient somebody has to be to taken off the process. The other thing of course that we do just want to make a couple of statements on as well is regarding the inclusion of a green field site because we do have questions regarding the actual date that the green field site came to be nominated, and it is something that yet we have not been able to get an answer to and we think it is very important to the process and to where we stand. We do say that so far to date the consultation process has been flawed, if we follow the DECC engagement rules, and we do ask the Committee to listen if they would to the transcript from the public meeting. We asked many searching questions and got some interesting answers and we would ask that of you. What I would like to do now is really look just at the inclusion of the green field site because back in 2007 when the first consultation processes took place the assumption was that it would be brown field, on existing or adjacent to existing nuclear facilities. We can find no reference to the date when the Government would announce that it was changing this widely-held view. We can find absolutely no reference if and when this position was made clear on the original consultation of the strategic siting assessment. Really these are our questions. We are a green field site, we are 21 miles due south of Sellafield, we have no infrastructure so we have really found ourselves in a process that we feel we do not actually belong in, nobody can give us the answers to our questions. Really what I would like to do—one of the main questions is a differential process, if there was one created and how it was created, and Imtaz will make a statement on that.

Mr Mohamed: Fine. We came here just to talk about the process and how we see it. It is my understanding that the Planning Act is a plan-led system. This market-led approach would mean that competition should dictate pricing. The danger is that those companies that are closest to the spheres of influence, i.e. RWE in Cumbria, may create anomalies within this system. The game theory calculation for the price of a nuclear site, one minus one over N times IVP becomes unviable because you now have a two-state process of green field versus brown field and I do not think people have actually understood the implications of what this would mean in this process. Citigroup and Ian Jackson in his recent Dungeness study have indicated that the game theory formula would have to accommodate a decrease in value over time if there are delays in the process. It is another factor that needs to be considered. What formula would accommodate for Kirksanton getting into the first round for an option price of £25,000? You have created a process where the Atkins Study cannot find any sites in the whole country. RWE on the other hand can be invited to Sellafield, get up in a helicopter and find a site north of Sellafield and find a site south of Sellafield. The Atkins Study cost a lot of money; maybe you should look for a refund, they could not find another site. It is barely credible. In terms of a green field site, if you actually look at a green field site and try and do a differential analysis of the differences between what a green field site is in relation to a brown field site, certain anomalies crop up again. There are a lot of things we can look at. One of the things we need to actually understand is how the Planning Act interfaces with EN–6 and we particularly need to look at things like impact assessments and the socio-economic parts of that impact assessment. The socio-economic impact assessments, because of the nature of Kirksanton should maybe have been rural-proofed. Kirksanton is a rural community on the definition of what rural is. This community may not exist in its present format if this proposal goes ahead, and I will deal with that later, because it is about sustainability. Negative socio-economic assessments need to be mitigated. This is what the Planning Act says. This is why this is done and it is sent to the IPC, they take this as a recommendation. It has not been done. The AOS study was a sub-regional desktop study. It made a number of assumptions. It did not do a socio-economic impact assessment for Kirksanton and, you must remember, this is a site-specific document; this is what you are putting forward to the country. The other part of that interface with the planning, and you can look at other aspects but the other part I have looked at is the SSA exclusionary aspect. It says that you can move people to five kilometres outside the secondary exclusion zone, and that is no problem. The problem with the actual place where I live, which is Millom, is that it is the only substantial community in 100km². Technically, yes, you can move these people to a safe zone, but after that there is nowhere to go; there is only one road. I say that because talking to the DECC staff, people did consider maybe it could have been put in at an earlier stage, but I do not think anyone actually considered the nature of a Greenfield site. There is another problem with the interface of the compulsory purchase and its relationship with the Human Rights Act. I can come to that later.

Q528 Dr Whitehead: I am going to have to ask you Mr Mohamed—this is a ten-minute joint presentation—if you could conclude your remarks. Ms Preston: In conclusion, you asked about guidance to the IPC from the NPS. Certainly the residents of Kirksanton would say it is a not-fit-for-purpose document at this time. Thank you very much.

Q529 Dr Whitehead: Ms Hawkes, before you start, I ought to warn the Committee that I believe a vote is reasonably imminent. If we are interrupted by a vote, I am afraid we will have to suspend proceedings for 15 minutes while that takes place.
Ms Hawkes: I am a pensioner. I was intending to retire to Braystones and we have bought a bungalow on Braystones’ beach. With all of this we are now questioning whether that was a very sensible move. I believe that public consultation relating to energy and climate change (and this is true of all of the people who have spoken so far) has been very badly handled by government at a departmental and local level. People from Braystones have not been allowed to participate fully at all levels from early on and throughout the process, they have not been invited to take part in any meaningful or realistic examination of the evidence to date or been able to influence any of the early decision-making, nor has there been any feedback to the Braystones community about if, or how, the concerns of the people of West Cumbria have been taken into consideration. The consultation process around the NPSs and the justification process do not comply with any of the Government’s own seven consultation criteria set out in the revised code of practice July 2008. How can ordinary local people even begin to understand the enormity and importance of all of this without telling them what is going on? Therefore, we believe that the consultation process on the NPSs is completely inadequate and our rights to be heard have been denied. There are many evidence-based examples in our submission, which I assume you have all read, but with only ten minutes available we have had to choose just a couple of key points. The total lack of publicity and public engagement around the NPSs nationally follows the pattern by this Government of not involving the public in many of the significant decisions around climate change. There has been no national public debate. For example, the UK Government is already in breach of the Rio de Janeiro agreement signed in 1992. The public were not involved in that decision, nor have they been consulted on decisions around carbon dating. We also have grave concerns about the impartiality of the Department and of the Secretary of State. Mr Miliband has repeatedly declared his pro-nuclear stance. He has also made himself the final authority in the justification of new nuclear power stations, even though he has regularly voiced his support for building new nuclear power stations. Where is the independence and neutrality? Is Mr Miliband compromised? There has been a complete lack of public involvement and transparency. These are key factors in the whole nature of this engagement process, particularly at local level. It has been suggested that the national and local decisions have already been made behind closed doors, and this seems to be confirmed by announcements made by the Government, the Minister and our local MP in favour of nuclear expansion. Mr Reed is the MP concerned, and he assured us at the public meetings in Whitehaven in March 2009 that neither he nor any local politicians have been aware of Braystones or the Kirksanton site being put forward as possible sites for a nuclear expansion programme until just after Christmas 2008, and yet he was the major author of the energy coast proposals which had been developed over the two previous years. Over the last ten months we have heard county councillors, local councillors and the local MP telling everyone that the vast majority of the public of West Cumbria are in favour of the proposals. In a debate last June Mr Reed told the House that he had to declare several thousand interests, the inference being that they were all in favour. At meetings last year in Whitehaven and Beckermet, which are local to Braystones, there were vociferous objections to the plans, but these views were not acknowledged. In this matter we consider Mr Reed has deliberately misled the House and misrepresented local views. In November 2009 Mr Reed appeared on Radio Cumbria and made unequivocal statements that there would be no developments at Braystones or Kirksanton, and he categorically stated over again that there would only be one development and that would be at Sellafield. That was in 2009. There has been no legitimate active or effective engagement with the local community in Braystones about NPSs or the justification process, including the siting applications. Local people have not been given access to the evidence of need by which Braystones was nominated in the strategic siting assessment process. We have not been able to examine or challenge government data or been given the opportunity to assess these proposals in public forums or to raise any other matters.

Dr Whitehead: We will have to suspend our sitting now for 15 minutes, assuming there is one vote. Of course I will provide you with injury time for the rest of your statement when we resume.

Q530 Dr Whitehead: Ms Hawkes, it sounds a little bit like Just a Minute, I know, but you were on five minutes when we broke for the vote.

Ms Hawkes: I do not think so; I was only on my first page. Anyway, as I said, we have grave concerns about the impartiality of the Secretary of State. I was in the process of talking about the lack of public involvement and transparency that Mr Reed had over the period between when we heard about this and at other times had deliberately, we feel, misled the House and misrepresented local views. In November Mr Reed had appeared on Radio Cumbria and made unequivocal statements that there would be no development of Braystones or Kirksanton and he categorically stated that there would only be a development at Sellafield. We feel that there has been no legitimate active or effective management with the local community in Braystones about the NPS or the justification process, including the Nuclear Industry Association applications. Local people have not been given access to the evidence of need by which Braystones was determined as one of those sites and we have not been able to challenge any of the Government data; nor have we been able to raise any other matters which we believe are relevant, such as the prohibitive costs or safety matters. It appears that decisions about these sites were based on market-based evidence from energy producers and suppliers rather...
than on the needs of the country or local areas. The news that Braystones had been listed as a possible site for nuclear reactors came out of the blue and was a complete shock to us. There was no public engagement of Braystones at all. We never got any letters from RWE and we only found out about it through the local media. We had exactly ten days to make comments about the site, and by the time we got to that meeting we found that RWE had already purchased an option to buy the necessary farmland and had already undertaken exploratory drilling on the farms. The National Policy Framework statement and the Regulatory Justification Consultations are not inclusive. The key issues of health, nuclear emissions and waste disposal and the environment cannot be raised by the public. Why not? Why are all the local meetings prefaced by those? We are told that nuclear is here to stay and matters such as health, the environment and disposal of nuclear waste are not up for debate. That was said at the beginning of several of the meetings we attended. What account of the health detriments is to be taken into account in this inquiry? We note that this is the only NPS planning process where there will be no legal requirement to undertake a full health impact assessment. Who agreed to this? Where was our view taken into account there? I wrote on 2 December to Professor John Ashton, who is the Director of Public Health at NHS Cumbria, asking for his response to this process. He wrote back to me. Yesterday I got a reply. Although he knew I was coming here, I did not get it until yesterday. He said, “Your questions are very wide-ranging and go beyond specific technical issues to the whole question of the impact of nuclear installations. In order to fully respond it will be necessary to be able to refer to an integrated impact assessment which took account of both externalities and the impact into the future of a social, including health, economic and environmental kind. I have no knowledge of such an assessment being carried out; therefore, I cannot answer your questions.” I want to know why that has not happened. We have heard about COMARE not reporting until after the consultation. I believe now that this consultation process is a total failure and falls far short of the Government’s own statements on public engagement. The short duration of the consultation on one of the most significant and complex planning decisions to be made this century renders the whole approach unacceptable and open to legal challenge. The process has already had a massive impact on the mental health and wellbeing of our local community and all the families involved. It has blighted Braystones, a beautiful place. The value of our properties is negligible and the probable destruction of our environment and local beach is heartbreaking. The Government has not taken into account the impact of proposing to build a nuclear reactor on a greenfield site. Article 6 of the Human Rights Act states: “In determination of his civil rights and obligations, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law.” Your process is not a democratic process; the people of Braystones have not been asked what they think; the process has been rushed; it is not transparent. Therefore, this NPS process is not legitimate and we believe all of these issues will need to be tested through an independent public inquiry.

Dr Whitehead: Thank you very much. Do committee members have any questions to our witnesses?

Q531 Charles Hendry: In relation to the development of the potential Greenfield site in particular, is it your view that that section of the NPS should be removed, or are you seeking for the whole of the NPS to be removed?

Ms Hawkes: I was asked to talk about public engagement and consultation. I believe that there has not been any true public engagement with the NPSs. I believe that the Greenfield sites are a particular issue because they are different from the brownfield sites. I believe everybody is entitled, whether they are living near brownfield sites or greenfield sites, to take part in this wider debate, but I really do firmly believe that the problems in relation to the way that this has all been developed means that we have had no voice, and that is why I believe firmly that this process is a nonsense.

Q532 Charles Hendry: Is that your view as well?

Mr Mohamed: What was the question again?

Q533 Charles Hendry: Is your concern about the inclusion of sites which are greenfield sites, primarily, and you would like that removed from the NPS, or is it that you believe the whole of the NPS process is flawed?

Mr Mohamed: I am not clever enough to know the whole process. I understand and know what has happened to me and my community, and that is what I have looked at and that is what I have prepared for here. In relation to that, yes, because there are a number of differential aspects. We and Braystones could never have been part of the early part of the process because no-one was looking for us—we were only nominated in March 2009—and it is a problem.

Q534 Charles Hendry: Do you have a sense of the number of your community who you are speaking for? How many members do you have in your organisation out of the total population?

Ms Hawkes: We are not an organisation; we are a little hamlet, and we have come together at meetings where there has been 100 per cent voicing against this. Can you imagine: there are a lot of quite elderly people who do not have access to computers; you have to go and talk to them. They are very worried; they are very upset; they do not want this. This is our beach. I know you probably cannot see it, but it is a beautiful place. We live on the beach; we have got houses on the beach. The hamlet has got about 35 houses in it: there are about 30 properties on the beach and then there is farmland. It is not an organisation; we are a small community.

Ms Preston: All of the residents in Kirksanton, which is 100 of us, are against the nomination, and also we set up a public meeting and 350 people...
turned up, which would then include residents from both Haverigg and Silecroft, but we are certainly not an organisation.

**Ms Birkby:** Could I make a point on that, that is Radiation Free Lakeland. We went to Coniston and handed out leaflets and got people to write to the Tourist Board, for instance, and ask their views on this, and everybody that we spoke to (and it was round about 200 people), all of them, apart from one person who was a nuclear physicist, said they were completely opposed to any new build in Cumbria. If you go to the top of Coniston Old Man, you cannot see any wind turbines, but what you can see is Heysham on one side and Sellafield on the other, and the visual expansion is going to be a blot on the landscape, but with nuclear power it is not the visual that is the problem.

**Q535 Dr Whitehead:** I wonder, Mr Mohamed, whether you could expand briefly on the point you made concerning the incorporation of greenfield sites into a document which is spatially specific which, you suggested, therefore enables an applicant to jump over one stage of the planning process and effectively have a site which apparently is designated for that purpose, which would not normally happen under the planning regulations as they stand at the moment? Is that your understanding of what is taking place?

**Mr Mohamed:** It is my understanding that the Planning Act had banned that process, yes.

**Q536 Dr Whitehead:** Is that your understanding as far as your site is concerned, Ms Hawkes?

**Ms Hawkes:** Yes.

**Q537 Dr Whitehead:** These are sites which have had, as it were, pre-purchases placed on them.

**Ms Hawkes:** They have already bought the land now.

**Mr Mohamed:** No, they had options. They had not purchased it; they had options to buy the land.

**Ms Hawkes:** They had options to purchase the land prior to the meetings, prior to the announcements, but since then, I do not know about Kirksanton but at Braystones they have actually brought three farms now.

**Q538 Dr Whitehead:** Your suggestion is that they bought the land first—

**Ms Hawkes:** Yes, or had options to buy.

**Q539 Dr Whitehead:** —when there was, as far as you understood, an assurance that these sites would not be placed within the NPS designated agreed sites?

**Ms Hawkes:** Who knows?

**Q540 Dr Whitehead:** Then, after that had taken place and after the land had been purchased, those sites were placed within the NPS document. That is your understanding, is it?

**Ms Hawkes:** Yes.

**Q541 Sir Robert Smith:** From your understanding of the options, were the options subject to successful designation by the NPS?

**Mr Mohamed:** The options themselves were signed about the end of October, beginning of November. That would indicate that RWE were in negotiations previous to this—this would be 2008—and, specifically, the options relate to buying the site on 30 October 2009 for a specific sum. This is after the SSA process. In fact, if you look at it, you have created a process where a major company got in at the first level for an option price of £25,000. That is fact.

**Q542 Dr Whitehead:** That is on the whole site?

**Mr Mohamed:** No, that was on Layriggs Farm. The site, we were told, was initially 180 acres. That was the option for that site.

**Ms Preston:** To clarify that, we still do not know today, once the site was reconfigured to 320 acres, if that land has actually been purchased or not.

**Mr Mohamed:** There is a technical problem. We have lived there for 11 months and we still cannot find out the day the site was nominated. It might indicate something. I do not know, but we asked DECC on Saturday; we cannot get an answer on the record.

**Q543 Dr Whitehead:** My understanding is, therefore, that there was an option on the 180-acre site.

**Mr Mohamed:** Yes.

**Q544 Dr Whitehead:** Presumably there is a purchase price per acre subsequent to that option?

**Mr Mohamed:** Yes. I can give you the purchase price, if you want, or I can send it to you.

**Q545 Dr Whitehead:** The Committee would be very grateful to receive that.

**Ms Hawkes:** Certainly RWE at Braystones had already purchased an option to buy three farms and had undertaken exploratory drilling on those farms prior to the announcement.

**Q546 Dr Whitehead:** Ms Birkby, just for my information, from what process does the emission of hydrofluoro carbons stem on the Sellafield site?

**Ms Birkby:** I think it stems from the reprocessing of waste.

**Q547 Dr Whitehead:** Your understanding is that those emissions have not been recorded within the emissions of the site prior to your group obtaining information?

**Ms Birkby:** They have quadrupled anyway. The reprocessing seems to be stepping up a gear and creating more liquid waste, despite the Nuclear Installations Inspectorate saying that the high-level liquid waste tanks at Sellafield are in a critical state and should be looked at immediately—this was last year—and that has not happened. It just seems that this whole process is promoting new build at a time when there are cutbacks on the safety aspects of
Sellafeld, and really we would like the money to be spent on looking after the existing waste as safely as possible to ensure the future viability of Cumbria.

Q548 Charles Hendry: Are you not bringing together two separate issues there? There is a reprocessing facility, which is a very modern facility, and separately there are the old waste tanks, which are appalling, but that is not the reprocessing facility.

Ms Birkby: No. Cumbria County Council itself has actually questioned the continued reprocessing, while the NDA are saying that they are going to reduce the amount of waste in the high-level waste tanks, but the process of reprocessing creates more liquid wastes, and so Cumbria County Council themselves have questioned this. How can you be reducing the wastes and carrying on reprocessing, which has never been commercially viable.

Ms Hawkes: It is not modern.

Ms Birkby: This is what Duncan was writing about, that was his thing, doing the reprocessing, and he was very concerned, obviously. He was under Sellafild’s own compensation scheme for radiation-linked diseases and he is not around any more.

Q549 Dr Whitehead: Thank you very much, Ms Birkby, Ms Hawkes, Mr Mohamed and Ms Preston. It is the first poem we have had submitted to this Committee in evidence!

Ms Birkby: Excellent.

Dr Whitehead: Thank you very much.

Witnesses: Mr Peter Lanyon, Shut Down Sizewell Campaign and Communities Against Nuclear Expansion, Ms Varrie Blowers, and Mr Barry Turner, Blackwater Against New Nuclear Group, gave evidence.

Q550 Dr Whitehead: Welcome Mr Lanyon, Ms Blowers and Mr Turner. Could you please introduce yourselves for the record?

Mr Turner: My name is Barry Turner. I am the Vice Chairman of the Blackwater Against New Nuclear Group (BANNG).

Ms Blowers: I am Varrie Blowers. I am the Secretary of the Blackwater Against New Nuclear Group otherwise known as BANNG.

Mr Lanyon: I am Peter Lanyon, and I am representing both the Shut Down Sizewell Campaign and the Communities Against Nuclear Expansion.

Q551 Dr Whitehead: Mr Lanyon, perhaps you would like to make your presentation.

Mr Lanyon: Thank you. The Shut Down Sizewell Campaign is an NGO of approximately 300 members, locally and worldwide, maintained by private subscription for over 24 years—we formed just after the Chernobyl disaster—opposing nuclear power stations on the Suffolk coast, and Communities Against Nuclear Expansion (CANE) represents a body of local people in the vicinity of Sizewell, Suffolk, who are opposed to further nuclear expansion. The organisation includes a number of teachers, doctors, former civil servants, campaigners and former councillors with experience of the impacts of two nuclear power stations and the plans for further reactors at Sizewell. Mr Wright has asked me to talk chiefly about the impressions locally of the DECC meeting and exhibition on 3, 4 and 5 December. The general local opinion is that the whole thing is a done deal already. They will not take any notice of us, so why bother? They did not take any notice of the Sizewell A End State when they had a consultation about that and we said we wanted it to go back to a greenfield site, so they will not take any notice now. We know it is in the wind that they are busy screwing up the planning laws so we cannot take part in planning inquiries anyhow and, therefore, all this stuff that DECC are coming down to exhibit and meet us about will just be a load of whitewash. There will be lots of suits and smart talk and it is being held at the industry’s own posh sports and recreation centre, so we know what we can expect. That is the feeling, and that was the feeling that we had to try and cope with when the two organisations suddenly realised that we could not stand back and take this, we had to do what we could. To get into the NPSs, as everyone here knows, is a monstrous task. It is very bad for NGOs, as Jim Duffy has already told you. I understand there is something like 2,000 pages to be read and ours is one of the first meetings and exhibitions DECC put on, so we had even less time to read them than anyone else. It is very difficult for us; it is impossible for members of the public in a place like Leiston, near Sizewell, to even get a feeling for what is going on. What ought to have been public consultation when DECC came down to Sizewell is not what in fact turned out. Public consultations, under the Aarhus Convention, are supposed to be at a formative stage when there is still the possibility of changing things. That is not the case here, unless your Committee will throw it out. It has already been decided. The whole thing is not capable of change. Moreover, if you read the NPSs, they are overwhelmingly persuasive from start to finish. They are tendentious, they are arguing for a cause and, when they do talk about whether Sizewell is suitable, it is all mitigating circumstances to improve what they are already deciding they are going to impose on us. Public consultations are not meant to be anything of that sort. Therefore, it is an enormous burden for anyone who wants to get involved around Sizewell to turn that sort of tendentious argument round to see it from our point of view, and for that sometimes—because the NPSs are written by experts—we needed counter-experts, particularly about the land issues of the access road but also about other things. We asked for an extension of time so that we could consult some experts—difficult enough over the Christmas break. That was refused. The inadequate time also contravenes the Aarhus Convention, but so does the lack of public participation which actually happened.
27 January 2010 Mr Peter Lanyon, Ms Varrie Blowers and Mr Barry Turner

at Sizewell. What should have happened was that there should have been deliberative discussions, dialogue, which could have been involved in developing the public ownership of the problem so the public could have turned round and said what they really thought about it. There was none of that sort of iterative process at all. The next public meeting at Leiston was neither deliberative nor participative. There were about 140 people there on 5 December. The extraordinary thing was that most of them were people we had managed to rouse because we had heard of the meeting through the Internet, which was just about the only place it was publicised. The other extraordinary thing about the people there was that there were no young people at all, and yet this is going to be their problem and their descendants’ problem. There was virtually no-one there under about 40 or 50 years of age. The publicity was negligible. I have not been able to find a copy of any leaflet or poster that was put up, and that is the way that people in rural East Suffolk and the small towns of Leiston, Saxmundham and Aldeburgh get their information. There was, I believe, a notice in the local paper, but not everyone reads the local paper, and I still do not know which paper that was. The meeting lasted 165 minutes. The DECC officials and the facilitators spoke for 55 minutes, which left us with less than 140 minutes, which means that if everyone wanted to participate they would have had less than one minute each to both speak and to get an answer out of DECC. It was farcical, and that was all there was. It is sad, because when we went into the hall we found that the seating was arranged in a chatty fashion around tables, with about six seats to a table; so we said, “Whoopee, they are going to have a workshop, or a seminar, or something. They are going to get us involved.” Not a bit of it. It was presentations from DECC, two long 20-minute presentations, plus facilitation which picked out one or two speakers, but nothing like all the speakers who wanted to talk. What should have happened, if they really wanted to know what the people of Leiston thought about the NPSs, was discussions, a workshop, a panel, a forum, a citizens’ jury, or something like that, which are all well-known ways of finding out what the public think. I take my example from the excellent public consultations run by Lancaster University about the ISOLUS project of nuclear submarines. This had none of those sorts of interactive discussions at all. The only other thing at Leiston was DECC’s exhibition, which I visited on two of its three days. When I was there it was very poorly attended, and that is probably because it was a considerable way out of the town in pretty hostile weather for two of the days. On the third day the meeting moved into the town. Once again, the two occasions I spent there, and the first time I was there for a couple of hours, there was no-one under about 50 who went in. The atmosphere inside was a sort of awed hush, because one felt intimidated by the glossy pictures around the wall and also by the persuasive arguments of the big print which was staring out at you about the thing. There were some intimidating state-of-the-art computer things running. Most of us, including myself, in that part of the world are not maybe as computer literate as DECC is, but it was not the way to find out what the people of East Suffolk thought, and the tendentious tone, again, of what we were presented with was very unpleasant to anyone who, like myself, does not agree with it. Either one feels disempowered and one walks out or one gets antagonistic, and that was unfortunate, because the staffing of the exhibition was charming, polite and amiable. One of the biggest pictures there was quite blatantly wrong. It suggested that the new power stations as Sizewell were going to be just one reactor building and a pond, and that is rubbish. Everyone there knows it is rubbish because they know what the present two stations look like, particularly the second one, and they knew that the future nuclear stations (and there will be two reactors) will be bigger and more intrusive too, and so that was plain wrong. I believe that picture was removed on the third day, but I did not see it myself. More important, perhaps, was the fact that there was no realistic presentation at all of the colossal threat of the access road. That is going to cut straight across an AONB, an SSSI, is going to make a mess of a Ramsar site, it is going to be plumb next-door to the RSPB’s famous reserve at Minsmere and it is going to be a blot on the entire heritage coast. Yet at the exhibition this was completely minimised. There was no display which in any way suggested what that was going to be like.

Q552 Dr Whitehead: Mr Lanyon, I am afraid I am going to have to ask you to bring your remarks to a close in a moment.

Mr Lanyon: Thank you. The effect was that that was mitigation: it was making it better. I would like to stop there and just conclude by saying that that consultation (and that was all it was, the exhibition and the meeting) failed to engage the people of East Suffolk and thank you for engaging me instead.

Q553 Dr Whitehead: Thank you. Ms Blowers and Mr Turner.

Mr Turner: Good afternoon. I would like to start by reading out a recent quote: “The more I hear about what is being proposed for Bradwell and the way in which it is being done, the less I can see how it can be agreed with.” This was a statement made only just over a week ago by a local mayor in the Bradwell and Blackwater area. He had received a response from DECC to a letter that listed the local towns’ concerns about having a new Bradwell Power Station, and the response that came back was described as being superficial and evasive, nothing was answered at all, which was somewhat like the consultation processes that we have already experienced. We think that the example of this mayor and his view illustrates the reactions of most of the people once they hear and realise how it is going to happen if a new nuclear power station or, indeed, maybe three new power stations are built at Bradwell. I will not read to you all of our submission, because that would use up valuable time, but I would
like to give you a flavour of it, in case you have not read it. Looking at the executive summary, it goes, “The Government’s process of consultation on the draft nuclear NPS cannot, by any standard, have been deemed to be open and effective. It has failed to clearly inform people around the Blackwater Estuary of the main differences between the operation of a new nuclear power station, or power stations, at Bradwell and the operation of the old power station”. Basically, people assume it is more of the old. It is not. “We believe effective communications would have resulted in residents understanding the following differences, which most, sadly, are only just beginning to realise but many are in ignorance”. The main points: high level radioactive waste could be stored on site for 160 years or more—that is something like five or six generations. DECC hopes that by then a national repository will have been built somewhere to accommodate this, but, of course, this cannot be guaranteed. What happens if that does not get achieved? We do not know. A new more powerful nuclear power station would require far more cooling water from the relatively narrow and shallow Blackwater Estuary. If you are not familiar with it, it is not a large, wide open to the sea span of water, it is a relatively limited shallow stretch of water that goes only ten miles up to Maldon and it is mostly surrounded by mud flats. It is extremely shallow. The concern is that far greater volumes of water would result in far more serious damage to fishing and oyster industries, to the ecology and the marine life in general, let alone things like holidays and tourism, which are very prevalent in the area. There is a proposal to build two additional nuclear power stations at Bradwell. These would require cooling towers due to a lack of sufficient cooling water in the estuary. The location for this very large nuclear complex, which would be built next to the partly decommissioned power station, is a vulnerable and very low-lying site and it is rated, the majority of it, at flood risk three, which is a high risk of flooding. Somehow this has got to be securely protected for 160 years, or more, against increasing threats from such things as rising sea levels, flooding, storm surges and tsunami. Another point is that Mersea Island is only two miles downwind of this complex. Mersea Island is an island. The only access is across a narrow causeway called The Strood. It is an old Saxon access road. This road regularly floods and, if you wish, I can leave you with one of our timetables because if you get the tides wrong you cannot get on or off the island; you are stuck. It has a population of some 7,500 people. We are not quite like Anglesey perhaps, but in the summer this rises to 15,000 because of the holiday season. A lot of holiday-makers come to the island; there are chalets, mobile homes and all sorts. In 1962, when the old place was built, there were only 3,500 or maybe only 3,000. I am not absolutely sure, but it is claimed that with this large increase in population we do not need an emergency evacuation plan. This is in spite of the fact that sometimes people would not be able to get off the island, and this is quite extensive periods. It is claimed that one is not necessary because the threats from a new nuclear power station are vanishingly small, and we are supposed to believe that and think we can sleep happily. Hang on: why do they not build it in London then? We know it is not true. Then there are other claims. Increased employment would benefit all local communities. This is very questionable because Bradwell is not particularly accessible to anybody who lives on the north side of the estuary. The roads are narrow and winding; it is a long, arduous journey, even though the north side might be only two or three miles away. On the contrary, we are convinced that the presence of a prominent nuclear complex is just as likely to cause a decline in major employment in the valuable tourism, holidays, sailing, fishing and oyster cultivation industries around the Blackwater Estuary. Incidentally, I do not know if you are aware of it, but the River Blackwater is a prime source of native oysters. This is in the report, but it provides a lot of work to people. As far as I can tell, and I am not an expert, I do not have the time, we think there are at least 100 people primarily involved in native oyster cultivation. They are world renowned; they export them all over the place. The continuation of this would be under extreme threat because of the huge volumes of cooling water and the addition of biocides to keep the cooling systems clean. Somehow we are supposed to accept with confidence that this can all be mitigated and no harm will be done. Again, if you read this you will see that there is strong evidence that extreme harm was done when the old operation was going. It only closed in 2002. There were no oysters on the south side of the estuary in the vicinity, one and a half miles either side the flora of the estuary was bleached and bare, but the old operators denied that it was anything to do with what they were doing, which is clearly not true. This can only get worse with a new one, because the estuary has only got limited volumes of water. Clearly it is going to need something like three times the new volume if it is an EPR that is put there. Nobody really knows what the effect will be, but somehow we are expected to be happy and believe that this can all be mitigated. This is really the point we believe. The whole process seems to be a bit of a rush to approve an unsuitable site. We think there is extreme bias in the whole process. We have got this massive collection of reports, that has already been mentioned. Somehow we are supposed to find the time to read and understand all these things and give you feedback. Certainly we cannot do it in ten minutes or in eight pages of submissions—it is impossible; there is just too much of it—so this has got to be ploughed through by us and other interested members of the public, and it is extremely difficult to do. What we find when we read this stuff is that when it comes to making opinions as to the suitability of the site and the surrounding influencing factors—some of which I have mentioned but not all of them by the way—negatives are usually avoided. There is very little mention of negative aspects, there is plenty of mention of positive aspects and they seem to be exaggerated, and we are supposed to believe that this is a balanced, unbiased report. I am sorry; clearly, it is
not. What we are supposed to do is feel satisfied that this is a good method of determining what should happen at Bradwell and, anyway, if this process fails, there is the fallback of overriding national imperative, which seems to be there to force a decision through—and that is regularly mentioned in all of the reports—so, if the IPC does not accept this, you have got it anyway; hard luck to people in the Blackwater. We think this is a pretty poor process. As I say, there is too much to talk about, but even if you just look at the appraisal of sustainability (and I know I have got very little time left), there are so many examples where things are just not mentioned. It talks about the benefits of increased employment; it does not talk about the threats to the industries that already exist there, many of which, I think, would vanish. If you do not know Merseyside, there are beach huts facing the existing power station. Okay, it is closed now, but if we have a massive new complex, I cannot imagine many people wanting to come to the island for a holiday with the threats. I know we are supposed believe it is safe, but that cannot be guaranteed. I suspect I have had my time. I could go on for a long time, but this stuff is so biased. It is not a valid, balanced report and, I am sorry, it seems to go through the whole process. I am only repeating what has been said already. I just think it is very disappointing. Incidentally, BANNG is not comprised of totally anti-nuclear people—not at all. Most of the people, probably at least 60 per cent, are not necessarily opposed to nuclear, they just think Bradwell is such a ridiculous place to choose to put something that has got to be protected in a difficult site against all the uncertainties. Incidentally, we had an earthquake some years ago. It was before there were ways of measuring it, but it is probably one of the biggest ones that happened in the UK. That gets scant attention in any of these reports. I could go on and on, but it is a flawed document, and I think we should expect it to be a balanced document which reports favourably on risks as well as benefits, the threats to people’s jobs, the threat to the surrounding infrastructure or maybe the result that other new industries are disinclined to come to the area because they do not think it is a suitable place. I will hand over to my colleague, if I have not used up too much time. Thank you.

Ms Blowes: I would like to make several criticisms relating to the Government’s consultation process and make a few comments on the National Policy Statement EN–6. First of all, BANNG is extremely concerned that the proposal to have long-term, for 160 years that is, highly radioactive spent fuel on the Bradwell site has been rolled into and subsumed in the consultation on the proposal for a new nuclear power station. The Government is well aware that the public has deep anxieties about radioactive waste and seems to be avoiding open and transparent consultation on this very important issue. BANNG believes that there must be a separate consultation process dealing only with the proposal for the storage of this spent fuel. Otherwise communities will have this dangerous waste foisted on them without any say at all in the matter. This is not only undemocratic; it is down right dishonest. The DECC exhibition and public meetings. The venues for the DECC exhibition and public meetings were quite selective. None of them was held in any of the large centres of population in the area: Colchester, Chelmsford, Clacton or Southend. There were events held in Maldon, but none in Colchester, which is much larger and closer to Bradwell. The advertising of the events was quite inadequate and, as a result, thousands of people have been denied the opportunity to take part in any debate. BANNG found itself in the position of having to inform people of the events and of prompting them to attend. The local press has reported that the people of Bradwell village itself, right next to the site, are very angry that a public meeting was not held there and feel they are being denied any say in discussions. It was left to members of the public to raise the issue of long-term nuclear waste storage on site at all the meetings, and the responses that were received were quite unsatisfactory. I should also mention that the document on the management of nuclear waste was not on offer at either of the DECC public meetings in Maldon or at West Mersea. The format of the meetings was not conducive to proper public engagement, with questions from the floor receiving responses from the platform with little opportunity to question unsatisfactory responses. I will move on to the consultations on the various stages. BANNG has made substantial and well informed responses to each of these consultations on strategic siting assessment, justification and the “Have your Say” on site nomination. Scant attention has been paid to these. Virtually no changes were made and responses from the Government have been general rather than specific. In the responses justification the request made by BANNG and several other groups for a public inquiry into further new nuclear practices in the form of new nuclear power stations could be justified. It was just completely ignored. BANNG has made every effort to comply with government consultations and to make serious and well evidenced criticisms of government documents. It is extremely frustrating, demoralising and disappointing when these are substantially ignored. Members of the public actually tried to take part in the Have your Say consultation and struggled with this because it was so complicated. I will move to the consultation on the draft energy National Policy Statements and justification.

Q554 Dr Whitehead: I am going to ask you to draw your remarks to a close very shortly. I appreciate there are two of you.

Ms Blowes: Perhaps I will just skip over the NPS except to say that it is clearly a green light for the development of nuclear power stations. I would just like to say something about BANNG. I think that BANNG has done a lot more than the Government to raise the public’s awareness in the Blackwater area about what the Government’s proposals are and also about the storage of waste. Although it is not perfect, the BANNG petition appears to represent the only real effort of large-scale face-to-face consultation in the country. Our findings are going
to surprise the Government, which asserts that existing nuclear communities welcome the prospect of hosting new power stations. The thousands of people approached so far by BANNG have made it clear they do not want a nuclear complex at Bradwell. To conclude, BANNG believes there is no proper and open consultation on the proposal to store highly radioactive nuclear waste on site at Bradwell in the long-term. This storage raises technical, social and ethical issues which can only be addressed through a completely separate public consultation process. The consultation process so far is seriously flawed, the procedures are unbalanced, unfair and do not represent the viewpoints of local communities. There is a complete absence of effort by government to find out what these communities really think about new nuclear build in their areas. Therefore, we conclude that the consultation process should be undertaken.

Either that or the Government should scrap what

Q555 Dr Whitehead: Thank you very much. Perhaps I could make clear to Mr Lanyon, Ms Blowers and Mr Turner, and, indeed, to all our witnesses this afternoon, should you consider that there is anything you really wanted to say but did not have time to say it, or were not able to say it, or there is information in addition to the submissions you have made to the Committee, the Committee would welcome any further written material that you may want to provide.

Ms Blowers: Thank you very much.

Q556 Sir Robert Smith: Could I raise some specific questions with Mr Turner about the earthquake. When was it roughly?

Mr Turner: It was 1884, so it is a long time ago, but I believe it is calculated to have been somewhere in the order of 5.6.

Q557 Sir Robert Smith: It has not been addressed at all.

Mr Turner: No. If it has, it has been kept secret.

Q558 Mr Weir: Mr Lanyon and Mr Turner, like other witnesses, both of you have raised concerns about the consultation process. Could you tell me what period of notice you were given of the consultation date but no venue. When we ran the meeting there was a question raised that most people did not know about it except on the initiative of a local newspaper reporter who actually put a notice about the meeting in that paper, which is widely circulated in our particular area anyway, but when it was asked how many people had received a leaflet after this claim of over 11,000 being distributed, only three people out of, I think, 58 put their hands up—that is all. There were claimed to have been adverts put in other local papers in Colchester and elsewhere, but there was no evidence that people had reacted to that. Also, I should point out that the consultation in West Mersea was conducted on a working day in the early afternoon. People who are working had to take time off or miss it. People are very sceptical about the whole process because of the apparent dishonesty of what we are being told about how we are supposed to have been involved and yet it is almost a secret.

Q559 Mr Weir: Mr Lanyon.

Mr Lanyon: I no longer live close enough to Sizewell myself to have been in the position to receive any of the leaflets, but I have not been able to find anyone who has received any of the leaflets. You are right, it was in the local newspaper. It was in the East Anglian Daily Times, which is the area newspaper. I do not think it was on any radio programme. I have not heard it, but the thing that did impress me was that the great bulk of the people that did go to the meeting were those who probably were informed by us after we got it through the Internet. The general complaint is, “We do not look at the Internet; so we did not know about it until the last moment.” As to when we first heard about it, I heard about it about a fortnight before at the start of the last week in November, and it was on 3, 4 and 5 December, but that was through the networking NGOs I belong to. I do not remember exactly when DECC announced it, but I could find out for you, and I certainly will.

Ms Blowers: Would you mind if I just told you what happened to me at Maldon? The DECC exhibition was being held in the town hall there on 11 December. I was standing outside in the freezing cold collecting signatures for the BANNG petition, and almost everyone I approached knew absolutely nothing about the exhibition or about the public meeting that was due to take place in Maldon the next day. In the interests of openness and democracy, I directed people to the exhibition. I arrived at the exhibition just before half past ten originally and I was clocked in as the first person to appear, and it had started at 8.30. My husband followed shortly after; he was the second. I think there was quite a lull until I cottoned on that people did not know about it and sent them into the exhibition.

Mr Lanyon: Could I add that one of the great troubles was that it was in the run-up to Christmas, and it is not the sort of time that people are going to get involved in things like this when they are already
disposed to thinking it is a done deal already. There are just too many consultations going on and people have become fed up with them.

**Q560 Dr Whitehead:** On a slightly different topic, how far above sea level is the Bradwell site? Mr Turner and Ms Blowers, you mentioned in your evidence that it is a low-lying site.

**Mr Turner:** It is.

**Q561 Dr Whitehead:** Are you aware of any work that has been done by Essex County Council on coastal protection or policy for future coastal management relating to that site or its environment?

**Mr Turner:** They admit that work will be needed to protect it. In actual fact, if I can find it (and it is in our report), there is one of the stupidest statements that I have ever come across regarding the site. The Environment Agency said this, “It is potentially reasonable to conclude that a nuclear power station could potentially be protected against flood risks throughout its lifetime.” The trouble is nobody knows what the sea level rise is going to be. That seems to be an unreasonable statement to claim as something that should be relied on. To go back to your question, I have not got the figures in front of me. I will have them in my volumes of information. It is certainly one of the lowest-lying sites. There is only a small part of it which is in flood level two, the rest is all in flood level three.

**Ms Blowers:** One of the problems too is that projections of sea level rises only go up to about the next 100 years, if that, and, as you know, there is a proposal to store highly radioactive spent fuel on sites for 160 years, or even longer. Of course, no-one has any idea what will be happening then.

**Mr Lanyon:** May I add to that, please? In EN6 on page 53 there is a statement that it is not practicable to consider beyond 2100 at this stage about the defences against sea level rise and flood risk, and, as Varrie Blowers says, the station, or the waste store at least, is likely to be there close on 2200. If you take it from 2025 and go on for 160 years you get very close to that. It is bad enough that we are being asked to cope with a waste store there for 100 years when, as you know, the nuclear industry has lots of money to throw at everything. We can envisage the Bradwell site ending up as an island and also that the amount of money which is going to be there to let the water out and in, and so that will be the first thing to go if the sea level rises. As you know, perfectly well, every time the International Panel on Climate Change reports it gets worse and worse, and the only certainty about this is that it is going to be a darned sight worse than we think already.

**Ms Blowers:** I would say it is possible to protect anything if you throw enough money at it, and, as we know, the nuclear industry has lots of money to throw at everything. We can envisage the Bradwell site ending up as an island and also that the amount of protection that will be required for that will have quite a devastating effect on the rest of the coastline.

**Mr Turner:** We are a bit puzzled as to how this will be funded. If an operator is operating his power station and subsequently decommissioning it, I can understand he would be expected to pay for that, but if that waste store has to be defended, let us say, for another 100 years beyond against who knows what risk, how is that funded? Who pays for that? The taxpayer, I suppose, against who knows what expense.

**Q563 Sir Robert Smith:** Nuclear companies have gone bust in the past.

**Mr Turner:** In this case it might be the French Government, might it not? I do not think they will cough up!

**Ms Blowers:** EDF is in dire straits apparently.

**Mr Lanyon:** By engineering, if you oppose the sea’s energy in one place, that energy has to go somewhere. It will merely deflect it up and down the coast, and up the coast you have got Minsmere, Dunwich, Walberswick and Southwold, down the coast you have got Orford and Aldeburgh. The energy is going to go there, so protecting Sizewell for...
any length of time will damage all these other places. You cannot win; you cannot mitigate those sorts of things.

Mr Turner: I still find it difficult to get my mind round this. If British Government sponsored surveys have said something is achievable economically to a potential site operator and those predictions prove to be at fault and, therefore, the site operator finds himself investing far more into protection, who would be liable then? The operator might legitimately say, “You told me this was defendable and actually it is not.” Who does it then?

Dr Whitehead: I think that is an interesting question. I am conscious that we are running out of time this evening.

Judy Mallaber: I am sure you have already covered the question as to whether the groups concerned are opposed to nuclear power in principle or whether it is specifically about the particular proposals and the specific sites. I do apologise for not having been able to be here earlier. I am sorry to have missed the session.

Q564 Dr Whitehead: I think we have received evidence that by no means all the members of such organisations are necessarily to be regarded as anti-nuclear power but have made representations about these particular sites. That is my understanding.

Mr Lanyon: We were formed as a consequence of the Chernobyl disaster to do everything we could to make sure it could not happen at Sizewell, and we have been going for 24 years.

Q565 Dr Whitehead: I think we will have to end our discussions at that a point. Thank you very much, Mr Lanyon, Ms Blowers and Mr Turner, for your evidence this afternoon and thank you also to all the witnesses who I know have travelled very considerable distances to be here today. We are grateful for your evidence and, I repeat my suggestion that, should you have any further information that you wish this Committee to have drawn to its attention, it will be very much welcomed by us in the course of our inquiry.

Ms Blowers: Thank you very much for giving us the opportunity to come here.
Wednesday 3 February 2010 (morning)

Members present:

Mr David Anderson
Colin Challen
Charles Hendry
Miss Julie Kirkbride
Judy Mallaber
Paddy Tipping

John Robertson
Sir Robert Smith
Dr Desmond Turner
Mr Mike Weir
Dr Alan Whitehead

In the absence of the Chairman, Paddy Tipping was called to the Chair

Witnesses: Mr David Brock, Chair of the Law Society’s Planning and Environmental Law Committee, and Mr Timothy Corner QC, Chair of the Planning and Environment Bar Association, gave evidence.

Q566 Paddy Tipping: I extend a warm welcome to David Brock, Chair of the Law Society’s Planning and Environmental Law Committee, and Timothy Corner, Chair of the Planning and Environment Bar Association. Thank you for the evidence you have already submitted. I start with the NPSs that have been published. Broadly, are they the kinds of documents that you believe the government should adopt?

Mr Brock: You have asked a major question. In order to decide whether or not you want to adopt them you need a complete assessment of everything in them and take account of all the evidence you receive. I have not done that exercise. The way lawyers work is that if somebody asks a question they will look at it.

Q567 Paddy Tipping: And send the bill!

Mr Brock: There’s that as well. Indeed I do not believe that I and other members of the Law Society’s Planning and Environmental Law Committee would have drafted them like this and we have some concerns about the level of detail and their range.

Mr Corner: Thank you for the question. The NPSs are far-reaching and will have a substantial influence on what the IPC does and therefore on the provision of all sorts of infrastructure. For example, in relation to those you are considering this morning we are told that, first, the IPC does not need to consider the relative advantages of one technology over another and, second, that nuclear power should be free to contribute as much as possible to a total estimated need of 25 GW. It is not for me to comment on whether or not they are a good idea; that is not in a lawyer’s area, but they are fairly bold propositions. Subject to one point to which I shall return in a minute, provided the proper consultation process has taken place and there is evidence to support the bold propositions contained in the NPSs in principle there is no reason why government should not adopt them, but they are quite large provisos and the evidence is not set out in the documents. Maybe there is no need for it to be set out, but there is a lot to examine.

Q568 Paddy Tipping: If you two gentlemen were members of the IPC—it is quite possible that at some point in future you could be so appointed—would you say there was sufficient advice and guidance in these documents?

Mr Corner: Broadly, there is sufficient advice, but if I were a member of the IPC I would take the view that there was a heck of a lot of work I needed to do to examine any infrastructure proposals that came my way; in other words, the government has set out fairly clearly the direction in which it wants to go. In my view in the end that is a matter for government and it is entitled to make policy, but there is a vast examination of each infrastructure proposal, for example in relation to the site-specific proposals. All government has done is set out potential sites.

Mr Brock: If I were a member of the IPC I would be somewhat perplexed by this because there is not a clear statement of particular policies. The way it is often done in planning is to use a different typeface or to say that this is the policy and here is some explanatory material. That approach does not seem to have been taken. It is quite difficult to disentangle the argument and background from policy. We also have concerns that in going much further than a simple statement of policy some confusion or difficulties might be stored up down the line.

Q569 Mr Anderson: In your note to us you raise concerns about consultation and say in effect there is a democratic deficit. Can you expand on that?

Mr Brock: The IPC is an appointed body. I believe it must give a report each year to the Secretary of State which he or she lays before Parliament. That is the extent of the democratic accountability. In this country customarily the major decisions that the IPC is to consider are made by democratically, accountable bodies but on this occasion we have chosen not to do so. Therefore, these national policy statements and the parliamentary process in which we are engaged including yours are the only obvious democratically accountable parts of the process. Obviously, you discharge your job seriously and diligently but you do have a major task on your hands particularly when you have a location-specific NPS which is EN-6. Does that help you understand what we mean by “democratic deficit”? 
Q570 Mr Anderson: It does to a certain extent, but there is also the question to be reached democratically within this House whether or not we need this to keep the lights on in this country and that is supported by the people of this country. To some extent is that not part and parcel of the democratic debate and is that going to happen in what we are doing here?

Mr Brock: The democratic process so far has chosen to put the Act onto the statute book and we have the system that we have here. I do not impugn any of that whatsoever, but one must recognise that the opportunity for input by democratically elected bodies is here and across the road rather than in the engagement one gets with a public inquiry.

Mr Corner: From my perspective perhaps I may give an answer to what is behind your question. We hope we have expressed in the paper we have submitted the view that we cannot object—we certainly do not—to the setting of national policy by government with the assistance of tribunals and committees like this because that is what Parliament is for. It seems to me that is entirely proper and appropriate. I welcome the fact that national policy to guide the IPC is being set by government because hopefully it will make infrastructure procedures more expeditious. That is what is behind it. My main concern is how site-specific matters are considered. It is quite difficult for the detail on the specific sites to be considered and determined as part of the NPS process. I realise government is not saying that it is determining the specific sites at this stage, but the NPSs and what they say about specific sites will have a great influence before the IPC. I simply say that the IPC needs to be conscious of the level of examination that has been possible at this level and it will need to do more.

Q571 Mr Anderson: Do you believe that the consultation process now going on fits the government’s own guidelines on consultation?

Mr Corner: It is very difficult to say because the government’s guidelines are extremely general. The consultation process must follow the statute and regulations. Obviously, if it has done that in principle it is appropriate, but that of itself would not necessarily stop the courts from intervening if it was decided that the process was not appropriate having regard to the importance of the subject-matter.

Q572 Paddy Tipping: How high would you rate the possibility of judicial review?

Mr Corner: I am not unwilling to answer the question but I could not say because I do not know the details of the consultation process that has taken place, for example in relation to all the various sites. Having read some of the transcripts of your proceedings I am aware that concerns have been raised about at least one process in relation to a particular site. I do not know the details of that and therefore it would be inappropriate at least for me to seek to predict whether or not judicial review proceedings would take place.

Mr Brock: I recognise my colleague’s caution. Obviously, this is a very controversial and emotive issue. I would have thought it almost inevitable that somebody would have a go using judicial review. That is one’s commonsense view of things. I suspect your next question will be whether or not we believe it will be a successful judicial review. That is much more difficult to predict because the evidence is not available. I do not know whether you want to go on and look at the stuff which has appeared in the press about the consultation difficulties.

Q573 Colin Challen: Perhaps we can explore what “democratic deficit” really means. It is a term loosely defined and I suppose is in the hands of whoever uses it. It has no legal definition. Perhaps we can look in greater depth at what the legal problems may be once these NPSs are clearly established and are in operation. For example, as we have seen in the past there will be people who take direct action against developments. Will they have a leg to stand on? Will the courts simply refer to the intent of the government and the legislation and what is clear in all the debates we have had?

Mr Brock: It is more a matter of how one sees these things working out in reality. The test for a successful system which is dealing with opposing views, (it might be a court where you have a plaintiff and defendant; it might be a public inquiry where people put their views) but this leads to a process of determination where eventually we decide we can have power lines or gas generation I do not make a point that is specific to these NPSs; it is a general one, but your question is, rightly, about what we mean by “democratic deficit”—the test in all of those situations is whether the person whose view is not upheld is content, maybe reluctantly content. If not, depending on how important it is to the individual and perhaps if there are many other people who feel the same way, they may want to go off and take other action. The greater the democratic engagement the more likely it is that people will be reluctantly content if the decision goes against what they want.

Mr Corner: I am not sure I find the expression “democratic deficit” one that takes me too far because, as you rightly say, it does not have a legal definition. I think I know what people mean when they refer to it, but they will probably judge whether there is what they might call a democratic deficit by looking at the combination of the process that led to the adoption of the national policy statements and the processes followed by the IPC when it comes to deal with specific projects. I have already mentioned that in relation to specific projects it is crucial that the IPC is prepared to examine in detail by whatever means are open to it the merits or demerits of specific proposals. First, it must be seen to do that. Second, with regard to the question whether alternatives to a particular proposition or proposal are feasible, although government has said the IPC will not need to consider the relative advantages of one technology over another I ask myself the question: if for example the IPC had before it a proposal for what was seen to be a nuclear power station with
high impacts of one kind or another would it really be able to refuse to look at alternative proposals for another type of power generation which, if it were submitted, would have fewer effects? I am not sure I know the answer to that, but that is a question in my mind.

**Q574 Colin Challen:** As I understand it, under existing planning law the presumption is in favour of development. As exemplified by the fact that if an application is refused the developer can appeal but if the application is approved the objectors cannot. Do these NPSs simply build on that tradition or deviate from it in any way? Are there any compensations for the democratic deficit in that presumption in these NPSs which can then be presented as a fairer way of doing things when obviously local people on site-specific applications will feel somewhat left out?

**Mr Corner:** I am not sure there is a presumption in favour of the grant of planning permission under the development control system. For a long time there was such a presumption written into national policy, but I would say that that no longer exists. You might say that in a sense there is a presumption by reason of the fact that developers have the right to appeal against the refusal of planning permission. Third parties do not have the right to appeal against its grant but they can go to the courts and seek judicial review. As far as concern local people in relation to the IPC they will want to know that whatever the NPSs say the IPC is looking at the specifics in great detail.

**Mr Brock:** The presumption in favour of the grant of planning permission for development arises because of the way in which we operate the planning system. In 1947 when the first Town and Country Planning Act was introduced development rights were nationalised. They were taken away from the land owner and the state adopted them and said that in order to develop one had to seek permission from the state. That was accompanied by a policy which included a presumption in favour of development. It was the post-war period and there was a need to regenerate the economy. As my colleague says, that has changed hugely over the years. There was a big change with the introduction of the Planning and Compensation Act 1991 which provided that decisions had to be taken in accordance with the development plan unless material considerations indicated otherwise. The plan was supposed to say that there could be development here but not there. If one had a plan which said that one did not have it there rather than here one lost the presumption in favour of development. Therefore, today one says that there has been no expectation whatsoever that this particular site has been given a major task and if you decide to recommend to the House a debate that is good. There is less likely to be difficulty the more people are engaged. One wants ownership of decisions, does one not?

**Q575 Charles Hendry:** I am keen to understand more clearly how serious a problem you believe is the lack of consultation or democratic deficit. Is it of sufficient magnitude that it could undermine the integrity of the NPSs? If you are concerned about what can be done at this stage? For example, we can make a recommendation that there should be a debate in the House in which all Members of Parliament can take part but there can be no vote on it. If there was a vote on it would it provide a greater element of democratic accountability because everybody’s constituency representative would have had an opportunity to vote? Would that start to rectify the imbalance?

**Mr Brock:** The system is as it is and it encapsulates the democratic deficit as it is. To my mind, one lessens the problem by giving people a fair hearing. It is about evidence-gathering and talking and listening to people. Enormous consultation has gone on in relation to these things and there will be more in relation to all the proposals when they go forward, but we have to remember that the IPC’s decision must be taken in accordance with these matters unless certain unlikely circumstances apply. Therefore, the decision is being taken in the process in which we are engaged at the moment. You can approach it only in the way you have, but you have been given a major task and if you decide to recommend to the House a debate that is good. There is less likely to be difficulty the more people are engaged. One wants ownership of decisions, does one not?

**Q576 Charles Hendry:** Mr Corner, you talked of your particular concern in relation to spatial elements. We have some sites where people have known for years they are likely to be the subject of a proposal for a new nuclear facility because it is on an existing site. There are two greenfield sites where there has been no expectation whatsoever that this will happen. Do you draw a distinction in relation to the way those have been handled? Is there a greater democratic deficit with a greenfield site proposal rather than a proposed development on an existing nuclear site?

**Mr Corner:** I do not want to assert that there is a democratic deficit; it is not a phrase I wish to use. You talk of consultation or democratic deficit. Is it of clear how serious a problem you believe is the lack of consultation or democratic deficit? If you are concerned about what can be done at this stage? For example, we can make a recommendation that there should be a debate in the House in which all Members of Parliament can take part but there can be no vote on it. If there was a vote on it would it provide a greater element of democratic accountability because everybody’s constituency representative would have had an opportunity to vote? Would that start to rectify the imbalance?

**Q577 Charles Hendry:** Should there be a greater level of consultation in relation to greenfield sites where there is no expectation that they will be selected?

**Mr Corner:** In principle if there has been no prior knowledge or discussion of a particular site for government to reach a conclusion that that site has potential it may well require more steps to be taken now than in relation to a site that has been in the public domain and debated for many years. Frankly, however, I suspect that it would be unwise for government to apply a lesser consultation process to any one site that is in the frame at this stage than any other because it would be perceived by those involved in a site that might have been debated for years that there was a deficit in terms of the process for that site.
Q578 Mr Weir: To follow up what Mr Corner said about judicial review, in relation to other non-nuclear NPS sites one of the complaints we have received from many witnesses is that it is very difficult to get local people involved in looking at the NPS at this stage because they are not site-specific. Is there an argument that because of that they might be more susceptible to judicial review at a later stage than the site-specific proposals given local people's inability to become involved because they did not know the site might be considered?  
Mr Corner: I am not sure I foresee that. If an NPS is not site-specific when infrastructure proposals are made the IPC is not trammelled by something said at NPS level on specific sites and therefore its determination is freer, if you like. When an NPS is site-specific the IPC is to a degree trammelled and restricted in its approach because of the provisions of the Act.

Q579 Mr Weir: But part of the consultation process is to consult the public. The public could argue that it had not been consulted because it had no idea there was a proposal for a development in their particular area.  
Mr Corner: That is conceivable.

Q580 Mr Weir: It will not be a strong argument?  
Mr Corner: I do not say that no one could succeed on it, but sitting here it is not one that I regard as necessarily compelling.

Q581 John Robertson: Do you believe the government when thinking about nuclear energy was tuned into the fact that this was a very sensitive subject and the public in many ways was changing its opinion about whether nuclear was good or bad and perhaps it has taken its eye off the ball on other energy sources that may become just as sensitive as nuclear ones?  
Mr Corner: I do not know; it may be. When I read through the draft NPSs I concentrated on the nuclear ones and therefore maybe I am guilty of the point you raise. I do not know why the government has not taken the site-specific approach in relation to other matters. It may be something it could have done but decided not to do so for all sorts of reasons. As to the nuclear sites, it has gone down the line it has with regard to specific sites. I see no reason in principle why government should not identify potential sites in a draft nuclear NPS provided the IPC is then free to examine very closely despite identification of the potential any particular proposal because it will have to do so.

Q582 Sir Robert Smith: When it is so site-specific in its guidelines you have already touched on the danger that the IPC really does not have a role in determining the application. Do you want to expand on that?  
Mr Corner: In short, under the Planning Act where there is an NPS it must be followed save in exceptional circumstances. That will apply to the identification of a site as a potential one in the NPS, but as I understand it what government has been unable to do at this stage—you may think it perfectly reasonable and understandable—is conduct a detailed tribunal examination of the merits of a particular site, although it has consulted the Environment Agency and other government agencies. But it is crucial that when the IPC is seized of a particular proposal, despite section 104 of the Planning Act, it says to itself that it will look at the extent to which the site has been subject to detailed examination at the NPS stage and take it into account when it decides how to apply the section. For example, as I have said in the paper the IPC may need to examine and question, as you are questioning me, expert evidence about all sorts of aspects of a particular proposal: flooding, landscape and ecological impacts. As I understand it, there has not been a tribunal process at this stage. All government has done is look at the potential, which is fine, but the IPC will need to bear that very much in mind and be prepared to do it itself.

Q583 Sir Robert Smith: Did you look at the strategic siting assessment process?  
Mr Corner: I looked at it; I do not say I am in command of every detail.

Q584 Sir Robert Smith: You do not believe that covers it?  
Mr Corner: No. The strategic appraisal process covers matters at a strategic level; in other words, it does not necessarily go into all the detail that will need to be examined. Furthermore, in that process, with which I and my colleague are very familiar in the context of planning applications already, it is one thing for an expert to make an assertion in a report; it is quite another for the propositions in that report to stand scrutiny by questioning. 
Mr Brock: You raise a very important issue. My colleague has gone further than I have in looking at the site strategic assessment. I have not looked at it although I know it exists. I have no reason to disagree with anything my colleague says about it. One must look at this on the basis that when one considers EN-6 there is a clear summary of government policy which says that all 10 sites in the NPS are needed. Therefore, 10 are nominated and we are told that 10 are needed. We then come to section 104 which tells the IPC how to take its decision. It must have regard to the NPS, a local impact report, matters prescribed and “any other matters which the panel or council thinks are both important and relevant to the decision.” It then tells one that the panel must decide the application in accordance with the NPS except to the extent that the next few subsections might apply. Those are about unlawfulness, which is unlikely, but the crucial one is subsection (7): “If the panel or the council is satisfied that the adverse impact of the proposed development would outweigh the benefits.” What we are saying to the IPC is that it should take into account a lot of things here. It has to examine all these things and listen to the evidence and delve, but at the end of the day it appears to say that it decides in accordance with the NPS. The government says that it has put forward only 10 sites and it needs
Mr Brock: you believe that puts us at a slight disadvantage?

submissions from the public to the government. Do dig into these documents before the end of the potential replacement. We have had to start our own end to this Committee and a hiatus before there is a that, subject to an emergency powers Act, there is

explanation and I can see why you do it that way.

Q588 John Robertson: We are conscious of the fact that, subject to an emergency powers Act, there is bound to be a general election soon which means an end to this Committee and a hiatus before there is a potential replacement. We have had to start our own dig into these documents before the end of the submissions from the public to the government. Do you believe that puts us at a slight disadvantage?

Mr Brock: You have called for evidence which seems to have reached a good number of significant ears. I go back to Mr Weir’s point about the non-site-specific proposals. People are not really engaging with this stuff. Does it put you at a disadvantage?

You have the available evidence; you can just sift through it to go in behind the work the government had done in coming up with this?

Mr Brock: Yes, absolutely.

Q587 Sir Robert Smith: It could start to weigh up the arguments?

Mr Corner: Yes. The result is that it may be drawn willy-nilly into some consideration of what we might regard as national policy. For example, a few minutes ago I asked what the IPC would do if it faced, let us say, a nuclear power station that it was said had highly detrimental impacts and along came objectors with another proposal for generating 5 GW. It might not be a nuclear power station but it might be claimed to have fewer environmental impacts. I say that entirely without criticism of the IPC or the propriety of its process, but it will be quite a burden.

Q589 Dr Turner: One of the functions of the NPSs is to make a clear statement of government policy. Do you believe that as drafted they do that, particularly the overarching statement?

Mr Brock: No. There is a lot of background and helpful information and summaries but I find it difficult to distil where the policy bits are.

Mr Corner: It seems to me you can tell what the policy is. As far as I am concerned it is for government to set policy having consulted. I do not set myself up as a policymaker. I am not, but I can tell what the policy is. The real question is whether there is good evidence to support it.

Q590 Dr Turner: Do you believe it has sufficiently addressed the question of need so that the IPC does not, for instance, have to spend months agonising over the need for nuclear power stations, as the Sizewell inquiry did? If the NPS is sufficiently clearly stated it can take need as read and proceed with other considerations.

Do you believe it does that adequately?

Mr Corner: That is the objective. Sir Frank Layfield who chaired the Sizewell inquiry was my first head of chambers. I remember his talking about it when it was going on. I can quite see why one would want to avoid a repetition of that. Do I believe it achieves the objective? It is tolerably clear but I am not sure that the IPC will be able to avoid looking at questions of need when confronted with a proposal which, for example, has detrimental impacts on a European site protected by the habitat regulations because it raises questions of what the alternatives are. I would not say that government has failed to set out fairly clearly what it is seeking to do; in other words, there is an assumed need for nuclear power stations, but that does not mean it will be able to stop debates about those matters before the IPC.

Q591 Dr Turner: The point of view of the Law Society appears to be that “the NPSs are meant to be statements of policy. However the drafts seem to explain quite a lot of law and then compound the difficulty by not actually stating that this is what they are doing.” Can you cite some examples of that?

Mr Brock: If one looks at EN-1, good examples are paragraphs 4.1.1, 4.3.1, 4.4.2 and 4.4.3. I shall take you to some of those, if I may. In EN-6 paragraphs 342 and 343 may give rise to an issue. EN-1, paragraph 4.1.1, is the introduction to how the IPC is to go about its assessment. It says things like: “Given the need for energy infrastructure, if the development proposal is in accordance with this NPS and any relevant technology-specific NPS then the IPC should operate on the basis that consent should be given, except to the extent that any of the exceptions in the Planning Act apply.” That is a completely correct statement of the law, but I do not see why it needs to be put in there and as time goes on either the law will be changed specifically or we shall discover that nuances and interpretations are placed upon it by the courts. Therefore, I question why it is necessary to do that particularly when it is said one must decide this matter in accordance with the words here. It does not get anybody anywhere in
particular. When one looks at EN-6, paragraph 3.4.2 is about the interaction between the decision of the IPC and the regulatory activities of other agencies such as the Environment Agency, the NII and so on. It states: “In respect of regulatory activities conducted by other agencies the IPC should make it decisions in relation to development consent applications on the basis that the relevant licensing and permitting regimes will be properly applied and enforced. It does not need to consider the matters that are within the remit of the nuclear regulators and it should not delay a decision on whether or not to grant consent until completion of the licensing or permitting process.” That is a highly developed area of the law on which there are a lot of nuances and some apparently conflicting decisions. That goes in the right direction but if somebody took that and worked on it without going back to the cases it would lead to difficulties. The existence of other issues that are controlled and regulated by other organisations is material to the decision, and the question is: how much materiality does one give them? Does one offset it by saying that is an efficient regulator which will deal with it? There are some dangers in relation to those things.

Q592 Dr Turner: What changes would you recommend to get round your objections?

Mr Brock: Let us have clear statements of what is policy and what is guidance and intended to be helpful background. That is the basic division that I want to see in there.

Q593 Dr Turner: It is a question for the barristers. In relation to the ports NPSs, not one of the energy NPSs, Morag Ellis QC gave evidence on behalf of your association and questioned the evidence base for aspects of policy in the document, raising the possibility of a legal challenge to the NPS on that basis. Is that your view of the energy NPSs as well? Are they vulnerable to judicial review?

Mr Corner: I do not believe that the fact the energy NPSs contain policy as to need of itself makes them vulnerable to judicial review. I do not know the ports NPS in detail but, as I understand it, there are perceived difficulties in the way in which need is expressed in that statement. It seems to me that the way need is expressed in the energy NPSs is fairly bald. One just hopes there is evidence to support those conclusions, but of itself government is entitled to set out policy in a strong, bald way without that leading to a legal review.

Q594 Dr Turner: Do you suggest that the statement of need would be helped by supporting evidence in the NPS itself?

Mr Corner: It would certainly give the statements of need a degree of gravity and feeling that there is support for what is said in there.

Q595 Dr Whitehead: Mr Brock, in your evidence you draw the conclusion that the set up of NPSs is such that they should trump all other planning policies. Is it right to put it as strongly as that?

Mr Brock: The NPSs are conceived to be guidance to the IPC on how to take its decisions on national infrastructure projects, but we see in them statements that they are policies to be applied by planning authorities in applications made to them. For example, if one had a 49 MW wind farm proposal in an area which hitherto had been the subject of a policy as set out in all its properly adopted and up-to-date documents, that that was not an appropriate development, that 49 MW wind farm would now also be considered against the background of these policies. Those are not just policies that apply to a 50 MW development that must go to the IPC but the government is explicitly stating that these policies are to be applied to developments that are below the thresholds. No doubt it is also saying they should be applied to proposals which will be affected by developments coming forward that are above the threshold. As a statement of planning philosophy and the way in which the system is written in planning law it is quite obvious that these matters are material to all planning applications that come forward. It seems to us that what this is trying to say is that for schemes below the threshold one should use it. Does it trump it? That is a slightly emotive word, but it is a very important consideration because it is up to date; it is the latest word from government on how one goes about deciding planning applications.

Q596 Dr Whitehead: I am sure you are aware of the letter from the chief planner of DCLG to local authorities saying that they should take account of the NPSs in their planning activities.

Mr Brock: Yes.

Q597 Dr Whitehead: How does that square with the idea of trumping, or do you think “taking account” rather waters down that concept?

Mr Brock: It seems to me Mr Quartermain makes the very same point. He says in paragraph 15 of annex A: “The designation of NPS should not delay the process of preparing development plans, but where it is not practical for changes to be made to existing plans to take account of a policy in an NPS the process of preparing development plans, but where it is not practical for changes to be made to emerging plans to take account of a policy in an NPS LPAs and responsible regional authorities should consider the steps they will need to take to address any issues arising from emerging policy throughout early plan review. Please change your plans as quickly as you possibly can to comply with this.” In paragraph 16 he goes on to say: “In cases where development plans have not yet been updated to take account of a particular NPS the NPS is likely to be a material consideration which the LPA and Secretary of State on appeal or call in will have to take into account when determining the planning applications.” It is saying this is important.

Q598 Dr Whitehead: Therefore, do you believe that “take account of” is rather an understatement in terms of the purport of the advice note?

Mr Brock: It is a neutral statement. This is the up-to-date government policy and it says in terms that planning authorities should apply these policies.
Q599 Dr Whitehead: As far as concern nuclear sites the guidance indicates that in relation to the 10 sites described in the NPSs the guidance should prevail if there is a conflict with local policy. One of the issues about the nuclear NPS is that the sites are defined but sites have hinterland. To what extent do you consider that that injunction, for example, would suggest to the local authority that if it did not like a site very much and there was an access road leading to it should nevertheless in order to make the site work ensure that planning facilitated access to the site, for example? What sort of impact and additional effects do you believe that injunction could have where there is a site-specific arrangement as far as an NPS is concerned?

Mr Brock: It will be very important. Clearly, one cannot have a position where one has allowed the new facility to go ahead but one cannot get to it; the roads have to go along with it. It is absolutely right that this has materiality in relation to other decisions. The question is: what is the level of materiality? If the answer is that one cannot get to the power station unless the road is there—it will not happen—that is incredibly important, is it not? One must give that a lot of weight in the non-IPC decision.

Mr Corner: Let us say a local authority is opposed to the site. Will it really amend its development plan to provide for the access road which you mentioned? Is it not more likely that it will simply say that government guidance says that where there is a conflict the NPS shall prevail and it will leave it to the IPC? Why not?

Mr Brock: Or the Secretary of State.

Q600 Dr Whitehead: On that particular point, what is the jurisdiction of the IPC as to matters beyond its remit in terms of decision-making? Does it then fall back on the guidance of which local authorities should take account?

Mr Corner: Or the Secretary of State on appeal. If a planning application is made but it is not supported by the development plan and it is necessary for the relevant site to function but it is outside the ambit of the application that comes before the IPC I would have thought the Secretary of State would be likely to allow it on appeal.

Q601 Sir Robert Smith: Let us look at the interaction the other way round. When the IPC is looking at the big picture should it be aware of the footprint of that development beyond the actual application; in other words, the orientation of the site? Should it delve into issues such as whether there may be a better way to get access even though it is not part of the application?

Mr Corner: I would have thought so. The IPC is apparently dealing with matters at a fairly high level but in a way it is not; it is dealing with matters at a very specific, detailed level and it will have no credence with the public if it dismisses the sorts of points you are talking about as being unimportant. The sorts of points you are talking about can be very important.

Q602 Paddy Tipping: It is clear that there is a lot of work for you in this.

Mr Brock: Perhaps we may raise one other point on the consultation side. I refer to the report that appeared in *Planning* on 22 January which was simply about the fact that there appeared to be difficulty over some of the consultation. Perhaps I may run through what the process is. In section 5(4) it is provided that, “The national policy statement may be designated only if the consultation and publicity requirements have been met.” Those requirements are set out in section 7. Where there is a site-specific proposal the Secretary of State must consult under section 7(5) by taking appropriate steps, which then means going off to consult with neighbouring local authorities about what they should be. One of the points about the consultation seems to be doubt as to whether or not that has been done completely. I have not seen all the evidence in relation to it. I was asked about it and I am on record as saying that on its face the statutory requirements have not been complied with. We come back to the issue of embracing people and ensuring that the loser is content, albeit perhaps reluctantly. The Committee has asked a number of questions about judicial review. It seems to me that if we are trying to get the policy in place in a short timeframe that is something that must be addressed and considered. It is quite a difficult matter. It is not for you to consider what it should do.

Q603 Sir Robert Smith: Is there a short-term remedy?

Mr Brock: The short-term remedy on consultation is to go back and ask and sort it out.

Q604 Sir Robert Smith: If tomorrow the government embraces that concern perhaps it can remedy the problem?

Mr Brock: Yes. Given the way the Act is written judicial review challenges cannot be commenced until the end of the process. One has to wait until the Secretary of State has designated and published the statement which is several months down the line. One can then commence the judicial review process which could go to the Supreme Court.

Paddy Tipping: Thank you both very much.
**Witnesses:** Dr Tony Grayling, Head of Climate Change and Sustainable Communities, and Dr Joe McHugh, Head of Radioactive Substances Regulation, Environment Agency, Mr Rob Cooke, Director of Environmental Advice and Analysis, and Ms Rosie Manise, Principal Specialist, Energy & Climate Change, Natural England, gave evidence.

Q605 Paddy Tipping: We welcome Dr McHugh and Dr Grayling from the Environment Agency and Mr Cooke and Ms Manise from Natural England. You followed the earlier session. I saw you nodding and frowning at various stages. You have looked at these NPSs. Do you believe that broadly they are in shape for the government to adopt them?

**Dr Grayling:** Yes, broadly but with some room for improvement. We are pleased to see the national policy statements on energy set within the context of the UK low carbon transition plan which is extremely important. We welcome the fact it addresses issues around adaptation to climate change as well and flood risk and coastal change. Water issues are all dealt with in a reasonable way, but we should like to see some strengthening of the national policy statements. We believe they could give an even stronger steer towards the decarbonisation of the energy system and some of the guidance on how to avoid and mitigate environmental impacts could also be strengthened. Those are our broad views and I am sure you will explore them in greater depth as we proceed.

**Mr Cooke:** We have very similar views. We believe they are a useful statement of government policy with respect to energy developments and we welcome the approach to low carbon/decarbonisation. Some improvements need to be made, particularly on environmental issues and we have detailed them in our submissions. We also believe that there could be a helpful steer in terms of how these relate to spatial planning.

Q606 Paddy Tipping: If you were members of the IPC and had all these documents in front of you would you have sufficient guidance from government?

**Dr Grayling:** I go back to my first answer. In certain respects the guidance could be strengthened. Equally, there will always be issues around the particular the site of a particular application that will need to be considered by the IPC and clearly will not be covered in the national statement. There will be no substitute for a proper environmental impact assessment of the sites concerned and for the evidence to which that gives rise to be taken into account.

Q607 Paddy Tipping: Talk to us a little about the overarching energy policy statement. It is not policy at all, is it, but just a description; it is value free?

**Ms Manise:** It is as you say a description. One of the issues for your inquiry into the NPSs is that they are one small but incredibly important part of a much bigger picture. It is hard to get an entirely rounded view of the provisions for future energy security and mitigation of climate change merely by looking at the NPSs in isolation. The IPC, planning authorities and other stakeholders will need to see the NPSs in the context of the low carbon transition plan, the adaptation programme for the UK Government and the national risk assessments on adaptation which are due out in about a year’s time, together with work we have been particularly pleased to see take place led by DCLG and DECC that looks at capacity assessments of each English region to deliver a variety of renewable and low-carbon forms of energy. One of the reasons we are particularly keen to see that in place is that in an ideal world we would have started all of this process by asking the big question: how does one provide low carbon renewable energy for the nation’s present and future needs while minimising environmental and social impacts? I am sure those questions have been asked and discussed ad nauseam. It would be helpful if there was a covering paper for the NPSs which said this was the question we started with and the NPSs were part of the answer and other parts of the answer would be provided by x, y and z so we had a picture around which to fit all the different parts of the jigsaw puzzle.

Q608 Sir Robert Smith: We have the nuclear NPS which says thou shalt build 10 nuclear power stations on specific sites and the rest of them are non-site-specific. From the point of engaging the public where there is no site-specific element it is very difficult for people to realise that what is now happening means that, if they go through, in several months developments will happen on their doorsteps. How do you believe that the rest of the site-specific planning matters should be dealt with?

**Dr Grayling:** I believe a balance is to be struck between it being site-specific on the one hand as in the case of the nuclear component and non-site-specific on the other. I guess the government’s overall approach to energy policy is that it operates within a market framework and the planning system is to some extent bottom up in the sense of what applicants come forward with in terms of their proposals. That is how the existing system works. One then must look at it on a case-by-case basis to see the impacts at the sites concerned. Would there be merit in making the other NPSs more site-specific? I think it would be an extremely difficult exercise for every technology that may come forward in all parts of the country. Nuclear is perhaps unique in that respect.

Q609 Sir Robert Smith: Do you believe there could be a greater steer? Is there sufficient guidance in there to say that these are sites that provide greater merit in terms of these sorts of developments?

**Dr Grayling:** Over time there could be better guidance. Ms Manise referred to the capacity assessments under way for renewables and other low carbon technologies on a regional basis. The Environment Agency is also involved in those. For example, we are looking at the biomass resources in the South West. There is a case study to see what best use can be made of them and that will have implications for where and what kind of infrastructure is provided. Over time one could build up a better picture to help the IPC and developers in bringing forward applications in the better locations to serve the country’s needs.
Q610 Sir Robert Smith: Turning it the other way round, is the nuclear one too site-specific?

Dr McHugh: I am not quite sure what you mean. Do you mean the development of greenfield sites?

Q611 Sir Robert Smith: The government has constrained the IPC so much by saying we should build 10 stations and here are 10 sites. Is there anything left for the IPC to do?

Dr McHugh: The procedure followed by the government was a nomination processes. It invited what it defined as credible nuclear operators to come forward with sites that could be developed by 2025, so there has been a selection process during that stage. A nomination had to come from a credible nuclear organisation that was operating a nuclear power station somewhere round the world or had an existing power station in the UK. It had to recognise the long lead times for nuclear developments to come into operation before 2025 and the government would probably say it should be as early as possible in that period, recognising the energy gap in which we are likely to find ourselves in a few years' time. Therefore, it says it needs all 10 sites but it is expecting that perhaps at the site-specific project stage some of those sites may not make it through the next stage. That was the thinking behind it. It has looked at some alternative sites which currently do not have nuclear power stations but has turned them down.

Mr Cooke: I agree with Dr Grayling about the significant challenge in making the other NPSs site-specific, but we believe more could be done to indicate the sorts of sites that might be suitable and the criteria to be taken into account. That is something we should like to see in the NPSs.

Q612 Paddy Tipping: Dungeness is not on the list. Do you have strong reservations about that site?

Mr Cooke: Yes, we have. We were asked to give our advice on all the proposed nuclear sites and we did so. We looked at the importance of the sites, what the impacts might be and how they might be either mitigated or compensated and what was potentially and realistically achievable. For all the sites except Dungeness we thought there was some potential to mitigate or compensate for the environmental impacts. At Dungeness we advised that that was not so within a reasonable timescale. Dungeness is a very special place and is the result of 5,000 years' worth of interaction between the sea and land and it is simply not possible to recreate it anywhere else. That was the basis of our advice to DECC.

Q613 Dr Whitehead: Did you also give advice on the question of managed retreat of coastlines and flooding defence with specific reference to the various sites that have made it to the site-specific nuclear NPS?

Mr Cooke: We took account of the existing policy recommendations within shoreline management plans and advised.

Q614 Dr Whitehead: We received evidence that it is easier to defend specific sites than coastline in general. Therefore, the image it conjures up is of a small sandcastle-type nuclear development isolated from the sea with the coast retreating behind it. Was that a consideration in your advice?

Mr Cooke: Yes. Technically, it may be possible to defend small developments. There is a knock-on environmental impact because the sea will wash round behind it. A lot of these sites already have on them nuclear power stations which will require to be defended even when they are decommissioned. Building additional capacity that requires additional defence over time, which does not seem to us to be very sustainable.

Q615 Paddy Tipping: What is the EA's view? You are the coastal experts.

Dr McHugh: Similarly, the site-specific flood defences are matters on which we work very closely with our co-regulator, the Health and Safety Executive. It will not come as a surprise that individual nuclear sites are defended to quite a high standard in terms of safety risks. It is important to join up the site defences with the shoreline management plan. For example, there needs to be access to and from these national infrastructure sites. I believe that at the next stage consideration will need to be given to how the individual site defences join up with local area defences.

Q616 Dr Whitehead: In terms of the non-site-specific NPSs you mentioned the DCLG/DECC project to assess regional capacity. You have suggested that the non-site-specific NPSs may move in that direction. How do you make a distinction between that sort of process almost inevitably becoming increasingly site-specific on those non-nuclear NPSs and the information that may otherwise arise about more general uses of a site or a regional or area's capacity to take particular kinds of developments and service and maintain them?

Ms Manise: I hope I did not give the impression that NPSs would move towards the approach taken in the capacity assessments. What I should have made clearer was that they needed to be seen as part of a whole which would include these regional capacity assessments. The value of the regional capacity assessments is that each English geographic region rather than administrative region has a different profile of opportunities for the generation of both renewable and low carbon energy. For example, I live in the hills of south Shropshire. It is a remote rural area which has great potential for large amounts of micro-generation and community-scale generation. Dr Grayling referred to biomass. It is the sort of area that could accommodate biomass generation because it can draw on municipal and farm waste and convert it into energy in situ. It also has the opportunity to exploit the wind that blows across the south Shropshire hills. That is a very different environmental profile from where I used to live in the middle of Birmingham. Several windmills...
in the middle of Birmingham perhaps would not be entirely appropriate, nor would a large biomass site, but ground-source heat pumps, air-source heat pumps, district-wide renewable heating, or low carbon heating provision would be entirely appropriate for that area. I hope rather than claim to predict that the non-nuclear NPSs will in turn inform the way regions and developers bring forward a wide range of projects and not what would be for me the alternative very unhelpful scenario where English administrative regions are saddled with targets to deliver a certain amount of renewable energy from a specific technology despite particular regions having neither the technical nor environmental capacity so to do.

Q617 Dr Whitehead: But I struggle to conceive how exactly these sorts of considerations fit into the existing planning structure for local development frameworks and the wider regional planning structure and the extent to which, as we have already heard, the NPSs may effectively trump that process and therefore in terms of their decision-making potentially overcome those sorts of considerations that presumably will find their feet, as it were, within the local and regional planning structure?

Ms Manise: My understanding, which I am sure is imperfect, is that local planning authorities will be submitting evidence to the IPC. The IPC can ask for reports from planners. The regional capacity assessments together with the guidance from the non-nuclear NPSs can and should inform the next round of regional and spatial strategies, or whatever name they end up having, and start to shape the debate and incentives and disincentives that may in part adjust the way the market operates in any one particular region. That is why in my earlier comments I was keen to point out that the NPSs need to be seen as part of a much bigger whole. It is immensely difficult to interrogate any one part of what will be the future deployment regime for energy without understanding the read-across to and coherence with the logic of all the other parts in the mixture. To me but perhaps not to others that remains very unclear.

Q619 Dr Turner: Does it worry you that in the absence of such guidance there is a risk of more carbon-intensive generation coming into the system than is desirable in terms of government policy?

Dr Grayling: Yes. I do not believe that is a problem that can be entirely resolved given the way the NPSs are written. It takes us back to what Ms Manise said. There is a wider energy policy picture and we need the right regulatory and fiscal frameworks in place as well as the right planning framework if we are to deliver the sort of energy mix we need to see. The Environment Agency’s view is that the NPSs should be stronger in their drive towards a low carbon economy than they are. They give a broad sense of the mix of new generation capacity one wants to see in 2020 and 2025 at least in the division between renewable and non-renewable generation capacity, but perhaps there is not a sufficiently strong long-term vision. We would like to see the government adopt the advice of the Committee on Climate Change that electricity should be almost fully decarbonised by 2030. We see an absence of any strong statement on the first priority of energy policy being about energy efficiency and using energy well, not wasting it because then one does not need as much new infrastructure as one might otherwise. We think it could give a stronger steer on combined heat and power. There is some encouraging wording on CHP in the national policy statements but it is perhaps not a sufficiently strong steer to the IPC that it should wherever possible require heat and power in new thermal power stations.

Dr McHugh: That introduces a spatial element of planning in relation to the use of the heat.

Dr Grayling: That is quite right. There could be stronger locational guidance in that sense, perhaps something akin to a sequential test whereby developers must show that they have tried every other option before they are allowed not to incorporate CHP.

Q620 Dr Turner: Would it be fair to summarise your views by saying that as drafted at the moment the NPSs leave too much to the market and it would be desirable to have some indication of a hierarchy of desirability of generation technologies?

Dr Grayling: To some extent. I say that it is the whole picture. In a way a criticism of overall energy policy, though iteratively we are perhaps getting there, is that as yet we do not have sufficiently strong regulatory policies and fiscal incentives to be sure that we will deliver alongside what it says in terms of spatial planning policy.

Q621 Dr Turner: Does that not place quite a burden on the IPC? The IPC will have to make some of those judgments in the sense of policy-making decisions as well as planning decisions and yet NPSs explicitly exclude the IPC from considering the carbon impact of individual projects. Do you believe that is consistent?

Dr Grayling: Yes, it is consistent because one could argue that the bigger picture is the responsibility of wider energy policy set by government. It would be very difficult for an IPC to say whether, for example,
an individual development is or is not a breach of the carbon budget. One does not know because the carbon budget is a cumulative one from all developments, both existing and new. To ask the IPC to take that decision puts it in an almost impossible position.

**Q622 Dr Turner:** But in effect it is being invited to take that decision at the moment given the way the NPSs are now set out?

**Ms Manise:** We had a discussion about some of this area yesterday. I entirely agree with everything Dr Grayling has said, particularly the fact that potentially this is still consistent. One of the reasons the energy policy and instruments have been brought forward is that it is an attempt to combat more serious climate change coming from anthropogenic sources. One of the reasons we fear climate change is the havoc it could wreak on all our lives and the functioning of the environment, whether it is farming, food production, water storage, fresh water availability, flood mitigation or anything else. Carbon is not, however, the only factor. It would at best be ironic if in our understandable anxiety to go for the lowest possible carbon mixture in the shortest possible time we inadvertently damaged the health of the underlying environment that provided the ecosystem services and made flood risk higher and harder to capture and keep water or damaged the land’s productivity. Carbon is a very important part of the question but the other impacts that any sort of energy development might have are also significant factors to be weighed in the balance.

**Q623 Dr Turner:** We shall be asking separately about environmental impact which is clearly to what you are referring. In a sense it is a separate issue and so I will not stray into that. Can you tell us briefly what you would like the NPSs to deliver in terms of energy efficiency and demand management?

**Ms Manise:** I shall begin to sound like a broken record. On their own they will not be able to deliver that.

**Q624 Dr Turner:** But they can encourage it?

**Ms Manise:** They should encourage. There is absolutely no evidence to suggest that the UK has harvested the potential gains from energy efficiency that are available so far. There is a lot of learning from international case studies to suggest that different ways of driving, enabling and encouraging energy efficiency have some spectacularly good results. Our record in the UK over the past 20-odd years and to date has not been great. I would not call for an NPS on energy efficiency but I believe that they should give a greater weight to the importance of reducing and managing energy demand so that the need for future capacity is limited wherever possible, whether that is in a covering statement to the overarching energy NPS or it is an amendment to the overarching energy NPS.

**Dr Grayling:** The biggest thing that could be done is in relation to the use of heat, particularly combined heat and power. The NPSs should contain a stronger statement of the government’s overall energy policy in the sense of energy efficiency being the first priority, but within that the specific matter to which the IPC could contribute is to ensure we get as much combined heat and power as possible coming forward from new thermal plant. There is a big locational dimension to that in terms of new plant being sited near potential or actual heat customers and it is about the conditions that are attached to any development consent order for being at least CHP-ready, even if from day one it cannot deliver heat to customers. Quite specific things can be done in that respect.

**Q625 Mr Weir:** Mr Cooke, you mentioned that the IPC should perhaps look at alternatives when considering specific developments. Do you foresee it being able to turn down, say, a wind farm because it thinks something else is more appropriate in the area?

**Mr Cooke:** For some developments on certain sites where there are key environmental issues if the impacts are such that they could not be mitigated or compensated for and it was within that regime then we would hope so.

**Q626 Mr Weir:** Do you envisage it making a recommendation for a different type of development irrespective of what the developer might want to bring forward as part of the plan?

**Mr Cooke:** I do not know how the IPC would operate. Certainly, under the existing planning system where we are called in as statutory consultees there are occasions on which we will suggest modifications to developments which would make them less damaging to the environment.

**Q627 Judy Mallaber:** I am at a disadvantage because I have not read the appraisals of sustainability which I understand are hundreds of pages long, so I rather rely on you to give me an analysis. I note that the Environment Agency overall has welcomed it, but I understand that both the agency and Natural England have comments and criticisms. Could the witnesses between themselves summarise what they believe are the key problems or failings of the appraisal and whether overall they are satisfied with the analysis in reaching its conclusions? Obviously, within the statements themselves there is a fairly brief summary of the appraisals.

**Dr Grayling:** Let me make a confession: I have not read the appraisals of sustainability but fortunately I have some excellent people expert in environmental appraisal, some of whom are in the room, who have read them and given me advice on them. In general we believe there is room to improve the guidance on avoiding and mitigating environmental impacts. We broadly welcome the appraisal of sustainability but it has some weaknesses. For example, in our view it does not make an assessment of the cumulative environmental impacts of the kinds of developments overall that we expect from the 60 GW of new generating capacity that is anticipated by 2025 in the national policy statements. Cumulatively, that could have quite big and, depending on location and mix, different effects and some sort of assessment of that...
would have been useful and helped to provide a better steer to the IPC in its deliberations. We also believe that perhaps more guidance should be given to the IPC as to what sort of expectations there are of developers to monitor the environmental impacts of their developments. I suppose that if we had one overall criticism it would be that there is a slight detachment between the appraisal of sustainability and the related national policy statements in each case. When one reads the national policy statement how it has drawn on the appraisal of sustainability in framing guidance to the IPC is not very transparent. We would like to see that drawn out more explicitly.

Mr Cooke: Dr Grayling has covered the points very well. Certainly, the question of the cumulative impact is one about which we are concerned. As a more general comment we are a little worried that the environment gets taken into account as being a slightly less serious element; it reads a little like an afterthought. We think the environment should be up there from the outset as one of the major considerations for the reasons you have already heard this morning.

Q629 Judy Mallaber: Are the appraisals basically okay? As written can they be improved or do they need to be torn up and a fresh start made? Is there sufficient there for them to be useful? What would you like to say to government?

Mr Cooke: There is sufficient there to work with. I do not believe they are sufficiently poor to be torn up and we should start again. We have been working very closely with the department in advising on the sorts of things that need to go into these documents. We are pleased about the extent to which our advice has been taken on board so far. There are some aspects that have not been taken into account and we have made those comments in our submission. Therefore, we say so far so good.

Dr McHugh: We take a similar view.

Q630 Judy Mallaber: There is the wonderful phrase, which I do not quite understand, “the imperative reason of overriding the public interest” which has the acronym IROPI. That is taken into account in the nuclear NPS. The government believes there are grounds for IROPI which outweigh the impact of the NPS on particular sites. Is that statement justified? Can you explain it to us?

Mr Cooke: It is a particular test under the habitat regulations. To cut a long story short, a development that causes damage can go ahead on a site designated under the Habitats or Birds Directives only if there are imperative reasons of overriding public interest. That is the IROPI test. That development can proceed only if the damage can be compensated for. Do we believe the test is sufficient in the nuclear one? As far as it goes, yes, we do. The “as far as it goes” bit is that at the moment it is not clear from the drafting whether the intention is for that test to apply to the NPS as a whole or to individual sites. Our very strong advice is that the test needs to apply to individual sites. Therefore, as it is drafted now it meets the criteria for the overall NPS but that test will need to be applied to individual site decisions. That is where we come back to the alternatives because that is one of the considerations we reach before we get to IROPI. While we have 10 potential sites identified it may be that the nuclear capacity could be delivered on a number of those sites; it may not necessarily be all of them.

Q631 Mr Weir: Given that eight of the sites identified are already nuclear, do they comply with IROPI at the moment? What will be different on these sites which means this must be reconsidered? I can see the difference in relation to the two greenfield sites where one will develop from scratch.

Mr Cooke: For many of the sites the test will be a new one which was not applied when they were first built.

Q632 Paddy Tipping: What is the consequence of that?

Mr Cooke: The consequence is that the advice we give and the decisions that government and IPC come to now may be different from that which it came to when those sites were first constructed.

Q633 Sir Robert Smith: In addition, while they are building on existing sites it is a new development; it is expanding the nuclear footprint?

Mr Cooke: It is a new development. Dungeness has cropped up as an example. The existing power stations were built before the adjacent site was designated. The proposal was for a bigger footprint that we advised would have a significant impact that could not be compensated for. Therefore, the IROPI test for Dungeness could not be met because it would not be possible to compensate for the damage.
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Q634 Mr Weir: What do you mean by “compensate for”? What do you envisage having to be done at an existing site to compensate for the disruption to the environment?

Mr Cooke: First, it does not have to be at an existing site; it can be at a nearby site or ultimately in the same biogeographic zone, but as a general rule of thumb closer is better. As to compensation, there are several examples where development has occurred which has required compensatory habitat to be created, so it is the recreation of the habitat which is destroyed as a result of the development, to maintain the overall integrity of the Natura 2000 series of protected sites.

Q635 Mr Anderson: Do you both believe that the NPS provide sufficiently strong messages about the requirements to provide the infrastructure impact of carbon capture and storage? We heard evidence earlier about potential pipelines. Do you think the NPS covers that sufficiently? If not, what should it do?

Dr Grayling: We do not believe that it sends quite a strong enough message in relation to the government’s goal of de-carbonisation of electricity by 2030 which will require that by then all large coal and gas-fired power stations will need to operate carbon capture and storage. Specifically there does not seem to be any reference to carbon dioxide pipelines in the national policy statements which we think is an omission that should be rectified. We should take a strategic approach to the development of the pipeline network for the storage of carbon dioxide.

Ms Manise: To amplify that, the infrastructure associated with energy generation is obvious by its absence in the NPSs. The connecting and distribution infrastructure can have as much impact on the environment and on communities—it is also economically very costly—as the generating capacity itself. Like Dr Grayling, I am very pleased to see some signal around CCS in the NPS, but it should be stronger. Coal and gas have a lot of life left given available sources and therefore are likely to continue to be used for quite a long time. To do so sustainably and to de-carbonise the energy system by 2030 means those fossil fuel sources must be used in conjunction with carbon capture and storage if we are to meet any of the carbon reduction targets.

Q636 Mr Anderson: On carbon capture and storage last week we heard evidence from Scottish and Southern Energy that the way in which the NPSs were drawn at the moment basically said to them that they would have to prove it was not economically viable before they could agree to go forward with their planning applications. The point made to us was that it was physically impossible to prove it at this moment which is one of the reasons we are building demonstration projects. They suggested that the wording should be deleted from the NPS. Do you have a problem with that?

Ms Manise: Natural England would not have a problem with it because it is way outside our remit to comment on the economic viability of one sort of development versus another. For us the bigger issue is that there is no mention not only of CCS but other energy generation technologies; there is no mention of environmental viability and security. There is a lot of mention of economic viability, cost benefit analyses and some reference to social impact but there is precious little in terms of what CCS, or indeed anything else, might do in terms of long-term environmental viability.

Q637 Mr Anderson: You started by saying it was not your role to comment on economic viability. Their point was that they could not prove it. If a standard gas plant was being proposed where they had 50 years’ experience they could demonstrate that they had done it here, there and everywhere, but given where we are at the moment it just is not possible to prove this point because it has never been done anywhere in the world.

Ms Manise: I would struggle greatly in being able to prove something in the future based on no history or evidence from the past. I entirely understand why they would put forward that point. I myself would find it very difficult to do.

Dr Grayling: At present the requirement for a new gas-fired power station is simply that it is carbon capture-ready, not that at this stage it must be operating capture and storage. The Environment Agency is the government’s adviser for England and Wales as to whether those conditions are met in relation to a consent under section 36 of the Electricity Act. We are trying to take it very seriously because notwithstanding what colleagues from Scottish and Southern said one can do that well or badly in terms of whether the subsequent retrofit is an integrated solution that is energy efficient or whether, for example, one bolts it on and has to build a separate boiler to provide steam to drive the capture plant. They could take their argument too far. There is a way to do capture-readiness cost-effectively but as and when the technology chain has been proven at scale I am sure we shall be looking at what policy framework is necessary to ensure there is a level playing field between the different energy regulators so that one is not disadvantaged in terms of the investment it has put in versus another.

Q638 Mr Anderson: Another point that is a real concern for us is whether it is right that the NPS precludes the IPC from considering the question of the management and disposal of nuclear waste.

Dr McHugh: The government has set out its policy on nuclear waste pretty clearly in the NPS as it currently stands. However, the test that the government has set itself is an ongoing one. In relation to the storage of waste on any particular application that may come forward it is something that we and the NII and HSE will look at. Therefore, IPC could come to us if it wished to be reassured about whether there is sufficient storage capacity for the waste and whether in future it will be potentially disposable to a geological repository. Those are issues that we shall be considering as regulators.
Q639 Dr Anderson: Are you saying that the IPC can come to you?

Dr McHugh: It would be able to do so if it wanted to.

Q640 Mr Anderson: We understand that at the moment the NPS precludes it from taking a position on it. My understanding is that the government has said the issue of radioactive waste storage has been looked at and sorted, so there is no reason for you to become involved in it.

Dr McHugh: I think that at a strategic level it has been. In relation to a particular application there may be elements of it on which it may want reassurance from us as regulators where we can say this is what we are looking at. This is specifically what we are looking at in relation to the generic design assessments of the nuclear power designs.

Q641 Mr Anderson: Do you say that the fact the NPS does not say the IPC can do this means that the IPC will or will not be able to do this?

Dr McHugh: We want a close working relationship with the IPC, so we would be quite happy if it came along and asked us that question for the purposes of its own reassurance.

Q642 Paddy Tipping: I am sure that is right, but is it not rather bizarre that we are to build new nuclear power stations to be approved by the IPC and yet one of the essential issues is disposal in which the IPC does not have a role?

Dr McHugh: It does not have a role in disposal yet. The government published a White Paper a couple of years ago which said that once the new planning framework was in place it proposed to enact a statutory instrument to allow IPC to look at geological disposal of radioactive waste. I believe that is part of the government’s plans but I agree it is not there yet.

Q643 Sir Robert Smith: But as far as the planning process is concerned all the IPC says is that the government has told it that a miracle solution has been found for nuclear waste and therefore it does not have to worry about it in granting applications?

Dr McHugh: I think it is saying that it has set itself a test which is that in future there will be solutions for geological waste disposal and in the interim waste will need to be stored at the sites where it is generated. It is not saying that a miracle will happen but that there will be a solution in future.

Q644 Paddy Tipping: Turning finally to biofuels and biomass, should not the IPC look at whether the sources are sustainable?

Dr Grayling: We think that it should take that into account. The renewable energy strategy envisages a very big growth in the use of biomass, perhaps delivering up to a third of our renewable energy target by 2020. That will mean a huge increase in the use of biomass much of which will be imported from North and South America or Indonesia. From our perspective it is very important to ensure that the wood chip imported for dedicated biomass plant is sustainably sourced from certified forestry, for example Forestry Stewardship Council-certified wood. At the moment we do not believe that the provisions are properly in place to ensure that will happen. For example, the national policy statement refers to a sustainable reporting requirement under the renewables obligation for renewable electricity, but that is a very weak one. For example, one can report that one’s biomass is of unknown origin and essentially it is voluntary. We think there should be mandatory standards. It is a problem that the Environment Agency itself faces and recently for the first time it put some sustainability requirements into an environmental permit for a dedicated biomass plant which is to be built by Prenergy at Port Talbot. That plant has a capacity of nearly 300 MW. It agreed to the provision that it would source its wood chip only from certified sources. We want to see that sort of approach being adopted across the board. On top of that there is an issue about comparison with the use of coal or gas. Different sorts of biomass deliver more or less greenhouse gas emission reductions on a life cycle basis because of the energy used in cultivation, harvesting, processing and transport. We want to see systems in place that maximise the greenhouse gas emission saving that we believe is half the point, if not the main point, of using biomass. At the moment those safeguards are not in place.

Q645 Paddy Tipping: One also has in mind the point you made earlier about the use of heat?

Dr Grayling: Indeed; we would also like the rules about the use of heat to be as strict as possible.

Paddy Tipping: That is very helpful. We have had a discussion with lawyers and a discussion with environmentalists and we can all judge which we have found more interesting. Thank you very much.
**Wednesday 3 February 2010 (afternoon)**

Members present:

- Mr David Anderson
- Colin Challen
- John Robertson
- Sir Robert Smith
- Paddy Tipping
- Dr Desmond Turner
- Mr Mike Weir
- Dr Alan Whitehead

In the absence of the Chairman, Paddy Tipping was called to the Chair

**Witnesses:** Sir Michael Pitt, Chair, Dr Ian Gambles, Director of Strategy and Dr Pauleen Lane CBE, Deputy Chair, Infrastructure Planning Commission, gave evidence.

**Q646 Paddy Tipping:** A warm welcome to Sir Michael Pitt, Pauline Lane and Ian Gambles from the new IPC. We were grateful to Pauline and Ian for coming to see us at the back end of last year to give us an informal private briefing. I know, Sir Michael, you had other pressing engagements, but you are a regular at select committee meetings so a warm welcome. Thank you very much for your written evidence. As I read it, it is quite clear in broad terms that you are satisfied with the National Policy Statements. I think there are some points that you would like to see clarified and perhaps modified a bit, but generally it is in the right direction.

**Sir Michael Pitt:** Our formal view is that we do think the documents are fit for purpose. We welcome the publication of the National Policy Statements but, as you rightly say, there are many improvements that we are recommending that could be made to the narrative.

**Q647 Paddy Tipping:** You are in discussion with government about these small changes. How is that discussion going?

**Sir Michael Pitt:** We are operating at two levels. One is the written evidence that we are giving to your good selves where we have set out in a fair bit of detail and I know there are conversations going on behind the scenes on some of the technicalities.

**Q648 Paddy Tipping:** Do you think you have enough material to work with? You are beginning to get planning applications in; perhaps you would tell us how many are on the table now and does the framework that is set out do the job for you? Are there any anxieties there?

**Sir Michael Pitt:** There are anxieties in that we have a very complex process which we have to very carefully follow in the evaluation of applications, but we believe the national policy statements, as drafted and as might be amended, will be sufficient to do the job that we have to do. In answer to your first question, we have approximately 17 schemes which are named on our website, predominantly energy schemes and also some transport schemes as well, and altogether we anticipate something like 40 schemes during our first year of operation.

**Q649 Paddy Tipping:** How many of those are going to be dealt with by a panel and how many are going to be dealt with by a single Commissioner?

**Sir Michael Pitt:** We are still at the point where we are considering how big a panel or whether it is a single Commissioner. It is only where there are a significant number of strands of inquiry that need to be undertaken by Commissioner s that might well then merit the use of a small panel of, say, three Commissioners s, but on the whole we are erring towards a single Commissioner approach.

**Q650 Paddy Tipping:** New nuclear plants?

**Sir Michael Pitt:** I think the new nuclear power plants might well be panels.

**Q651 Paddy Tipping:** To share the pain amongst yourselves. On the Overarching Energy Policy Statement, there are people who have said to us that this is not a policy at all, it is just a set of words, it is a description of what the Government wants to do. Is that a fair criticism?

**Sir Michael Pitt:** I think at this point I think I need to make a general comment about where the IPC is in relation to the national policy statements. The views that we are expressing are about the role of Commissioner s making evaluations and whether or not the wording of the National Policy Statement is sufficiently clear and well drafted for them to carry out that responsibility. What we are avoiding doing is making any comments at all upon policy content and the reasons for doing so are to avoid any challenge against the IPC that we have in some way pre-judged or been prejudiced in our view about an individual application.

**Paddy Tipping:** I understand that position. Let us now talk about one of the issues that has been quite live in our evidence which is how far you are going to take carbon emissions into account.

**Q652 Colin Challen:** I want to see if we can reconcile the statement that you made in the submission, which is to say that consideration of climate change impacts is likely to form an important part of the IPC’s examination of proposed energy nationally significant infrastructure projects (NSIPs), against the National Policy Statements in EN-1 paragraph 2.1.5, that the IPC does not need to assess individual applications in terms of carbon emissions against the carbon budgets. How do these two statements reconcile?
Sir Michael Pitt: I wonder I could ask Pauline Lane to deal with that.

Dr Lane: I think that does have the two elements to it. It may seem odd that we are specifically excluded from, as it were, being the accounting body for an individual project against total carbon budgets, but the reason for that is we are only considering one part of the planning system; we are only considering the large projects. We are subject to general requirements in relation to climate change, partly through the obligation of the Secretary of State in the draft NPSs and through things like the Climate Change Act. In relation to the nation’s carbon budgets, we will be consulting with people, notably with the Committee on Climate on Change, as one of our statutory consultees, as to any commentary they wish to make on projects that come in front of. We are not the bookkeepers in terms of carbon budgets as stated clearly in the national policy statements, but we will be taking account of commentary that is given to us about the question of carbon budgets in relation to individual projects by what we see as the overarching framework that is in place for that.

Q653 Colin Challen: The obvious question that follows then is that you get a certain number of applications in, you are not the bookkeeper of the budgets but you will consult with CCC. Is it possible in that consultation, if it takes place on an individual application or a series of applications, that could indirectly influence your decision so that you would maybe heed the Climate Change Committee’s advice more than other factors?

Dr Lane: The question of as to the advice that we receive from the statutory consultees would be one of the factors that Commissioner s would be weighing in their decision making. I think in some earlier evidence we heard somebody say that they thought that we could not refuse a project on the basis of such advice; I do not think we share that view. I think we share the view that we would listen to representations from the statutory consultees and we would take account of those and if that was a significant issue then it is open to us to weigh that in our judgment.

Q654 Colin Challen: Do you not think that would bring legal action forward? If you had a series of applications and they are all, let us say for the sake of argument, identical, different companies, different people wanting to develop and at some point the CCC says that the first five of these ten are okay because they will still be within budget, the five that you have in series coming after they will probably be exceeding the targets in the budgets and you will say you are not going to approve those. Those companies and developers are going to have cause for complaint, are they not?

Dr Lane: It is not open to us to pre-judge on an individual application before we start consideration on whether we would or would not consider it. What I am saying is that we would absolutely take advice in terms of information from consultees as to where that process was at. I cannot say for an individual project upfront—and we would not say upfront—whether we would agree it or refuse it solely on the basis of that one element. What I am saying is that it is open to us to take into account that consideration.

Q655 Colin Challen: Is there a danger that some companies would perhaps frontload their applications to try and get round this possible later danger that consideration of carbon might be a more significant feature later on than it is right now?

Dr Lane: I think that is something that both the Government and the Committee on Climate Change would want to consider if they saw there was a direction of travel, but that would be the policy levers for them to pull.

Q656 Colin Challen: So you do not see any difficulty then with this statement being in the NPS, that you should not consider the budgets. It does seem to be a rather flimsy assertion that is really going to be ignored in the main. Not ignored, but not quite as apparently strong as it appears here at this point in time.

Sir Michael Pitt: We will take each application on its merits individually and if one of our statutory consultees changes their advice partway through because of the elapse of time and because perhaps there are changes in their own assessments, then that change of advice will be material to the applications in front of us at that time. So it is quite conceivable, following your line of thought, that a number of applications would be approved and then there would be a change in the advice we are receiving from a statutory consultee which may then lead Commissioner s to view against a particular proposal. I think that is quite conceivable.

Q657 Sir Robert Smith: You go further than the bold argument that there are other mechanisms in the market designed to limit carbon and that planning therefore does not have to be part of the carbon limitation mechanism when making a planning decision.

Sir Michael Pitt: I think what we are saying to you is that whatever is said to us by our statutory consultees, including carbon and other matters, that will all be material to that particular application and the Commissioner has a duty under the act to then weigh that evidence and come to their conclusions on that particular application, taking them one by one.

Q658 Mr Weir: I want to ask you a specific question about the NPS relating to fossil fuels, and the particular point of carbon capture readiness. In terms of the NPS, to obtain planning permission, as I understand it, for a fossil fuel plant, whether it be coal or gas, you have to demonstrate carbon capture readiness and it then gives details of what it should be. One of them is that it must demonstrate that it is economically viable to put a carbon capture system into the plan at a later date if it is not being done then. The Scottish and Southern in particular have raised a question about the application of this to new gas plant since there is no carbon capture for gas at the moment and obviously the levy is going into coal
rather than gas. They have raised the question that these, as written at present, would make it impossible for them to get planning permission through the IPC for a new gas-fired station. I wonder if you have any comment on that.

Dr Lane: Our general position is that it is not for us to consider the economic viability of the individual project; that is a matter for the promoter. I am not certain what the reasons were that were cited by them.

Mr Weir: The NPS specifically says that they must demonstrate the economic viability of their preferred choice of CCS system in their planning application. Their point is that it is impossible until there is a system that they can point to and say, “It is system X that we are putting in and there is no system X and the levy is purely for coal at the moment and is unlikely to be a gas system in the foreseeable future”. It would seem to come together to prevent the building of new gas plant with CCS.

Sir Robert Smith: Or a new gas plant.

Q659 Mr Weir: You could not have it without CCS.

Dr Lane: I am not aware that there is actually an agreed arrangement by which you could demonstrate economic viability of carbon capture and storage. I think that is the position of DECC as well. It might be something we would like to confirm to you.

Sir Michael Pitt: Can we come back to you on that point?

Q660 Mr Weir: Yes, of course. Do you feel that the NPSs—particular the overarching one—fulfil one of their key purposes, which is to set out a clear statement of government policy?

Sir Michael Pitt: As far as we are concerned we believe it is sufficient in terms of setting out government policy. It gives enough guidance for Commissioner s to be able to determine whether or not a particular application is compliant with the National Policy Statement and to give consideration to whether they should approve or not approve that application.

Q661 Mr Weir: When you say “sufficient” do you believe they could be clearer?

Sir Michael Pitt: We have argued this in our submission to you that we do think there are some improvements that could be made, some of which are merely drafting improvements, consistency of wording. We would also very much like the NPSs to draw out and highlight in some way very crisp statements of what the conclusions are, what is the policy? The narrative is very interesting and it provides a good backdrop, but it is the words of the policy which are going to be key to the Commissioner s who have to make those judgments.

Q662 Mr Weir: The Sizewell public inquiry has obviously been quoted at us several times during this. Do you feel the NPS as drafted will do away with the need to discuss policy as such and inquiries into nationally significant infrastructure projects?

Sir Michael Pitt: I am sorry, could you repeat the question?

Q663 Mr Weir: Do you feel that the NPS as drafted will do away with the need to discuss specific inquiries into nationally significant infrastructure projects?

Sir Michael Pitt: I think what the NPSs do is reduce the degree to which evidence would be provided on those issues. I think that from the point of view of a applicant, from the point of view of local authorities, objectors and statutory consultees, everybody knows that the IPC has to regard the National Policy Statement as a primary document; it is key to the decision making process. What I think Commissioner s cannot do is rule out evidence and submissions which are made to them. They have to address that evidence and submissions and if they object to it, for example, and wanted to put evidence before a Commissioner which was about need, then I think the Commissioner in some way would have to refer to that in their report but might not well give it as much weight as they would have done if there was not a National Policy Statement in existence.

Q664 Mr Weir: The point was put to us by lawyers this morning that, for example, in the nuclear NPS there is stated to be a need for ten new nuclear stations and there are ten sites, so where does that leave the IPC? If evidence is put to them about need, the Government has decided—whether we agree with them or not—that there is a need for ten stations, they are going to be faced with the position of looking at evidence that is apparently contradictory to the policy set out in the NPS from the start.

Sir Michael Pitt: The public position of the Infrastructure Planning Commission is that clearly the NPS is a very significant document but it does not mean to say that Commissioner s would ultimately agree all ten sites. If it is the view of the panel—assuming it is a panel—that the adverse impact locally of a particular individual nuclear power station was so great that it overruled the national benefits of that energy then that panel would have the right to turn down that application.

Paddy Tipping: One of the issues we have discussed a lot is the justification of need; we received quite a lot of evidence on that. Des?

Q665 Dr Turner: If these documents are as advertised they almost take away from yourselves any need to consider justification for the need, for instance, for a nuclear power station or whatever the generating technology may be. Do you feel this is so?

Dr Gambles: Yes, I think to a great extent that is so.

The justification for the policy that the Government outlines in the National Policy Statement—the reasons behind the policy—are a matter for government and it is not a matter for Commissioner s to re-examine the rationale that lies behind the policy. I say that without in any way contradicting what Sir Michael has just said, that if someone wishes to present evidence that is relevant to the matter under consideration they can do so and that
will be considered, but I think it is not for Commissioners to re-open the consideration of the underlying rationale for policy.

**Q666 Dr Turner:** Does it make that rationale sufficiently clear in all cases for that to be so? It might be different, for instance, for a wind farm because the NPSs do not really make clear any distinctions between the desirability of different generation technologies. Can you see a problem arising with the impact of a wind farm against a gas generating station or whatever? Do you think it would be helpful if you had more clear guidance on the desirability in policy terms of different forms of generation?

**Dr Gambles:** No, not necessarily, because each application must be considered separately and on its own merits. Commissioner s will, in that sense, never be comparing the merits of a wind farm with the merits of a gas powered station: they will be examining each on their own merits. The Policy Statement is very clear that it is a matter for the market to determine what the energy mix shall be and that there is an overriding need for both renewable and non-renewable capacity and so we would examine each application within that context. If Government wished to amend a Policy Statement to set out a hierarchy or an energy mix, as some witnesses have asked, then of course it is a matter for them and we would then take it into account. I would not say it was necessary in order for us to use those statements.

**Q667 Dr Turner:** Do you not see a potential problem in trading off your decision making the absolute need and desirability of the generating technology against, say, adverse environmental or social impacts which might be acceptable for a low carbon technology but not if it is going to be a carbon intensive technology?

**Dr Gambles:** I think those are going to be difficult decisions and judgments. I do not underestimate the challenges that Commissioner s will face in comparing things which are very difficult to compare and weighing things which are difficult to weigh in looking at environmental impacts, local impacts and socio-economic impacts against the benefits of meeting national need for energy supply. Those are going to be difficult decisions. I am not sure that they are made more difficult by the considerations you are talking about.

**Q668 Dr Turner:** It leaves open the possibility which is already raised by DECC’s own figures which suggests that there is already quite enough gas powered generation capacity that has already received consent not to need any more. This presumably has clear implications for how you would consider future applications for gas powered generation but it is not covered in the guidance.

**Sir Michael Pitt:** I wonder if I could jump in there. I think under the act the secretary of state can withdraw the National Policy Statement on a particular sector and replace it with a new statement because life has moved on, circumstances have changed.

**Q669 Dr Turner:** It means that what the Government is effectively doing in this is saying that the market should determine it.

**Dr Gambles:** Yes, that is exactly it.

**Q670 Dr Turner:** With the economics of power generation as such, if you leave the market to determine it you will get a carbon intensive generation.

Sir Michael Pitt: I wonder if I could just add a comment on this because these are really important considerations. As time goes by and as the Commission deals with a succession of applications and reaches decisions in the way we have described, it is quite conceivable that over a period of time there would appear to be a problem of conflict between government policies—government policy on carbon targets—and what is actually in the National Policy Statements. We are required to produce an annual report for select committee and for Parliament and I would imagine we would want to draw attention to that in our annual report so that if we feel that there is a conflict between government policies as set out in different documents we would like to make that clear to the relevant secretaries of state, but that would then put the problem back where it belongs, back to government to decide how to resolve it.

**Q671 Dr Turner:** If the guidance were modified to take account of this problem you would not have to worry about that.

**Sir Michael Pitt:** That is right. We can imagine a situation where, from time to time, the secretary of state will wish to withdraw the National Policy Statement on a particular sector and replace it with a new statement because life has moved on, circumstances have changed.

**Q672 Paddy Tipping:** Just tell us about that. Is that a whim of the secretary of state?

Sir Michael Pitt: I think under the act the secretary of state can withdraw the existing national Policy Statement after it has been designated, but then to introduce a new NPS would require a repeat of the consultation process and the scrutiny by your good selves and others.

**Q673 Paddy Tipping:** We are going to be busy for a bit. Just going back to the line of questioning that Des was talking about, when we signed up to the EU renewable target of 15 per cent by 2020, that implies that 30 to 40 per cent of our electricity has got to be generated by renewables by then. That does introduce a hierarchy, does it not?
Dr Lane: I think there are various mechanisms by which the Government is presumably attempting to address that issue whether it be through the carbon trading system, and it is open to government to ensure that it is satisfied that those mechanisms are delivering. After all, that is what it says in the Policy Statement, that it believes it is doing that. It is open to government to change some elements of that process if they feel it is necessary to do so. They could do that even without having to rewrite the whole of the NPS. Because of the way the NPS is constructed it would be open to them to pull some of those levers without having to repeat the whole process. Albeit the original timescale we were given for the NPSs was about five years, it is perfectly possible to do that.

Q674 Dr Turner: It could give the Government an extra and quite powerful lever for promoting renewable energy for instance, would it not?
Dr Lane: I hesitate to stray into the policy area directly, but obviously it would be open, given that these are drafts, that the wording could be changed and I know that you have received evidence from various parts of the renewable energy industry as to their attitude to the way the NPS is currently constructed and whether or not it is helpful in that respect. That may be something the Committee wishes to comment on.

Q675 Sir Robert Smith: You were saying in answer to the earlier questions that if you have an application before you obviously you deal with it on its merits and you do not compare alternative applications. Quite often on a controversial development objectors could put in the observation that that need could be met by better use of the site. Are you saying that because no-one commercially has come forward with that better use you will only look at the commercial application that is sitting before you?
Dr Lane: We can only determine the application that is in front of us, yes. It is not open to us to pre-judge the commercial judgment of the operator that puts something in front of us; that would be a matter for government policy in terms of the market mechanisms as to the commercial viability of that project.

Q676 Sir Robert Smith: So only the market can deliver the solution to that need.
Dr Lane: We can listen to the evidence but the statement of need is that it is market led and that therefore we should not attempt to judge the commercial viability of anything that is in front of us either in terms of the commercial viability of the actual project or by comparison to an alternative.

Paddy Tipping: Shall we talk about site specificity and the nuclear NPSs’ named sites.

Q677 Mr Weir: Are you content with the fact that non-nuclear NPSs are not location specific? Would you have preferred more guidance on these?
Sir Michael Pitt: This is a choice open to government whether to attempt to be more specific about individual sites or, as has been said, to leave it open to the market place to decide which particular locations to bring forward. We are entirely satisfied with the way in which this has been handled inside the National Policy Statements. We do not think that the lack of designations of sites outside of nuclear presents us with any insurmountable problems at all.

Q678 Mr Weir: One of the things that has been put to us is a lack of site specification has made it more difficult for the public to know the impact of these on them. Do you have any views on that?
Sir Michael Pitt: The opportunities for the public to have their say will be if there is an application in their locality. I think you may well know that from the procedures in the act there are a series of occasions when objectors, the public, local authorities and consultees can make their representations first to the developer themselves and then through to the Commission by written representation and open hearing. If there is a project in the vicinity of where they live there are very good democratic processes built in.

Q679 Mr Weir: The point of the NPSs and consultation process was to set a national policy which you have said will weigh heavily in the decisions of the IPC at least. The idea that has been put to us is that the national policies are a process of public consultation but, other than the nuclear ones which are site specific, it is difficult to engage the public in looking at NPSs because they have no idea whether or not they will have any impact in the area in which they would be specifically interested. It is a different matter when it is a specific application, but it is too late at that point to make any impression upon the terms of the NPS because that has already been decided.
Sir Michael Pitt: I have an enormous amount of sympathy with the question but we are guided by the act and the way that has been constructed and, as far as I can see, this particular regime and these National Policy Statements do follow the act precisely.

Q680 Mr Weir: Do you agree with the position of the Law Society this morning which argued that the site specificity of the nuclear NPS combined with the Government’s assertion that all the sites are needed effectively constrains the decision making of the IPC?
Sir Michael Pitt: I think you are right, it does. The fact that the Government has identified ten sites has reduced the number of potential sites available for applicants and, indeed, somewhat constrained the decision making freedom of the IPC. On the other hand, it is for the Government to make those choices—it seems quite appropriate that they should do so—and the IPC has no argument with that. We are quite happy that the government of the day is entitled to make those strategic choices on behalf of the country.
Q681 Sir Robert Smith: On the non site specific you seem to be holding out maybe more hope than perhaps people expect that their independent representations on the impact of the development will be able to carry weight against the strength of these national guidelines.

Sir Michael Pitt: What I am saying to you is that the National Policy Statements are really important documents. They prevail; they are the main policy context; they are the primary basis for decision making, so these are powerful words that Commissioners must fully take into account. However, it is quite clear also from the act that if a Commissioner feels that the local impact is so great that it overrides the national need then the Commissioner or panel can recommend against that particular project.

Dr Lane: It might be worth making the point that representations may not just be about whether or not something should or should not exist; they are also about the very important considerations around the exact detail of the development order and mitigation measures. Because of the new planning regime and the frontloading of the process whereby actually a lot of the representations will be to the promoter at the early stages, there is actually the opportunity for people’s individual representations to have quite significant impacts on the outcome, not necessarily in the binary system of win-lose, but in terms of the detail of the design and the organisation of the site and the mitigation measures associated with it. I would not want to put people off from making representations both to promoters at the first two stages effectively that they have of consultation and to the commission in terms of the examination process because there are actually very important issues to be determined during that.

Q682 Sir Robert Smith: Those earlier interchanges between the promoter and those making observations, are they audited by the Commissioner at the later stage of the process?

Sir Michael Pitt: We are strongly encouraging promoters of development to engage effectively with their local communities, with the local authorities and consultees. Commissioners will want to see that those constructive conversations have taken place; they will want to see that the promoters of development have responded positively to the representations that have been made. Commissioners must be satisfied that there has been effective consultation and if they believe there has not been then they do not even have to accept the application in the first place.

Q683 Dr Whitehead: Could I go back to the question of the site specific NPS relating to nuclear applications as far as you are concerned. If somebody comes along to you and says, “I would like to put a nuclear power station on Surrey Docks” you would presumably not even entertain that notion on the grounds that it was not within the specified sites. Is it not the case conversely that should someone come along and say, “I wish to put a nuclear power station on the site of Sizewell B” you would have to agree?

Dr Lane: That is correct. That is exactly the situation; you have illustrated it well. If somebody puts forward a site which is not one of the sites identified in EN-6 then under our process it falls outwith our consideration and it has to go to the secretary of state. We cannot actually commence an examination of it; it goes elsewhere. If somebody brings forward a site which is one of the identified sites and we certify that that is the case along with all the other things that we have to certify—including the community consultation process—then we would examine it but what we are saying is that it is not a rubber stamping exercise. It is examined on the merits of the impact in that location.

Q684 Dr Whitehead: So what might be the circumstances where you might not agree with a nuclear power station being put on such a site?

Dr Lane: There are a whole list of considerations that we have to make in respect of any application both in EN-1 and EN-6 in respect of scale, massing, impacts, emissions, everything, so all of the considerations would be relevant.

Q685 Dr Whitehead: Would you make a distinction between a nuclear power station application that did not fulfil all those criteria on that particular site and the idea that the site itself might therefore, as a result of your examinations, be in your consideration not suitable for a nuclear power station to be put on it? We have heard, for example, from witnesses saying that there could be a severe problem of flooding, coastal retreat on some particular sites and we are very concerned that it may not be possible to defend a nuclear power station site over a long period of time as a result of what we think is going to happen on coastal retreat.

Dr Lane: That is one of the issues we have to consider. If the panel have rejected an application on those grounds or any other grounds that would not invalidate the Policy Statement. I would imagine that any other promoter would want to take that into account before they brought forward another application; that would be open to them. If those grounds were very significant I would have thought it would be a matter the secretary of state would wish to consider in any updating of the policy Statement. We cannot, as it were, de-designate an individual site; all we can do is respond to the application in front of us and, if we refuse it and we cite grounds for refusal, that is a matter in the public domain and could be taken account of by, as I say, a promoter or indeed the secretary of state.

Q686 Dr Whitehead: You would have thereby effectively de-designated a site.

Dr Lane: We cannot de-designate a site; we can only refuse a project for reasons clearly stated.

Sir Michael Pitt: In those particular circumstances the views of the Environment Agency in relation to flood risk would be paramount and taken into account by the Commissioners. I guess that if a
particular application was clearly going to be in danger of flooding within a reasonable amount of time then any further application may well be susceptible to the same risk. So I guess the advice from the Environment Agency would be consistently against that development taking place.

Dr Lane: I understand that was what happened to the Dungeness site proposal as to why it did not make it through to the final round.

Q687 Sir Robert Smith: Going back to the earlier interventions, that pressure not to go ahead would be weighed against the very strong pressure that ten sites were needed and only ten were available on the other side of the scale.

Sir Michael Pitt: Yes.

Dr Lane: That is correct, but if the Environment Agency had made such representations we would give them significant weight as suggested in the act and the NPS.

Q688 Paddy Tipping: What would you say to a resident who lives in Sizewell who says that this is a done deal, any new application is going to through? How would you reassure?

Dr Lane: We have not pre-judged any application and the process that I have just outlined has to be gone through and we have to be satisfied that it has gone through in terms of communication by the promoter, through consultation and also the examination. We are not a rubber stamping body; we have to give due consideration to representations.

Q689 Paddy Tipping: This is a real sceptic talking to you from Sizewell who says, “Just give me some ideas of why you might turn it down”.

Sir Michael Pitt: The way the act is drafted is very interesting because once the National Policy Statement has been designated the final decision is made by Commissioners and there is no right of appeal. There can be a reference to the courts for judicial review but, indeed, the decision of Commissioners is final. I think if there were public in the position you describe that would be one of the first things I would explain to them.

Q690 Paddy Tipping: Pauleen, just give us some themes that you would be concerned about in an application.

Dr Lane: Exactly the sorts of things I have just been talking about. We would be looking at the question of flooding and representations from the Environment Agency; we would be looking at, for example, the issues which have been raised in the local impact reports with us by the local authority which might be in terms of impact on community, it might be in terms of impact on transport. Those are all issues that we have to consider and that would include, for example, the whole life of the project, the construction phase, the operation phase and indeed the de-commissioning phase.

Q691 Paddy Tipping: Let us turn to a smaller and sharper area. In your written evidence you make some interesting points about design and the need for a clear statement on design. You point out that these are fairly lengthy documents—that is a bit of an understatement—but there are inconsistencies in them. These are areas where you would hope that the draft NPSs are sharpened up.

Sir Michael Pitt: There are several references in the NPSs to good design. I think we would like to know a little bit more if we could about what the criteria might be. I guess a lot of this is about visual intrusion, the use of different textures and colours of materials in construction; issues around good landscaping which can often soften the impact of a very large structure. I think a little bit more in terms of the framework around which those design considerations could be assessed would be helpful, but we would clearly want to get advice. Again, an organisation like CABE would be a very good example and we would take account of those views in coming to our conclusions.

Q692 Paddy Tipping: What about the inconsistencies of language? Is this just a drafting matter?

Dr Lane: Clearly these are drafts and we think it would be helpful if there was a greater consistency across them, particularly in relation to the question of weighting and hierarchy, and we have drawn attention to that factor, that if the opportunity is to revise the text it would be helpful to do so. Clearly if we are faced with the text we will work with it, but we think it would be helpful, particularly for promoters and for people being consulted on processes, that those inconsistencies were ironed out.

Dr Gambles: Can I just add to that. It is a matter for the Government how they want to draft this, but what we want to avoid is wasting valuable time in the examination with debate around nuances of meaning that perhaps were not even intended to be there in the first place but are just accidents of drafting. I think we are asking for a certain amount of simplification, clarification and tightening up for that reason.

Q693 Paddy Tipping: When you are sitting on an inquiry you will be presented with evidence that some people will think are fact and are non-controversial, things like the possibility of magnetic fields around power lines or the consequences of wind flicker or even noise. Would you have to examine that evidence?

Sir Michael Pitt: I think this is a very important question about where does the Infrastructure Planning Commission get the detailed specialist expertise it needs to properly evaluate complex evidence. We know that there is going to be a great deal of that on any or all of the applications. The specialist understanding will come from a potential number of sources: perhaps the Commissioner him or herself; from the staff of the secretariats; and also in the act the ability of the Commission to appoint experts from outside. If, for example, shadow flicker was a big issue on a wind farm then if the Commissioner so wished I am able as Chair to appoint an external expert to support the Commissioner in handling that evidence.
Q694 Paddy Tipping: Thank you very much for coming. This is one of your opportunities to influence the draft NPSs. Is there anything you want to tell us that ought to be done?

Sir Michael Pitt: I only wanted to add one point which we have just touched on but not really given enough emphasis to, and that is the central importance of the local authority. Obviously there are a large number of statutory consultees but we will, I think, be looking to local authorities to weigh up and represent the interests of their local communities. They have the democratic mandate; they will be preparing the local impact report and they will be working with the applicant on the nature of the consultation exercise that should be undertaken in that area. I just wanted to emphasise how much importance we attached to that role of the local authority and that Commissioners, I think, will make national policy and were very concerned at that time that we needed to be brought into the consultation at appropriate levels. Are we saying that this current system is perfect? Probably nothing ever is. However, in terms of the direction of the IPC and our input into it, subject to some of the questions which you seem to have already asked and answered, then we think this is a better system than the one that went before.

Sir Michael Pitt: This is a tricky one. I think it is right to say that the new regime places special responsibilities on local authorities. A number of planning authorities are relatively small district councils. I know it has been argued that they would have had to have done this work anyway even under the old regime. As I was just saying to you, we will value very highly the contribution that local authorities make to this planning process. They will need professional and technical expertise to come to their own conclusion about what is in the interests of their local communities and I think they do need to have the resources to do that effectively. I am not going to take that any further because I think that is a matter for CLG and ministers to resolve, but I think there is a potential issue there.

Q695 Paddy Tipping: That is helpful; we are seeing the local authorities in two seconds.

Sir Michael Pitt: I happen to know that!

Q696 Paddy Tipping: They will tell us they do not have enough resources to do this. What is your view on that?

Q697 Paddy Tipping: Let me push you a little bit more. Should the developers pay for this?

Sir Michael Pitt: I know that planning performance agreements are being reached in some parts of the country and I can see, for example, that is happening in Somerset. I have spoken to the leaders of one or two of the councils there and they are very pleased that those agreements have been entered into. On the other hand, they also say to me that their residents feel that the local authority is receiving funding from the applicants themselves and that in some way might create a sense of bias. I think that is a consideration that should be looked at.

Paddy Tipping: Thank you all very much indeed, that was really helpful.

Witnesses: Mr Richard Kemp, Deputy Chair and Government Association, gave evidence.

Q698 Paddy Tipping: Welcome to Councillor Richard Kemp, who is one of the Deputy Chairs of the LGA, and Phillip Mind, a Senior Policy Consultant. Can I get us off to a good start by saying that I have read your evidence and I was just struck by the phrase, “The LGA is supportive of the new planning regime”. When I was involved with the Planning Bill you were not very keen at that point, were you?

Mr Kemp: I actually remember the first time the IPC was suggested to us when five secretaries of state met four councillors—we were entirely honoured by this process—in a small meeting in Westminster Hall. We did make clear then that we had concerns about what was then the current system. We recognised that the national government had a mandate to make national policy and were very concerned at that time that we needed to be brought into the consultation at appropriate levels. Are we saying that this current system is perfect? Probably nothing ever is. However, in terms of the direction of the IPC and our input into it, subject to some of the questions which you seem to have already asked and answered, then we think this is a better system than the one that went before.

Q699 Paddy Tipping: You have had a look at the NPSs which have got to be adopted by the Government. Are they broadly the right area; fit for adoption at this stage with some tinkering?

Mr Kemp: We have some reservations to this as we do the other National Planning Statements. In fact, I am almost going to repeat the evidence I gave on behalf of the LGA to the Transport Select Committee looking at the ports one. First of all, it is very difficult to consider these things in isolation particularly in the absence of what you call a national spatial strategy and which I would call a national economic development policy because where are you sending a port to, where are you sending lines to; it is quite difficult to sum that up. The second thing is it is not clear—again I follow what went on before—what the role is of local government both in its own area and with partners—other local authorities—trying to build a policy upwards from the bottom, having a very clear identity about the needs of Merseyside, Greater Manchester or what have you, and where the conflict might come between a bottom-up strategy and a top-down strategy. Lastly—and this is a technical point which relates to the way the IPC as a whole will work rather than an individual policy statement—we do have concerns about financing. Some of these operations are a billion pounds and people in the private sector quite rightly will put a lot of money into putting that process through. Whether it is a small council or a big council like my own we will still be quite hamstrung unless we find additional
sources of finance to deal with it.

**Q700 Paddy Tipping:** We will come back to some of those points, but let me just ask you at this stage, the Overarching Energy Policy Statement is not a policy statement at all, is it, it is a description of what the Government wants to do? Is that a fair criticism?

**Mr Kemp:** I would certainly say it would not be evidenced in the way that I would like to see with its relationship with an overarching strategy for the country. So yes, I think that is a fair description.

**Mr Mind:** If I could just add to that, what it does is that it enshrines existing policy but what it does not have is any kind of spatial dimension, so it does not give any indication about the appropriateness of energy infrastructure in different parts of the country and what criteria you might apply in determining the best place for certain types of infrastructure.

**Paddy Tipping:** We are going to spend a bit of time talking about a spatial approach in a little while.

**Q701 Sir Robert Smith:** In your observations of the process do you feel that the Government have got it right in how they have actually consulted the wider community that is going to be affected by these, and have they created the right input now so that when decisions are being taken using these guidelines people will feel that they have actually had a fair say?

**Mr Kemp:** I can only answer that as far as local government is concerned. We believe that in these strategies the fact we are here today means that we have been given an opportunity to be involved both by written evidence in a variety of different ways and in oral evidence. In terms of the big structure against what has been proposed we have been consulted quite reasonably.

**Q702 Paddy Tipping:** What about local people? There is a story in Hartlepool that the public consultation took place only three days after the NPS was published; 100 people came to the exhibition and 35 came to the meeting. That is not good consultation, is it? You would do it better than that.

**Mr Kemp:** We would, but I think we would find it easier to consult on things which matter down particular streets and particular neighbourhoods and particular communities. These are big complex things. My guess is that most people who turn to a consultation event like this anyway are not what you and I would describe as an ordinary constituent, but they would be the pressure groups and what have you who have an axe to grind. I cannot speak for them in saying whether they have been adequately involved enough; we come in in a slightly different process. I do not think the man in the street, if we go down to the pub and discuss this document tonight, really wants to look at the spatial strategy for energy.

**Q703 Sir Robert Smith:** They are going to be affected by it.

**Mr Kemp:** Absolutely. That is where our job comes in absolutely vitally when we look at the bottom-up approach. Again they might not discuss it purely in terms of energy, but they will want to know what the future of Merseyside is and be more involved in that. It is then our job to put those things together at a Merseyside level in the way it is your job to put things together at a national level.

**Paddy Tipping:** Let us move on to talk about local development frameworks and that kind of building a policy from the bottom-up.

**Q704 Mr Weir:** You say you think the draft NPSs need to give more weight to local development plans; can you tell us in what way they should be done?

**Mr Kemp:** In our local development frameworks, both the ones that originate inside our own councils but particularly in the way a conurbation is working—Greater Manchester or what have you—we have very clear ideas of what we are trying to achieve. Some of those will involve industry, commerce, they involve roads, we have a very clear idea of how we are going to increase or maintain jobs in our community in difficult circumstances. The infrastructure is absolutely vital to that because unless we have the right infrastructure in place we cannot attract inward investment; we will find it very difficult to maintain existing investment. If I felt that a national strategy was composed of a series of local strategies which had been added together I would not have this concern, but I do not see how our attempts to do things sub-region by sub-region—that is more important than region by region—are being taken into account. These are early days and it is a draft strategy, perhaps we are wrong, but what we are doing is voicing a concern at this stage.

**Q705 Mr Weir:** We heard evidence this morning from the Law Society and environment lawyers who suggested the opposite was happening, that local councils were being asked to take account of the NPSs in revising their development plans. Is that happening to your knowledge?

**Mr Kemp:** Of course this is always a question of where top-down meets bottom-up. The question is when does push become shove? If the main decisions are being made by central Government and we are just asked to respond to them, then that will have to change what we think is right for our areas. I think Phillip can be more technical about it.

**Mr Mind:** There is another way of looking at this question and that is the weight which the IPC attaches to a local development framework and there is not anything in the National Policy Statements that actually addresses that. If I could give you two broad scenarios, a particular proposal could be consistent with the local development framework and that would work in its favour, but if it is inconsistent with the local development framework then surely that should count against it.

**Q706 Mr Weir:** If I understand it correctly, the IPC would say that the NPS is taking precedence in its main source of decision making, how it decides an application. Surely that would take precedence over a local development plan whatever you may feel those development plans should have in their process.
Mr Kemp: One would hope there would be a meeting of minds. Although I gave a very simplistic view that if the national strategy could be made up of lots of local policies, of course it is more complicated than that. We have to accept that someone needs the bigger view and that is why my big concern about this is I do not know what that bigger view is into which this or other policies are being created. If we could have a debate about that, then local authorities, by themselves or together in their regions and sub-regions, could express an opinion on that and we could come to an accommodation which would mean that friction would be reduced. However, I do not see that big statement.

Paddy Tipping: Can we move on and talk about spatial strategy?

Q707 Dr Whitehead: In your evidence you have suggested that there should be guidance on where energy developments might be encouraged or supported. Do you see that guidance in terms of something approaching what is in the nuclear NPS, ie here is where nuclear may well be developed and here is where it will not be developed, or would you see it in terms of here are the sorts or areas where it is more likely that these developments might be encouraged and here are areas where such developments might be discouraged and presumably reasons for each area, so it is a general guidance within an NPS rather than site specific?

Mr Mind: The latter, and let me expand on that. We have broadly two types of National Policy Statement on energy infrastructure before us, one which is location specific and the other which leaves the decisions about location to the discretion of promoters bringing forward projects. What we are saying is that the National Policy Statements could give more of a strategic steer, so somewhere in the middle ground, about the kinds of places where it would be appropriate to bring forward proposals for energy infrastructure and that might take account of issues like the need to develop the place economically, the availability of grid connections and onward transmissions, so a set of technical issues, a set of socio-economic issues. There may even be demographic issues. That strategic layering is not present at the minute in the National Policy Statements.

Q708 Dr Whitehead: Conversely, you say that if those sorts of statements are not appended to non-spatial NPSs then you might get an effective cumulative development. In your evidence you have set out some problems that might arise from that where presumably, as a result of discrete decisions, you would nevertheless get a cumulative of the consequences of those decisions which would have a cumulative impact on an area. Could you expand on that concern and that fear?

Mr Mind: What is missing form the National Policy Statements is a sense of place. Turning the telescope upside down and looking at this from the lens of a local community where you could have a set of proposals in an area that might be clustered around a particular industry—nuclear industry—or actually different types of energy infrastructure or interdependent proposals, but all that comes together in a place and there will be all sorts of associated development needs alongside a set of proposals. What we are saying is that we need much more sense of how you tackle those issues in the National Policy Statements because actually those cumulative impacts could be positive or, if not handled in the right way, they could be negative. What you risk is that you get a set of incremental decisions, individual decisions that are taken that actually turn out to be suboptimal.

Q709 Dr Whitehead: What I am not clear on then is that if you did have guidance as to where major infrastructural projects might be sited in the way we have discussed, presumably that would potentially result in accumulation in any event.

Mr Kemp: It could do, but it is a question of balance. Having enough of one thing is useful and productive and links, in this case, to transition lines, but when does it become too much. There are concerns that we take a series of individual decisions on this or, for that matter, pubs in the high street and we look at each one individually but do not look at the bigger picture to say that actually all of those made sense but all of them do not make sense, if you follow me.

Mr Mind: There is a really important point here which is that accumulation and clustering may not be a bad thing: actually it can be a good thing if addressed in the right way and actually it does tend to happen naturally that industries cluster in places for all sorts of reasons.

Q710 Dr Whitehead: From the point of view of your members, I can envisage circumstances under which large numbers of your members would be clamouring to be in a category of these projects should not be generally regarded as suitable for this area and rather less clamouring for the idea that projects should be regarded as suitable for this area. I would imagine still fewer would be particularly sanguine about the idea that clusters and accumulation could easily develop in their areas. Is there not an irreconcilable divide between what individual authorities might want to see happening and what might be the overall picture that might result?

Mr Kemp: Not irreconcilable, but there is no doubt that this is a difficult situation. It depends also on the type of power. I was surprised but I just noticed today, for example, that Shepway District Council has reiterated its wish to have a nuclear power station. There will then be that balance between what is in the national, regional and local interest and we have to resolve that, and the way we do it through local government is for councils to get together to try and sort out what that bigger picture is. I suspect outside nuclear power, based on the fact that we are probably not going to have a lot more coal developments, there would not be as much concern about a cluster as you might think.

Mr Mind: I think it is wrong to generalise because local councils will take the stance in relation to particular proposals, but clearly there are
considerable benefits in terms of jobs to an area that are on the positive side which would influence the stance that a local authority would take in relation to a particular development. That does not mean that there will be adverse impacts that would need to be mitigated, but I would not necessarily assume that local authorities would be against proposals for infrastructure; actually many might welcome proposals.

Q711 Dr Whitehead: If we turn to the implications for the rest of the planning system, I am sure we are all aware of the Chief Planner’s letter of November 2009 when he asked that anybody making a decision within the existing planning system arrangement should have regard to what the NPSs have to say. Would you regard that as effectively enabling NPSs to trump the planning system outside that directive or do you think that formulation is acceptable?

Mr Kemp: I do not think it moves the agenda significantly from where we are now. As councils consider big infrastructure projects of course we are aware of what national government is thinking and saying about these things, because that affects what we bid for, when we bid for it and how we bid for it. So anything which actually is a clear reiteration of existing government policy—which the national planning statements are as distinct from developing new policy—is something that clearly we would bear in mind as we approach these issues anyway.

Q712 Dr Whitehead: How do you think that the construction of what would be continuations of existing regional spatial plans, development frameworks and so on might now shape and proceed in the light of that sort of guidance? Do you think the way that those arrangements might work could be unduly affected by considerations about the NPSs which in a sense could be regarded as self-censorship within the new planning process, i.e. no-one is saying, “Do this” but the planning process under those circumstances would feel towards having a regard for NPSs and therefore shape its considerations accordingly?

Mr Kemp: Our first requirement as a local council is to fight for and defend people of our area. I think that most councils would be in the position that they will make it quite clear what they would like, but then as always we have to go into a mediation situation, “This is what we would like, what can we have? We have the evidence for this; will you let us have that?” I think that in all these things we go into a bargaining position on behalf of our constituents, our council area and our groups of councils to get the maximum available from the cake that the Government is giving us under the present system. We will continue to do that. As we approach what is deliverable and what is realistic, of course we will have regard to what the Government wants because in reality that is where the power and the money are.

Q713 Dr Whitehead: Having regard to what the Government wants as far as an IPC decision—which would have been mediated by what is an NPS group and obviously if it is one of the non-spatially determined NPSs that could be anywhere—the consequential arrangements relating to that decision would be taken through the existing planning system and by local authorities. Access roads would arguably be determined by the existing planning system. Do you see the consequence of having the IPC with the NPSs over them taking those decisions, then has a roll on effect—or might have a roll on effect—in terms what is, I would imagine you would regard as, the proper sphere of decision making that the existing planning system, i.e. local authority determined decisions but possibly decisions that are linked—and perhaps at some removed—from the actual decision that the IPC has taken, but nevertheless clearly influenced by it. How would you consider that would work as far as local authority decision making is concerned?

Mr Kemp: If there was a decision made by the Government, IPC or under any other system, first of all we will fight it if we do not like it. If it goes through and we do not like it we move to a different place. We move then to say what can we do within the decision that has been made to mitigate it, to reduce its effect, to reduce as many of the bad consequences that we warned about. We would not take a Luddite view. Our job is always: if a decision has been made, how will we make it work to the best advantage of our constituents even if we did not believe it in the first place. I do not think it would be any different under this system.

Mr Mind: I think this goes to the role that the local council plays in relation to the promoter. I think what you are asking about is that if the IPC takes a decision, does that pre-determine other decisions that fall within the remit of the local planning authority? Really those kind of issues need to be identified early on so that the IPC is seeing the whole picture so that does not happen and that places an importance on local councils and promoters engaging very early on in the process to understand all the knock-on implications related to a particular scheme.

Q714 Mr Anderson: Can I ask who you think should have the final say? If, for example, a local authority agrees to a power station of whatever kind and with that work come transmission cables or, in the case of CCS, pipelines to wherever it is going to be transported, and the neighbouring local authority does not want either transmission lines or the pipe work, who should be the arbitrator?

Mr Kemp: The first thing is for local government to get its act together. We usually do; we do not always. If there is something that is clearly in a regional or national interest then the decision must be made above the level of an individual local authority. Again, we know what our role is; our role is to work for our local community within a national system and a national structure.

Q715 Mr Anderson: Do you think the IPC should have that power?

Mr Kemp: Probably, because they are, in a way, more democratic. I would rather the IPC were doing it than the pre-existing inquiry system because again
we have strategic inputs into the IPC at a number of stages so I think we, as a local council, would have had more impact in that system than in the former system.

Paddy Tipping: Richard, right at the beginning you talked about taking into account social and economic factors in making decisions. Des, do you want to explore that?

Q716 Dr Turner: You argue as a body that more weight should be given in the NPSs to social and economic impacts that will be important to local people. The draft overarching NPS contains several fairly explicit references to socio-economic impacts, so how would you improve on that?

Mr Kemp: It comes back to the relationship between the bottom-up and top-down approach. When we produce a local development framework for our city, in our case, it is linked to a series of documents; it is the physical representation of the aims of the council to improve the economy, to have a higher level of employment in terms of wages and grading; it includes a housing strategy, an economic and an educational strategy. We have a very clear idea of what we want for our area. Increasingly councils are then coming together to promote the needs of our conurbations with agreements across all the major conurbations now. We do not always love each other but we do get on with each other because we recognise that we have to work together. So we will have very clear ideas of what our conurbations need in terms of the economy, in terms of the existing needs of our people and relate that to a whole series of other actions through complementary documents which are not planning documents but which are people based documents, if I can put it that way. Then you come back to the question of how a conurbation, having come to its decisions, will then meet national policy coming down to meet it. The evidence is there now in all the conurbations and the big counties about what our communities need.

Q717 Dr Turner: How do you suggest that the IPC should weigh those considerations up against the national socio-economic impacts?

Mr Kemp: As a local councillor I would rather they gave us more recognition than the national, but I know the Deputy Chair is still at the back and, with all due respect, I am not trying to pass it over but that is more a question for the IPC. You know what I would say in these matters.

Q718 Dr Turner: Would you wish to see anything else included in the draft NPSs to give you what you want?

Mr Kemp: In terms of the generality, not the energy?

Q719 Dr Turner: In terms of resolving the potential conflicts between national and local area socio-economic impacts.

Mr Kemp: I think we are in a very difficult early situation here. I might come back in three years’ time and say that the IPC listens to everything we do. I am very pleased with them. At the end of the day anything we put into a document will be words; we will have to judge on actions. What I would say on behalf of local government—you have seen the array of people before—there is a very strong input of people who understand local government both as officers and members, so that gives us confidence that our view will be taken into account by the national body.

Q720 Mr Anderson: If there were two potential sites in two different authorities, do you think the IPC should look at the socio-economic impacts and compare them?

Mr Kemp: First of all you have to assume that there are equal merits for both. Everything else being equal I hope they would put it in the area that would get the biggest from.

Q721 Mr Anderson: Should it be the IPC’s responsibility to do that?

Mr Kemp: It should be someone’s and it is above level, so it should be the IPC

Mr Mind: Under the current arrangements the decision on bringing forward a proposal in an area rests with the promoter, rests with the developer. It is then for the IPC to make a decision about that individual development. So actually my understanding of the process is that they would not weigh up two competing proposals and make that strategic decision which is actually where you could say that the National Policy Statements are wanting because there is no direction in terms of what places are strategically most suitable for different types of energy infrastructure.

Q722 Mr Anderson: They might do it if there was, for the sake of argument, a proposal for a plant on Teeside and another one on Tyneside but there was not the need for both.

Mr Kemp: If there were two that would be right. We cannot direct, we can only respond.

Q723 Mr Anderson: You think they are the public body to take that decision.

Mr Kemp: Yes, and good luck to them.

Q724 Mr Weir: I was struck when you were talking about the socio-economic impacts, it seemed to me that you were talking mostly about economic impacts as such. Many of the objections against developments are more to do with everyday lifestyle in the community. When we had the various local groups before us I was struck by the people who were against a nuclear power station and made their case that it would dilute the Welsh language on Anglesey. Are these things that should be taken into account in deciding applications?

Mr Kemp: As the Council frames its response, subject to the limitations which I think we are going to come on to about how well equipped we are to deal with the response to very complex documents, we will try and engage people so that they understand the arguments and we understand the arguments back. That will dictate the line that the council will take in its pre-application type activity, which we are strongly in favour of, be it a big
structure thing or quite a small planning application which just affects two streets. We will try to take account of that anywhere, but we never have a planning application where everyone is pleased with the result from it. When you make a decision you have to take some people on; whether that is our local plan or whether it is a national plan you cannot have everyone happy all the time.

**Mr Mind:** The social applications of a major infrastructure project like a new nuclear power station could be profound for a local community. You are talking about 5,000 workers to build a station, the impact on public services, the impact on local businesses and local communities. Actually you could say there that there should be guidance for the IPC on what weight to try to give to those factors because actually for some communities they could be disproportionate and distortionary in the way that I think your example about the Welsh languages goes to.

**Q725 Mr Weir:** Again it goes back to the overriding aspects of the nuclear NPS where the ten sites are ten and we need ten stations, so where we are going with all that? There is not much leeway in that situation it seems to me.

**Mr Kemp:** That is a particular problem for that particular strategy. That is why I am amazed when two councils in an area say they want one. I would take the line of least resistance personally.

**Q726 Paddy Tipping:** You convened a meeting with local authorities where people would be able to see a new nuclear plant in their area on 22 January. What came out of that?

**Mr Mind:** I was at the meeting and Richard was not. There are a number of concerns amongst councils that are impacted by new nuclear proposals. The number one concern at the moment is how they are resourced to discharge their responsibilities under the act and the weakness with the current arrangements which require the developers voluntarily to enter into an agreement with the council for just one part of the process and clearly we are talking about a billion pound development with a million pound impact for councils, quite marginal in relation to the overall cost of the project but significant and unprecedented in relation to their budgets. This is something that we are talking to government about. We are saying that actually the new process is a new burden on councils but also the new policy—if you can describe what is enshrined in the NPSs as new policy and in relation to nuclear it is new policy—is also a new burden; we have not opened a nuclear power station in this country since 1987 I believe.

**Q727 Paddy Tipping:** I think CLG will say to you that under the old system you would have to have paid for it anyhow. Why have you come in asking for extra money?

**Mr Kemp:** We always have this dispute with DCLG. I think what we are seeing now is a concentration of these big schemes which we have not seen for a long time, nuclear power stations being the best of them. We are also doing it at a time when I am sure everyone here is conscious of a massive reduction in our budget. In the next CSR round we are facing effectively a 17 per cent cut outside ring-fenced budgets. We are laying off planners now because of the number of planning applications coming in not meeting the costs. We are going to have to keep departments in place for a long time, and Cumbria might have three applications for three nuclear power stations and that is going to keep someone very busy for perhaps a decade. That is a lot of money for the council to lay out. If you tell us we have to find it we will find it; it will just mean that we will not do something else. That is the debate that we need to have and what we are laying on the table.

**Q728 Paddy Tipping:** What do you think of the notion of the applicant paying for those costs as, in a sense, part of the planning fee?

**Mr Kemp:** This must be the way forward and it must not be left to a voluntary situation either, otherwise we will get the problems that were reported to you from Somerset. You are in the pocket of the developer; you have taken the two million et cetera. If they had to give us two million—I am not sure we actually understand yet how we would say what that levy should be—then that would take all that out of it, but these are people who want to put in facilities where they expect to make a lot of money. For us to be able to match that we need to be adequately resourced. It seems to be the fairest place to get the money, either from there or in the fees they pay for the IPC for it to come out of the IPC’s funding. At the moment we could spend a lot of time and a lot of money without a voluntary agreement. We would still have to do the same work whether there is a voluntary agreement or not and that would be a tremendous drain on council taxpayers.

**Q729 Paddy Tipping:** Richard, Philip, thank you very much for coming; it has been most helpful. Is there a final thought that you want to leave us with, the thing that as you were coming down you thought, “I must tell them that”?**

**Mr Kemp:** I would only reiterate really the wider point that we do need the national spatial strategy into which we fit all the NPSs—energy and others—because otherwise I cannot quite see how they are going to add up.

**Paddy Tipping:** Thank you both very much.
Wednesday 10 February 2010

Members present:

Colin Challen  Paddy Tipping
Charles Hendry  Dr Desmond Turner
Miss Julie Kirkbride  Mr Mike Weir
Judy Mallaber  Dr Alan Whitehead
Sir Robert Smith

In the absence of the Chairman, Paddy Tipping was called to the Chair.

Witnesses: Lord Hunt of Kings Heath OBE, a Member of the House of Lords, Minister of State, Mr Adam Dawson, Head of New Nuclear, and Ms Anne Stuart, Head of Energy Planning Reform, Department of Energy and Climate Change, gave evidence.

Q730 Paddy Tipping: A very warm welcome to Lord Hunt, the Minister of State at the Department of Energy and Climate Change, who is supported by Adam Dawson, Head of New Nuclear, and Anne Stuart, Head of Energy Planning Reform. Welcome to you all, and welcome to the students at the back; a doubly well-informed audience today, some of whom might want to ask questions at the end. Let us start the session, Phil, by going back to the Planning Act 2008. I know you were involved with it and a lot of us took a lot of interest in it, and it just seems a long time ago that that legislation went through the House and after that it has taken quite a long time for the NPSs to emerge. Why was there such a delay with the energy NPSs?

Lord Hunt of Kings Heath: Thank you, Mr Tipping, and thank you for your welcome this morning. I think that is right, that I had just got into the Department in autumn 2008 when I picked up the energy parts of the Planning Bill when it was in the House of Lords, and it does seem quite some time since then. We have had to work very carefully to make sure that the draft National Policy Statements are fit for purpose. The Energy National Policy Statements, in particular, are pretty comprehensive. Indeed, one of the criticisms, I think, that has been made of us is that we produced so many pages, but, given that we are covering an overarching NPS in relation to energy and then separate NPSs in relation to different technologies, inevitably it has taken some time. We have had also to recognise that this is the first step in a new planning system and I think it has been very important to get it right, as is now the public consultation that we are in the middle of and parliamentary scrutiny. Obviously, I am hopeful that we will be able to move as quickly as possible to designation, but equally we will have to take account a lot of the input that we have received, and will receive, as a result of the consultation and parliamentary scrutiny.

Q731 Paddy Tipping: Do you know offhand how many responses you have had so far?

Lord Hunt of Kings Heath: Yes, in relation to the actual number of responses, I think we have just had over 1,000 formal responses so far and, as the consultation closes on February 22, I would imagine that we will get a lot more in the last two weeks, of course in addition to having to look extensively at the impact upon this group.

Q732 Paddy Tipping: Presumably, you have been looking at the responses as they have come in and you have not put them in a pile to read on 22 February. What are the main themes that are emerging?

Lord Hunt of Kings Heath: Well, I am not sure how far you are going to press me on this because—

Q733 Paddy Tipping: I wanted to see if your list was the same as ours.

Lord Hunt of Kings Heath: I have deliberately wanted this to be a thorough job in terms of, rather than dipping into the points being made, actually really looking at this in detail when we have been able to pull it all together, but you would not be surprised that a number of issues have been raised about energy policy in general, energy security, whether the mix of energy generation is right in the future, to what extent should the IPC be going beyond its planning reach into almost setting quotas for each type of energy technology based on carbon emissions, clearly issues about the process that the IPC will use, the process of consultation, and in relation to new nuclear clearly a lot of questions have been raised about nuclear waste, and I suppose I should mention overhead lines as well as there are those who wish that all overhead lines were placed underground. I am encouraged by the fact that we have had so many comments already. We have had some national events where nearly 400 people have attended and we have also had the local siting events in relation to the ten possible sites for new nuclear development by 2025 and I think we have had so far over 3,000 people coming, so it does seem to me so far to have been a pretty lively engagement.

Q734 Paddy Tipping: Given the range of comments, when do you think you might be in a position to designate? What is the broad timetable you have got in mind?

Lord Hunt of Kings Heath: I cannot be absolutely precise on this, there are one or two events that are coming which might intervene, but ideally we would like to do this in the summer, but it might be in the
autumn. I think that one has to reflect that, as yet, I do not have a specific timetable. For instance, the House of Lords is having three separate sessions taking the overarching energy NPS, then nuclear and then the others in a third session, and this is occurring in February/March and, if there is then going to be a debate in the Chamber of the Lords, I do not know yet whether time will be found before an election is called, so there are some imponderables here, but, as I say, ideally we would like to do it by the summer recess, but I cannot give that guarantee. I think in the end we have to do this and we have to do this carefully, and I understand the imperative to get on with it, but equally the key thing is getting it right.

Q735 Paddy Tipping: We are going to produce our report a bit more definitively by 28 March, which is what you asked us to do. I would not want you to do a Bob Ainsworth and tell us the date of the General Election, even if you knew it, but it is pretty clear to me that there are only a number of parliamentary weeks left and I think it is unlikely, if we were to recommend a debate, and I think there is a strong possibility we would do that, that we would get in in the lifetime of the current Parliament.

Lord Hunt of Kings Heath: Well, that is very helpful and I think probably the 28th is probably the latest that one would wish to receive your report! I think that, if that is the case and then we are talking about a new Parliament and the time it takes to sort this out, then clearly it might have a consequence in terms of when designation can take place, but I want to get the balance right here. We are clear that we want to do this as quickly as possible, but the most important thing is to get it right and that we are able to give due consideration to all the comments that we have received and to the output of parliamentary scrutiny.

Q736 Paddy Tipping: And you are prepared to acknowledge that the imminence of the General Election has, in a sense, truncated the timetable and it has made it more difficult for ourselves, in particular?

Lord Hunt of Kings Heath: Well, I am appreciative of the work of the Committee and of course we have been keeping close attention to the hearings that you have been having. We have always recognised that this is a tremendous amount of work for the Committee to do and we would be extremely appreciative to receive the report before the election, but I think inevitably it does cause a pause, though no doubt my officials will have the luxury of having no ministers around for some time to get on with the job of assimilating and making recommendations, so one should not think, just because an election is called, that the work will stop.

Q737 Sir Robert Smith: Do you accept though that it has not been ideal in the sense that we have had to start our scrutiny before all the evidence has come in to your Department because of the election and, if there had not been an election, the process would have been different?

Lord Hunt of Kings Heath: I do of course understand that it has meant that the Select Committee has been operating under some pressure, for which I am grateful. Nonetheless, it does seem to me, with the thoroughness of the hearings you have had so far and the fact that so many people have already responded, that we are going through a rigorous process.

Paddy Tipping: Let us move on and talk about the consultation process.

Q738 Colin Challen: We know that there are various legal challenges being threatened to the way that the consultation has been handled. Are you happy with the way the consultation has been handled?

Lord Hunt of Kings Heath: I have always thought that the whole process of developing the draft NPSs would be liable to a great deal of scrutiny and to judicial proceedings, and that is not unexpected. Overall, I think we have done very well on the consultation. Of course, if people wish to take proceedings, we will defend ourselves robustly, but in terms of what has happened we have had these national events, and we added one for the North West in the light of the helpful advice from the Select Committees, and, as far as the local events in relation to the proposed sites for new nuclear are concerned, we have had very good attendances. I have had letters from members of the public who have said they have appreciated the opportunity to see the information and we have certainly had good acknowledgement of the openness in the way in which officials have been prepared to discuss issues with people who have raised issues. We have added a number of local events. Some concerns were raised about the short notice in relation to Hinkley and Hartlepool and we have added an event at both Hinkley and Hartlepool. My colleague, Mr Dawson, will go to one on Saturday at Dungeness, although it has not been listed as a site suitable, but there clearly has been a lot of local debate about whether Dungeness should have been listed, so we are attending an event there. Therefore, in terms of the requirement to be thorough and effective, I am satisfied that it has been thorough and effective, and there has always been lots of local media activity and ministers have done quite a lot of interviews for local radio and some regional TV stations, promoting the events.

Q739 Colin Challen: You mentioned the site-specific nuclear consultation. Given that there is so much wind held up in the planning process, which hopefully the NPSs will deal with, I just wonder why it was that it was not possible to have site-specific consultations on wind proposals.

Lord Hunt of Kings Heath: Well, I know that this has been one of the issues raised as to whether, in parallel to what has occurred on nuclear, we should have had a process which was much more specific about whether other technology developments should take place. I think we do have to recognise the special circumstances of new nuclear developments, and in 2006 the Government gave an assurance that there would be this site-specific approach. However, if you
were to extend that to all technologies, and I accept
that you are asking about wind, but I think that, in
principle, you could say that, if you are going to
extend it to wind, you might extend it to other
technologies, I think the risk is that it would take a
large amount of time to do the preparation work, it
would be very expensive, it would delay investment,
which I would regard as a big problem. Finally, if
you were actually engaged in an exercise that looked
at the whole country and tried to map out where it
was appropriate for different developments, I
suspect the problem of blight would be greater, so we
came to the view that it would be better to leave it to
the developers to propose sites and that the
assessments should then take course from there.

Q740 Colin Challen: Does this not illustrate that
there is in fact an inherent bias towards nuclear?
Lord Hunt of Kings Heath: No, I do not think that is
a fair comment. What we are clear about is that we
want to see a diversity of energy generation. In itself,
the commitment on renewable energy of 15 per cent
by 2020 translating into about 30 per cent electricity is a clear statement of government policy
and priority, so I do not think that that is the case. I
think the case in relation to nuclear is due to the
specific issues around the decision to go back to new
nuclear, the commitment in 2006, and I think also a
recognition that the number of sites for potential
nuclear development is pretty limited, and I think it
is rather different from wind and other generations.

Q741 Colin Challen: But it seems to me as if the
nuclear industry is getting a head start. In dealing
with public opinion, the fact that we will have NPSs
in relation to renewables, and particularly wind,
which is perhaps the most controversial, and because
there is so much held up in the pipeline, all the battles
that local people have about the siting of wind farms
have yet to happen or they are happening and they
are being generally backed by local councillors who
support objections. That does mean that wind still
has a lot of resistance to overcome, does it not,
despite the NPSs?

Lord Hunt of Kings Heath: I think that there is no
doubt that, if we are talking about onshore wind and
planning consent, this has been a major problem.
Indeed, when I got this job back in autumn 2008, I
think that the two major issues that were raised with
me by the industry were access to the grid and the
problem of planning. We know that the record of
local authorities in giving planning consent to wind
is pretty poor, and clearly we hope that the new
planning system in relation to onshore above 50
megawatts will lead to a more rational approach and
an approach which at the same time allows local
people to have their say and, nonetheless, recognises
the national importance of major wind applications.
I understand that the wind industry themselves did
not want the site-specific approach for the reasons
that I have suggested. I am optimistic; it does seem
to me that in the last two or three years we have seen
considerable momentum in relation to wind, and of
course offshore the third leasing round by Crown
Estates which was announced in January was very,

very successful indeed with major companies coming
in with major investment, so I would recognise that
those developers who have tried to take wind
projects forward have found considerable barriers,
but I am optimistic. With the combination of the
emphasis that we are giving in Government to
renewable energy and the reformed planning system,
I am hopeful that this will lead to much greater
progress in the next few years.

Q742 Mr Weir: Obviously, we have had evidence
from local groups who have been very critical about
the public consultation, specifically the nuclear-
specific one, and the Department has produced a
very interesting and detailed breakdown of the
publicity. The residents of Hinkley Point were
particularly critical. I notice that there were 5,000
leaflets dropped, according to this, through a long
list of villages, but that seems to be considerably less
than were dropped at the other nuclear stations
when there were between 10,000 and 11,000 in most
of them, as far as I can see from this. They were also
critical about the area in which they were
distributed. Do you feel that sufficient information
was given in this case?

Lord Hunt of Kings Heath: Well, I am. I do believe
that we have had a good process in relation to the
consultation events, that sufficient information was
available, not just through leaflets, but through the
local media. Could I ask Mr Dawson to perhaps
respond in general because he has been very much
involved in the planning of these events.

Mr Dawson: Indeed, yes. The first point to make, I
think, is that the number of leaflets was determined
by the geography as opposed to meeting any
particular target, so we aimed to leaflet within six
miles of a site, so that may explain some of the
differences in the numbers that you saw. In addition,
we have also sought to advertise in newspapers and
we have done that in advance of the public events
that we were holding. We have also recently re-
advertised the imminent ending of the National
Policy Statements consultation so that people have
had the opportunity to input their views later in the
process as well. Then, associated with all of the
events, we have done media, so there have been
interviews with ministers and officials on the local
media in the areas that have been affected, so I think
actually we have gone to quite considerable lengths
to make sure that all sites were aware of the activities
that were going on and people had the opportunity
to come along and have their voices heard.

Q743 Mr Weir: The other point was that many
people did not know, they did not hear it on the
media and they did not necessarily get the local
paper, so it is interesting that you have included in
your paper local pressure group publicity and the
Stop Hinkley website, and there the point was that
they had to get it out to a lot of people because they
were not getting it through the media. My geography
of the area is perhaps a bit vague, but Bridgwater
was not included in the original leaflet drop. I note
from your own thing, and I note also that you have
had a second bite at it at Hinkley. Is that evidence that perhaps you accept that it was not so well done in the first place?

**Mr Dawson:** The reason why we had the second event was because Hinkley was only the second of the programme of events and we felt that it might have been the case that we were not able to give enough publicity in advance because it happened very soon after we had launched the National Policy Statement. We got feedback from the area that they would like another event, so we responded to that and organised one. Incidentally, Hartlepool, which was the very first very shortly afterwards, we received similar feedback there, so we went back there as well and participated in a session that the local authority organised there.

**Q744 Mr Weir:** On a more general point, Lord Hunt, the other point which has consistently been brought forward is the aspect that in the nuclear one, because it is site-specific, it is easier to get public engagement, but with the other ones, where it has not been site-specific, it is very difficult to get local people involved because they do not see the immediate impact in their area. Are you satisfied that there has been sufficient public involvement in these non-nuclear NPSs?

**Lord Hunt of Kings Heath:** Well, I do think that the events that we have had nationally on the whole suite of the energy National Policy Statements have been successful and lots of viewpoints have been put forward. One has to recognise that we are at the first part of this whole process and, in the case that you have mentioned of non-nuclear developments, of course the whole IPC process means that the developer will have to go through a very extensive process of local engagement before the application can be accepted by the IPC in which the local authority will have involvement. Then, of course you then come to the IPC process itself when it actually takes a planning application and the opportunity for people who have concerns to express their views, in open hearings so we took the decision, which I think was the right one, to only have the site-specific element in relation to nuclear, I think that we got the balance right between national and local events. At the end of the day, the question is this, and this is testing out the National Policy Statements: are they fit for purpose? There is a whole purpose of the current consultation and parliamentary scrutiny and what I can say so far is that we are being tested and that people are raising legitimate issues which we will have to consider. At the end of this part of the new planning regime, what will we have National Policy Statements that are fit for purpose? Well, I think we will do so. You can always find different ways to consult, and we all are experienced in that, but I believe they are thorough and it has been thorough and effective.

**Q745 Sir Robert Smith:** Is there not a danger though in what you just said about the process, that a member of the public comes along on the last day when the IPC are looking at an application and is horrified, shocked, bewildered and gets told, “Oh well, you see, these National Policy Statements constrain us in what we have to do and we have to comply with these National Policy Statements. You really should have taken an interest back then when those Policy Statements were going through”, and that is why it is so important to engage the public now? Much of my planning casework is people coming along, saying, “I don’t want this development”, “Well, you missed it in the Local Plan, you missed it in the strategic plan and you only woke up when the planning application came in”, but that is too late to influence the policy process.

**Lord Hunt of Kings Heath:** Well, of course I understand the point that you are putting and I would not at all seek to underestimate the value of public involvement in the current part of this process, making sure that these draft National Policy Statements are up to scratch, but let us be clear, that we are at the stage where Government in the end comes to a view on national policy, following scrutiny by Parliament and public input into the National Policy Statements. Now, that seems to me that that is very much the role of Government. When it comes to the individual applications, then that is a matter for the IPC and they will deal with it, using the planning considerations that they have to take into account. I do think that one of the big differences between the current planning regime and what is going to emerge is the amount of work that the developer will have to do with the local authority and the local community before the IPC will even take the application. I also would say that, as you will know, why we are here is because of the experience of previous planning applications where there have been public inquiries and where days and weeks have spent debating the issue of whether you should have a particular technology or not rather than focusing on issues to do with local planning consents and infrastructure all the issues that we all are interested in locally. What this does is allow much more focus to be given to those local issues and concerns without having the overriding issue of, for instance, do you go back to nuclear or not because, surely, that is right for Government, accountable to Parliament, to actually decide.

**Q746 Sir Robert Smith:** One of the other questions on the consultation on the nuclear side, that a lot of the sites are next to existing plant, and that was very much expected and in the pipeline, but there are greenfield sites. Have you made extra effort to alert the community to the greenfield areas, or have you noticed any difference in the engagement?

**Lord Hunt of Kings Heath:** Well, perhaps I could ask Mr Dawson to answer that.

**Mr Dawson:** There are indeed two greenfield sites, one is at Kirksanton and the other one is at Braystones, which is fairly close to the Sellafield site. We considered very carefully how to engage with these communities. For example, at Braystones, initially we had considered whether we should do a single event and activity to cover both Braystones and Sellafield, given that they were so close to each other, but we concluded that would be wrong and we decided to run separate events, even though the two
sites were very close to each other. We publicised each one separately and we have run separate exhibitions and so on so that we were able to distinguish the greenfield site from the legacy site that was already there in that case. Kirkksanton was the other one. We, I think, probably had just about the most vigorous response to our consultation from Kirksanton of all of the sites and I do not think that there can be any doubt that people in the area were aware that this was going on. Certainly, those of us who went there were very aware of the feelings that the people had in the area and we went to considerable lengths to make sure that it was properly publicised, so I do not think there should be any issue of people, certainly in those two greenfield sites, not knowing that it was going on or not feeling that they had the opportunity to input.

Lord Hunt of Kings Heath: I have done an interview with a local newspaper and the local regional TV on the issues in Cumbria, so we certainly are pretty clear that there are issues that people have raised and we understand them and will consider them.

Q747 Paddy Tipping: I am pleased that you are having a special event in Dungeness. Is there a strong case for a new nuclear plant there?

Lord Hunt of Kings Heath: Well, I think as you will know, we concluded that, because of the site of special significance due to the unique nature of the shingle and given the advice that we have had from Natural England, it would not really be possible to mitigate in a satisfactory way or deal with the adverse consequences, and that is why we concluded that we would not be able to recommend Dungeness as a site for development. I know that this has proved to be a controversial decision and I know that there are many people in the vicinity of Dungeness who would wish Dungeness to be considered, and Mr Dawson is attending an event in Dungeness this Saturday where there will be further discussion of it, but, as the Minister who received the advice, I looked at this very carefully indeed. One has to recognise, I have to say, that these are draft National Policy Statements and I quite certainly do not have a closed mind to this issue, but equally the advice I received in looking at the issue would suggest that development in Dungeness would be very, very difficult indeed.

Q748 Paddy Tipping: But, if it came out on Saturday that it would in fact be possible to mitigate, would you ask Natural England to look at it again?

Lord Hunt of Kings Heath: I will ask Mr Dawson perhaps to deal with this in detail, but I think probably I have answered your point really, that we do not have a closed mind. If substantive evidence were produced which would suggest that it would be possible to meet the kinds of objections that have been put forward, including the advice received from Natural England, then of course we would consider that. I think I must stress that we are talking about draft National Policy Statements and I do think that this whole undertaking is one in which we will look very seriously at the comments we receive, but perhaps Mr Dawson—

Paddy Tipping: No, a statement of principle is fine. We have talked a bit about need and I want us to explore that a bit more.
Q750 Dr Turner: But, since the NPSs are basically a statement of government energy policy and the government energy policy is that we should have 30 per cent of electricity from renewables, et cetera, it is not really reflected on the face of the NPSs. The suggestion has been made that the NPSs should at least indicate a hierarchy of desirability of different types of generation, which could well be a consideration, and, if the IPC is considering a raft of applications, three of which are renewable and two of which are carbon-intensive, then the NPSs would have a very clear steer about which was more desirable.

Lord Hunt of Kings Heath: I would be very, very wary of going down that route because essentially, it seems to me, that would bring the IPC into the arena of policy-making. I believe that it is Government’s role to do that. The IPC has to take each planning application on its merits and not, if you like, make value judgments whether one particular energy technology is deemed to be better than another. I do think that that must be for Government to make sure that we have sufficient interventions and incentives so that we get the right mix. I would also say that I understand the hierarchy approach, and others have suggested that you set a sort of gigawatt per energy technology limit for the IPC to give consent up to, but there are two points about that. First of all, even though they give consent, you do not know with absolute certainty that that development is going to take place. Secondly, I think I would argue that you might put undue pressure on the IPC if, for instance, you are almost setting a quota. Would that not be undue influence on the IPC to give consent where it might not be appropriate to do so? Surely, it is better for the IPC to judge each application on its merits. It is for Government; we set the policy on energy and, if we find that the applications that are being made, looking at the mixture of technologies, do not look as though they are going to meet our low carbon requirements or energy security requirements, then it is up to Government to intervene. We are doing pieces of work at the moment looking ahead to the kind of technology mix and requirements on energy going up to 2050, and we are also doing work looking at the market, which is called the ‘energy market assessment’, where again we hope to produce preliminary work on this at the time of the Budget, very much looking at whether we have got the right levers, do we need more levers, but I do think that that must be the role of Government and Government must accept responsibility for this.

Q751 Dr Turner: I do not think anyone is suggesting rigid quotas or anything like that, but it would have a role to express some provision for hierarchy, especially if you consider the relationship between the IPC and, as the statutory consultee, the Committee on Climate Change, which is in a position to advise the IPC on the relationship between the carbon intensity or otherwise of a given application and the progress of carbon budgets so that in fact, between the NPS and the Climate Change Committee, the IPC could be given a very clear and dependable steer so that they would not be placed in an invidious position.

Lord Hunt of Kings Heath: I know, Mr Tipping, why there should be interest in trying to give steers to the IPC on this, but I think that it would be unworkable. I think it would be invidious for the IPC to have what, in effect, would be value judgments between different technologies, and I do not think it is what the IPC itself would want to do. It is very, very important that they have clarity that their job is to receive each planning application on its merits, that they make their decisions in relation to the impact assessment and all the other assessments they are required to make, but, if you were to actually say to them, “In addition to that, you, the IPC, have to ensure that the energy mix is right according to government policy”, I think that takes them out of that independent view in relation to planning consents and they would become much more a kind of operational arm of Government in deciding whether a particular application should be allowed or not. I think it is very important that Government accepts responsibility for this. There will always be argument about whether we have got the right policies and the right interventions, but it is right that the Government should bear that responsibility.

Q752 Dr Turner: But, having set up the NPS mechanism and the whole new planning system, the Government has put this at arm’s length, so the Government has deprived itself of the ability to intervene if it wishes to, so, if the Government wishes to make sure that climate change mitigation is considered as a very important factor in assessing need, how is it going to do it?

Lord Hunt of Kings Heath: Well, in a sense, we are sort of repeating some of the debates about the planning legislation in the first place. I think it was right, first of all, to ensure that with these major planning applications in future the debate locally should not be about whether it was right that you had a particular technology and that falls to Government because on energy policy the Government has to set the framework for the way in which the energy market, the energy infrastructure and the energy supply, is going to be developed. When it comes to planning applications, surely the planning body must deal with those on the basis of the merits of that application. Now, the question then is: does Government have enough interventions? Now, I think the question there is that we think that we have developed a series of policies which do ensure that we get the right energy mix, but I am not at all complacent about that and that is why we are doing this work on the energy market assessment to make sure that, as we go ahead, if we need further interventions, we will take them, but it is our responsibility.

Q753 Paddy Tipping: I think, Phil, that is an issue that we will come back to talk to you about at a later date, about how far the framework is strong enough,
the role of Government, and the new Ofgem Report, Project Discovery, says some interesting things about that.

**Lord Hunt of Kings Heath:** Certainly, it is interesting that Ofgem, whom I have always seen as the apostle of the free market, have now decided that government intervention is required. Clearly, we are looking at the Ofgem Report and in fact it was very helpful to us in terms of the energy market assessment that we are doing.

**Paddy Tipping:** We have begun to talk about the role of the IPC in terms of carbon budgets and carbon accounting, so let us pursue that a bit further.

**Q754 Mr Weir:** We have had conflicting evidence, I suppose, about what the role of the IPC should be in respect of carbon budgets and, in particular, should they have a role in assessing the cumulative carbon emissions arising from their consenting decisions. What is your view on that?

**Lord Hunt of Kings Heath:** No, I think they should not. My argument is exactly the same as my response to Des Turner, which is that, if the IPC is making essentially a value judgment in terms of looking at the carbon emissions of each proposed application, I think it becomes rather more than a planning body; it is bringing itself into making, if you like, energy policy decisions. It is for us, the Government, to do that. Our job is to make sure that the market, the interventions, the subsidies through renewables and all the other interventions that we have produce the right result in terms of energy policy and energy outcome. I think it really does confuse the picture if you give to the IPC a wider responsibility, and I think for developers it will create a great deal of uncertainty in terms of what process do they have to go through in order to get planning consent. I am also very wary of taking responsibility from the Government when I am clear that energy policy is our responsibility and we properly should be held accountable for that.

**Q755 Mr Weir:** How would the Government deal with the situation when the IPC is purely looking at developments from a planning point of view, not as to the type of generation and the carbon emissions from that? There must be a danger that the wrong type of developments are put forward by developers. The Government is going to have to step in at some point and, I do not know, would you call in a certain development or stop a certain kind of development? There must be a point where you would have to take an interest or take action if the wrong type of developments are going through the IPC.

**Lord Hunt of Kings Heath:** Well, quite clearly, the question of development of energy infrastructure is of close interest to Government and, clearly, we take a very close look at how developments are taking place and ensuring that the cumulative output meets the kind of mix that we want to see. What are the kind of interventions that can take place? Well, clearly, as a lot of this is around the kind of subsidies that are available, if we talk about renewables, we have recently seen the impact of introducing banding for the Renewables Obligation. The result has been a very, very successful licensing round in terms of offshore wind, and I think that is a good example of how an intervention can actually ensure that you meet the policy objective. The work that we are doing on the energy market assessment is looking at whether there are other interventions that need to take place, how can we ensure that the investment that is likely to be required over the next 20/30 years is going to come about, but I do not think we should use the IPC to be part of that process. If the National Policy Statements themselves look like they are not fit for purpose, then of course they can always be reviewed and withdrawn, these are not set in stone for decades to come, so I am satisfied that we will have the necessary ability to influence what is happening to make sure we get the right technology mix, but I do think that trying to give the IPC a kind of additional responsibility to essentially manage energy policy, which is what this would do, I would be very wary of going down that path, and I think the IPC would too.

**Q756 Mr Weir:** What about the interaction between the IPC and the Committee for Climate Change? Will the Committee have a role in advising the IPC on this matter of stepping in in any way should they be concerned about the way that the generation capacity is developing?

**Lord Hunt of Kings Heath:** I think it is entirely appropriate for the Committee on Climate Change to comment on what is happening in relation to energy policy, where they think things are going wrong, where they think they are going right and making suggestions to Government about what interventions they might make. That is what the Committee is doing at the moment and I have no doubt that, if they wish to comment on the planning process, they will be well able to do so. What again I would be wary of is the Committee for Climate Change being asked to actually make comments on an individual planning application; I do not think that is the Committee’s remit. In terms of, as you know, the Committee on Climate Change, it has had enormous effect in terms of advice to Government and, I am sure, will continue to do so, but again surely, rather than commenting on a specific application, it would be much more looking at what is happening in relation to the energy mix, whether we are likely to meet our climate change targets and, if we are not, then that would be the alert that they would be giving to Government and to Parliament, and it seems to me that that should be their role. I am very clear here that the IPC itself is not in itself an instrument of government policy in relation to energy; that is not its role. There is a real worry that we get into a sort of grey area here where people are not clear about what the IPC is there to do.

**Q757 Mr Weir:** I understand your point, but the overarching NPS is supposed to be a statement of government policy. Now, should there not be, whether it is the Committee on Climate Change, someone looking at the way that the IPC is operating? The IPC, from what you are saying, is
operating purely on a planning basis, and we understand why, but the planning decisions of the IPC will have a significant impact on the development of a type of generation and surely there must be someone having a look at that to make sure that is fitting within government policy for climate change and carbon reduction?

**Lord Hunt of Kings Heath:** Well, I think that is for Government, is it not?

**Q758 Mr Weir:** But who is going to do it? Surely, there must be someone to give them a steer and say, “No, you can’t keep giving permission for this type of generation because it is leading to an imbalance”?

**Lord Hunt of Kings Heath:** Well, I do not think that is how it would work because I certainly think that Government should be doing that. Other organisations, I am sure, will as well and in fact I suspect that every decision made by the IPC is going to be clawed over. Clearly, stakeholders, pressure groups and parliamentarians are going to be looking at the cumulative impact, so I am not at all worried that there will not be a very close eye kept on the IPC decisions and the cumulative impact. I still think you come back to the issue as to what is going forward by developers, if one gets a view that the kinds of interventions and incentives that are in place at the moment are not producing the energy mix that we require, then it must come back to Government to look at the interventions and to see what else needs to happen. Equally, if it became clear that there were gaps in the National Policy Statements or problems, then again you have got the process of suspension or withdrawal, so you do have those mechanisms as well, so I understand what you are saying, but it does seem to me that there will be a lot of monitoring of what the IPC does. The Government itself has every interest in ensuring that its own policies get us the energy mix we require because the Committee on Climate Change, which is a statutory consultee in relation to the National Policy Statements, of course, if it reports in the future on our energy mix and any concerns it has, Government will listen to it.

**Q759 Paddy Tipping:** Can I just ask you to comment on some evidence that the IPC gave us, and let me just read it out to you: “Consideration of climate change impacts is likely to form an important part of the IPC’s examination of proposed energy nationally significant infrastructure projects, and commissioners must consider all relevant evidence submitted”. The IPC thinks it has got to look at carbon effects.

**Lord Hunt of Kings Heath:** Can I ask Ms Stuart to answer that.

**Ms Stuart:** I think there are two aspects here. It is very obvious and, I think, very clear on the face of the NPSs that we do expect the IPC to take a very serious interest in climate change adaptation. With everything they consent, they have to actually consider the impacts of not merely what would happen at present levels, say, of flood risk, but what would be the predicted climate change impacts, so I think they have got a very clear interest and a very clear mandate to be interested in climate change and I would not expect them to be ignoring it. They also have an interest in, for instance, the emissions of power stations, and obviously one of the emissions to air is carbon dioxide and other things and they will take an interest in that. I think what I would be very wary of is saying to them not merely, “You can’t consent an individual power station if it reaches a certain level of unacceptability”, but we have obviously said to them, “You cannot give consent to a coal-fired power station that does not have a CCS demonstration”, which is a climate change issue. What they are not being asked to do is say, “We can’t give consent to this power station because we consented that one previously” or “because we know another application is coming along”. What we are trying to make them do, and what I think they want to do, is to focus on the application in front of them and make a decision on the acceptability of that application.

**Lord Hunt of Kings Heath:** I must say, I think that you have to draw a distinction between the sort of climate change impacts, so, if you have a generator that is by the sea, you have to look at what the impact of a rise in sea levels would be. I think that is rather different from looking at what gigawatts it has and what technology. The IPC are trying, through planning decisions, to meet the kind of mix that we want to see, and that is the distinction that I would draw there.

**Q760 Mr Weir:** I just have one point arising from the point that Ms Stuart made about being carbon-capture-ready. There have been concerns raised, I think, by Scottish & Southern regarding the fossil fuel impact relating to gas generation, which is the opposite point to the one Des was making. It says there that, if you are applying for a gas-fired station, you must ensure that it is carbon-capture-ready and it is economically viable to put in carbon capture, and they are concerned that, as there is no CCS for gas at the moment and no research at the moment going on in the UK, it will be impossible for them to apply for a gas station. I just wonder what your views are on that.

**Lord Hunt of Kings Heath:** Well, I do not think it is unreasonable for us to require carbon capture readiness for gas-fired generating stations. Of course, those colleagues who have been involved in the Energy Bill consideration in committee will know that this has been the subject of some debate, the extent to which we should signal now in terms of CCS for gas-powered stations.

**Q761 Mr Weir:** I think the point is not whether it should be carbon-capture-ready, but the point is the economic viability of it when there is no research into it in the UK and no one has demonstrated an economically viable model for CCS for gas at this stage. If the IPC is to consider the economic viability of it, in effect, it would have to turn down a gas station.
Lord Hunt of Kings Heath: What do you mean by ‘carbon-capture-ready’? I think being carbon-capture-ready is very different from a requirement to develop CCS and often it is around the land availability around a site to develop the technology that is required. On the whole issue of CCS, clearly we believe that we should focus on coal to start with because it is a large emitter, but we have always thought that at some stage in the future CCS was appropriate to gas-powered stations, and we have laid amendments yesterday to the Energy Bill—sorry, it is today, we were going to do it yesterday—which essentially extend the CCS incentive to demonstration projects on gas. I have to say, that is future-proofing because we are still very committed to starting CCS with the four demonstration projects on coal, but I think we can all see the direction of travel here.

Paddy Tipping: We will come on to talk about CCS in a little while.

Q762 Dr Turner: Philip, there is just one last question before we leave this need issue. You say that it is for the Government to decide if the energy mix is going right or not, which is fine, so I think the only question is whether you declare that before the application or after the event because after the event it is a bit difficult to do anything about it. You could have a theoretical situation whereby there were already quite enough gas-fired stations permitted and along came another great thumping application for one and you have no ability, because of the way the legislation is set out, to stop that being approved. It is a bit difficult to see quite how that is going right or not, which is fine, so I think the only question is whether you declare that before the application or after the event because after the event it is a bit difficult to do anything about it. You could have a theoretical situation whereby there were already quite enough gas-fired stations permitted and along came another great thumping application for one and you have no ability, because of the way the legislation is set out, to stop that being approved.

Lord Hunt of Kings Heath: Well, of course ultimately you can suspend the NPS if you want to, but that would not be the approach that I would want to see happen. In the first place, the application process takes time and it is not as if an application, I think, creeps up on you, so we will be able to keep track and, as I have said, if it appears that the combination of the interventions that Government has look like we are not getting the right mix, then we will not hesitate to introduce new interventions. I think one has to recall on gas that gas is important as the transition and it would also be needed as part of the balance, given the intermittence in nature of much renewable energy, so gas will have a role to play in the future as well.

Q763 Dr Turner: I think we have done that one to death. Let us move on to the question of environmental assessment. All of the NGOs have been critical of the Appraisal of Sustainability that has gone along with the preparation of the NPSs. The question from their point of view is why did the Department not evaluate the full range of alternatives suggested by its own environmental consultants in the Appraisal of Sustainability for the non-nuclear NPSs?

Lord Hunt of Kings Heath: I think the straightforward answer to that is because the non-nuclear NPSs are not statements of new energy policy, what they do is bring together existing policies. I do not think, in that sense, the approach that has been suggested would at all have been appropriate. The issue here, particularly if we talk about non-nuclear, because obviously we have pursued a different course in relation to nuclear, essentially is how does the energy infrastructure flow from the policies that we have already enunciated?

Q764 Dr Turner: It almost makes the Appraisal of Sustainability irrelevant if you pursue that to its logical conclusion. It is difficult to see quite how that appraisal has informed the drafting of the NPSs when they were done at the same time.

Ms Stuart: I was involved in the work we did on this. I think there is a slight conflation in the argument that you have been given. We went through the process, which is very linked to the SEA process, where one identifies all the conceivable alternatives you can think of to your plan, you then identify which ones of them are reasonable and you then do the detailed appraisal on the ones you think we are reasonable. The fact that our consultants, very correctly, identified as many alternatives as they could was exactly what I would expect of an appraisal of this type. What then happened was we talked through with them what could realistically happen and, in the context of the purpose of the plan as set out, we had said that the purpose of writing National Policy Statements was not to invent new energy policy but to explain how existing energy policy was applied. In talking with them we came to the conclusion that it was not reasonable to say that the plans had a different purpose to the one we had set out when we started, which is why we landed up where we were.

Q765 Dr Turner: That is fine, but, of course, the IPC process does not supplant the need for environmental impact assessment?

Ms Stuart: No.

Q766 Dr Turner: It has been put to us by Friends of the Earth that the Appraisal of Sustainability is actually in conflict with the Strategic Environmental Assessment legislation. What is your view on that assertion? That is Friends of the Earth’s assertion?

Ms Stuart: Yes, they have said the same thing to us in a very detailed letter which we are still looking at in detail, but on the SEA legislation I would be fairly confident. The purpose of SEAs is to assess the environmental impact of plans and programmes, not of policies, so to argue that we failed in the SEA Directive because we failed to assess the impacts of policies is a slightly circular argument to me, but, as I say, our lawyers are still having fun poring over the 14 pages we were sent.

Paddy Tipping: We have talked quite a lot about the spatial nature of the nuclear NPS and the non-spatial nature of the others. Let us just pursue that for a bit longer.
Q767 Sir Robert Smith: I should remind the Committee of my entries in the Register of Members’ Interests, given the evidence we have been having, of a shareholding in Shell and a visit to Total’s carbon capture and storage demonstration project funded by Total. You mentioned in some of the earlier evidence that each application should be judged on its merits, there should be no quotas, and so on, but, of course, when it comes to the nuclear NPSs there are ten sites identified and then a description of need, that ten sites are needed. Does that not really heavily constrain the IPC’s decision-making?

Lord Hunt of Kings Heath: No, I do not think so, and it is not meant to. As you know, we have identified that by 2025 we might need about 25 gigawatts of non-renewable electricity generating capacity, and what we have said is that we think that the nuclear sector should be free to put in development applications as much as they want to up to that level. If you take the ten sites, I suppose, if there was one reactor per site, the potential gigawatt development would be between 12 and 17 gigawatts, but that does not take account of applications which might embrace more than one generator, and I think some of the pre-applications that are being proposed actually consist of two generator applications. The point I am making is that, in the end, it will still be entirely up to the IPC to decide. Although we have gone through this process and said we think that these ten sites are appropriate that does not constrain the IPC, when it comes to an individual consent process, to actually turn down an application. I would not want it to be thought that we are so constraining the IPC, when it comes to an individual consent process, to actually turn down an application. I would not want it to be thought that we are so constraining the IPC. What we were trying to do is to identify a number of sites where we thought it would be possible to see development and where it was appropriate and met the kind of tests that needed to be undertaken by 2025.

Q768 Sir Robert Smith: Could someone come in with an application for somewhere not on the list?

Lord Hunt of Kings Heath: Perhaps I could ask Mr Dawson to comment on exactly what would then happen. This is not inflexible, but, of course, due process would have to be gone through.

Mr Dawson: I think the first thing to recognise is the sites are identified out of a pretty lengthy process which started right back in 2006. If somebody came forward with an application for somewhere else that was not listed, was not one of the ten sites, then the IPC could consider it and the IPC would be able to make a recommendation to the Secretary of State, but the Secretary of State would have to consider whether to re-run the whole sitting process to identify whether or not it was an appropriate site, in the same way that we have identified the ten that were listed. They could come forward, but the hurdle is quite high to gaining consent, and the IPC could not grant consent.

Q769 Sir Robert Smith: If they were to refuse several sites, how do you think the Government would have to react?

Lord Hunt of Kings Heath: I think we would have to probably look for more sites. In a sense what we have been saying here is that it is for the IPC to deal with each consent on its merits. I have already said if there are other interventions that are necessary, then, clearly, it would be up to government to do that. I would have thought that one of the obvious answers is to say that if in terms of the energy met we are worried that we are not getting enough development and it was clear that the sites that we potentially thought might be suitable were not being consented, we would either have to revisit the policy or we would have to look for other sites. It is interesting that on my visit to Cumbria, where three of the sites are listed, as you know, one of the points put to me is of issues around local infrastructure: “What would be the impact if you had three nuclear generators being developed in Cumbria? What is the impact on the National Park?” These are legitimate issues about local infrastructure, roads, and that is for the IPC to consider and, in the end, they will have to come to a view.

Q770 Sir Robert Smith: It has been put to me that traditionally they have been on the coast for cooling purposes, but some of the newer developments are looking to have cooling towers taller than the Post Office Tower. Presumably the IPC, again, have to take into account the impact of the development.

Lord Hunt of Kings Heath: Yes, that is absolutely right.

Q771 Dr Whitehead: Why do you think there is such a distinction between the very precise spatial approach of the nuclear NPS and the completely non-spatial approach of all the other NPSs? Do you not think, at least in terms of indicative areas for development, a more spatial approach might have been taken as far as the non-nuclear NPSs are concerned?

Lord Hunt of Kings Heath: I do think it is a very fair question and I understand that a number of organisations have raised this. I think you do have to go back to the unique aspects of nuclear energy and the reason why the Government in 2006 made this commitment that a site-specific approach would be taken. We have discussed how many sites might be available and might be necessary. Inevitably, the number of sites that are going to be judged suitable will always be limited, and so I think it was both right in terms of public confidence in a new nuclear policy but also practically to do the specific work in relation to individual nuclear sites, but when you think of the whole energy infrastructure, I do not think that that necessarily follows. There is a massive amount of work that would have to be undertaken to go through the kind of process we have done with nuclear, the time that would be taken, the costs, because you would be dealing with so many different types of technology, so many sites. I would have thought issues of blight, of investment in decisions. Obviously I will look at this more carefully at the end of the consultation process, but the impression that I have got from a lot of stakeholders is that once you get into the details of
this, actually they are not in favour, and I think in relation to the other technologies it is much better for the developer to put their proposals and then to go through the process.

Q772 Dr Whitehead: We have managed to do this on offshore spatial planning apparently without too many difficulties.

Ms Stuart: The offshore spatial plans are spatial but they are very, very high level, they cover a big area, and so you could go somewhere in there. It is a bit like saying you could build a wind farm in Norfolk. It is not the sort of thing that people are doing for nuclear, where we are actually drawing a line round the site; so I think there is a very different approach. We did look at the possibility of indicating areas and indicating regions. The problem we came across, particularly with onshore wind, was the fact that it can go pretty much anywhere where there is some wind, so you land up drawing a map of the country that says you can go very nearly anywhere, which is not really much help to anyone. There is also the concern we had that if you start narrowing down those areas by adding in extra criteria, they still have to stay fairly wide because there are a lot of suitable areas and we want a lot and are you starting to create blighted issues. If you narrow down again, then there then comes the point which Lord Hunt referred to where there is a particular concern from both industry and other areas that if you have too small an area you put too much stuff in that constrained area and the impacts become quite bad for the environment in the surrounding area. If you have too small an area from industry’s point of view, of course, it very much constrains what they can do and means that, if they can find a suitable site elsewhere, they cannot build on it, and we have seen this. There have been a lot of attempts at spatial planning and it tends to work very fine until you start trying to work out the transport plan for putting seven wind farms’ worth of kit up a small side road.

Q773 Dr Whitehead: Is that not precisely what you have done with nuclear?

Ms Stuart: The nuclear one, I think, because the sites that are possible are much more constrained—Adam can speak better on this—but there was a very big sweep of the whole country and we came down with a small number of sites.

Mr Dawson: Nuclear is different. There are not that many places where you can actually put nuclear power stations—you have to have access to cooling, there are population density criteria set out by the regulators, and so on—so it is relatively more easy to identify the sites where new nuclear power stations can be built than for other forms of energy infrastructure, and there are significantly more constraints about where you can put them.

Q774 Charles Hendry: The ten sites which have been identified so far for nuclear: is it your assumption that those are the best ten sites in the country or is it more that they are the only ten sites which you can see as being appropriate?

Lord Hunt of Kings Heath: The definition we have used is that we think they are potentially suitable for development. The Atkins study actually looked at three other sites which they thought might be suitable, but we thought that they would not be potentially developable by 2025, which is a criterion we have used.

Q775 Charles Hendry: You were talking about your visit to Cumbria and the potential cumulative effect and the impact on the infrastructure and on the National Park. Would the IPC take account of the cumulative effect or would it not be required to look at a site-specific approach and say: “What are the merits of that particular application?” bearing in mind that somebody may get permission but ultimately not build the facility?

Lord Hunt of Kings Heath: My understanding is that they can take account of the cumulative impact, which I think is fair. Perhaps my colleague would like to come in, but it does seem to me to be fair to a particular community or communities that they are able to take that into account.

Ms Stuart: The EIAs that must be done on all proposals for infrastructure would cover the cumulative impacts of the proposed development on the area, including all development consent that was ahead of it in the planning process. If something has just entered the planning process and there is something that has already got a planning application in but not yet consented, they would have to take that into account because there is a realistic prospect that you might land up with it being built. If the circumstances then changed, you could go back and change your EIA and say, no, actually they decided not to build that. Otherwise you land up with a situation where the fact that you are building your wind farm next to the site of a proposed school and the site of another proposed wind farm is not taken into account.

Q776 Charles Hendry: Are you completely comfortable that the same approach should be taken in this process towards greenfield sites as legacy sites? The evidence which we have had is that people have been much more willing to accept an application in a legacy site—they expected it, in many cases they were pushing for it to happen—but there has been a much more negative reaction from people who had no idea that their community and their village was going to be identified. Do you think the same process is applicable to both?

Lord Hunt of Kings Heath: Yes, I too have received that feedback. I do not think you can visit Cumbria without understanding that as a whole it is a community that is very pro and supportive of nuclear development, but, nonetheless—the point you have raised—people living on or near the greenfield sites have also expressed that view. I do think that the Atkins study and the process it has gone through is entirely appropriate both for areas where you already have a power station and greenfield sites. It looks to me that it is thorough and I see no reason why the IPC cannot come to a clear decision in relation to whether it is legacy or new.
Q777 Dr Whitehead: When we look at the distinction between the spatial precise proposals for the nuclear NPS and the non-spatial proposals for the non-nuclear NPS the accusation could arise that effectively you have given a number of nuclear power station developers free sites rather in defiance of what would be the normal process of identifying a site and negotiating its value and developing it, and so on, especially since a number of these sites, effectively, were identified in the first instance, so I understand, by potential developers of nuclear power stations. Does that not mean that as far as the nuclear NPS is concerned there is a completely different assumption about site value and site access and company advantage compared with, say, developing a non-nuclear power station within one of the non-spatial NPS constraints?

Lord Hunt of Kings Heath: Perhaps I could ask Mr Dawson to answer that in some detail, but, of course, there are two points that I would make. Yes, developers were in a position to put forward sites but so were other organisations as well. The second is really coming back to the question because we have listed ten sites does that mean that the IPC has to give consent on each of those sites? The answer, very clearly, is, no, it has to deal with it on its own merits.

Mr Dawson: There is one other point I would add, which is that the existing sites are where they are for very similar reasons to the reasons why you would put them there if you were looking at the country from a blank sheet of paper, so to speak. Nuclear power stations were sited by the CEGB and others at points where they met the population density criteria, where the geology was suitable when you did the site investigation, where there was access to cooling water, and so on, and so you would naturally expect that land in the vicinity of existing nuclear power stations would be potentially suitable for new ones because it has, essentially, similar characteristics to those that the CEGB would have identified in the first place.

Q778 Dr Whitehead: The population density criteria: presumably that is because it is not advisable to put them near centres of population?

Mr Dawson: There are criteria set out which the Nuclear Installations Inspectorate has to advise on. In terms of the density of population in various directions from the nuclear site, that was an exclusionary criterion that we set out for siting any new nuclear power station.

Q777 Dr Whitehead: One of the criteria may well be the fact that these sites may well flood over the next 100 years. Indeed, one of the issues relating to those sites is the presence on them of material stored for between 100 and 160 years prior to any sort of entry into a repository. If the IPC said, “Well, actually that is a pretty material consideration. We are concerned about the fact that there may well be coastal retreat on a number of these sites except for nuclear power stations,” how would you react to that in terms of the search for sites and the site-specific nature of what the NPS presently says?

Lord Hunt of Kings Heath: What has happened in relation to climate change aspects of the ten sites is that all those nominated sites were assessed against flood risk, et cetera, really against projections that take us up to 2100, because that is the evidence that is currently available. In relation to other developments, clearly, one would expect the IPC to take account of climate change impacts. That must become a feature of all considerations in the future. If I think of the Climate Change Act, the adaptation requirement on statutory bodies, all of this must lend the whole public sector, and in its interface with the private sector as well, to ensure that we are looking at climate change impacts decades ahead and making sure, as far as possible, what we are developing now is fit for purpose then, so I would not really see a distinction there.

Q780 Sir Robert Smith: If there is a population density criterion, is that saying that if you live in a sparsely populated area you can be put more at risk than if you live in a densely populated area and there are risks associated with building these power stations?

Mr Dawson: A risk of what?

Q781 Sir Robert Smith: Presumably if a regulator is saying you must not build them near people, there must be a reason why they do not want people near the power station.

Mr Dawson: Ever since nuclear power stations were first built there have been criteria about where they should be placed, and it is a prudent thing to build them in areas that are distant from centres of population. It is a criterion that we have used for at least 30, if not 40, years. It is not something that is new and it is a prudent precaution that you would take.

Q782 Sir Robert Smith: So the Government still accept there is a risk to nuclear development?

Mr Dawson: I think there are risks with everything we do.

Q783 Paddy Tipping: It brings into stark focus the urban/rural discussion that we sometimes have.

Lord Hunt of Kings Heath: Nonetheless, I think I should state for the record that we believe that nuclear energy is a safe energy source and that we do have very strong regulation. We are going ahead with the 2008 White Paper which announced the new policy is based on that. We should also recognise that, of course, in many other places where they already have nuclear power stations the communities there are very anxious that the new developments come in. I remember my visit to Wylfa when I was Health and Safety Minister four or five years ago. People then were very keen that the Government came to a decision about new nuclear. In a sense I do not that one is being either naïve or perverse in recognising that there are communities who are keen to see new development.
Q784 Paddy Tipping: We are going to move on to another issue that, because they say they will not consider it. Mr Dawson: The IPC could consider it or they could pass it straight to the Secretary of State. Lord Hunt of Kings Heath: One of the benefits of pre-designation scrutiny is that if there are any misunderstandings we can resolve them. Mr Dawson: We are, I think, quite clear in the consultation document about what the process should be.

Q785 Paddy Tipping: I think you need to talk to the IPC about that, because they say they will not consider it. Mr Dawson: Okay. Lord Hunt of Kings Heath: One of the benefits of pre-designation scrutiny is that if there are any misunderstandings we can resolve them. Ms Stuart: We are, I think, quite clear in the consultation document about what the process should be.

Q786 Paddy Tipping: Just take us through it then. Mr Dawson: The process is essentially as I outlined it. If somebody comes forward that wants to develop on a site that was not listed in the NPS, then the IPC could consider it, but they could not make a decision; they would have to refer the decision to the Secretary of State.

Q787 Paddy Tipping: Could you just have a look at that and drop us a note about that because there is a difference of view there? Mr Dawson: Okay. Paddy Tipping: Let us move on to another issue that is quite interesting where we have a new planning regime and we have an existing planning regime, the TCPA, and the relationship between the two.

Q788 Dr Whitehead: Are you happy that there is, in fact, a potentially smooth relationship between the remaining requirements, duties, responsibilities of local planning authorities for applications outside the NPS and IPC structure and the decision-making process within the IPC guided by the NPS structure itself? Do you think that those two continuing processes will mesh together well? Lord Hunt of Kings Heath: We certainly hope so. I know that this has been a matter that a number of developers and NGOs have raised. Clearly the National Policy Statements are, if you like, the core policies against which the IPC will undertake its work, and in doing so, of course, in terms of their decision-making, they are able to take account of local impact issues and other relevant considerations, which can include regional or local development plans. Equally, one should say, the National Policy Statements are not there to tell local authorities what to do when it comes to local applications, but my understanding is the Government will shortly be consulting on new planning guidance in relation to climate change and renewable policies and, of course, I would expect that planning guidance to be consistent with the National Policy Statements. I do not think that anything we are doing here, in a sense, will constrain local authorities in their own responsibilities, but I sure hope that the National Policy Statements will be a helpful influence to them. Perhaps we might see some more wind farms allowed by local authorities in the future.

Q789 Dr Whitehead: The Chief Planner’s letter (DCLG) to chief planners and local authorities in November emphasised very strongly that local planning authorities must, therefore, have regard to NPSs, and he also said that, where there may be a conflict between location specific NPSs and local and regional plans the NPSs will normally prevail. That seems to suggest that we are getting pretty close to an instruction that local planning authorities must follow NPSs, essentially.

Ms Stuart: I think it has to be absolutely right. Yes, we have said that they are effectively relevant considerations for local planning authorities when making decisions because they are statements of government policy and local planning decisions are supposed to be in accordance with government policy. The one site-specific NPS we have, of course, is nuclear, and I think what we are saying is simply that, if you are the local authority at or near one of the sites we have identified, you cannot say that the site is unsuitable if we have done all that work and identified it as suitable. You can say that the development proposed is unsuitable, because that is obviously part of the consideration of the application, but you cannot actually, effectively, contradict what the NPS has said because the NPS has been set out and consulted on and scrutinised and is now the existing document until such time as it is amended.

Q790 Dr Whitehead: If I am a local planning authority and I am in receipt of a decision by the IPC relating to a red-lined area which has on it either a nuclear development or perhaps a non-nuclear development and I have to have regard for that decision but I do not like it very much and I might not be terribly accommodating as far as access roads and ancillary considerations are concerned to such an extent that it effectively makes that development not very easily doable, would the guidance that is set out here mean that the Government would effectively come in and tell that local planning authority what they have to do with the rest of their planning arrangements?

Ms Stuart: I think there are two things there. The reason we have the new single consent regime for the IPC is, to some extent, to stop that situation where you have a piece of national infrastructure consented but it cannot go ahead because of a minor piece of local infrastructure that somebody is refusing to consent, and that is why the IPC will be able to consent the access road as well as the development itself and why they will be able to consent the gas pumping station on a pipeline or the substation on an electricity line. I think the purpose of the regime is actually to make sure that the decision, once made, is made and is not reopened locally all along the line, as it were. If you have a situation where there is something that is not covered by the IPC, then I would expect the local...
authority to take into account government policy when they decided it, but that is not to say that if, for instance, as local authorities often do, they have to discharge conditions that are set on them by the IPC and the IPC says, “You can build if you can establish there is an acceptable waste management plan or an acceptable transport plan”, that does not mean the local authority has to accept anything that is proposed to them. I would only expect the kick to happen if they were starting to say, “We will not accept anything that is proposed to us.”

Q791 Dr Whitehead: We had an issue a little while ago, obviously well before these discussions were entered into, with one particular local authority deciding that it did not like the landing station for London Array, as it happened, and, therefore, that particular development was very substantially compromised and delayed. Incidentally, the same local authority is now wishing to have a nuclear power station sited in its area, which I think is an interesting compare and contrast. Would you envisage those sort of conflicts would be something of the past, and do you think those sort of conflicts could reasonably be managed by the sort of guidance that has been set out as far as the IPC decisions and the NPSs are concerned?

Ms Stuart: In that particular case, I think it was an electricity sub-station on the London Array, and I would expect that if the IPC was consenting to that project, they would consent to the sub-station too and it would not be a case of the local authority being able to hold it up in the way that did happen, unfortunately, in that case. I think that is what the new system is designed to do, to ensure that the consent given is given for the whole project but also that it takes account of the effect of the whole project when it is given. It is not merely that the IPC can give consent for the local sub-station, it is that when they give consent for the main project they will consider the impact of that local sub-station and it will have been considered as part of the main application. Yes, that is what we are trying to do.

Lord Hunt of Kings Heath: I have noticed the evidence that has been received on this. As we actually come to designation, if it appears that there is confusion around this, of course, we will look to give it greater clarity. The other point I would make about local authority involvement is that a very important part of the whole new exercise is almost a very important monitoring role to play. Obviously, energy infrastructure and I think CABE themselves have an important role to play. Obviously, energy infrastructure sometimes does not lend itself to beautiful buildings, but we will do our best, and I do think wind turbines are structures of great beauty.

Q792 Charles Hendry: Can I ask about what appears to be a perverse unintended consequence of the 50 megawatt threshold at which a development would be considered by the IPC rather than by the local authority, and particularly relates to energy from waste facilities. I understand that historically you have tended to come in at about 20-30 megawatts as a local community waste facility, but because the developers would now like them to go through the IPC process, they are coming in at 60-70 megawatts. Accordingly, they are no longer local waste facilities, but they are regional, with the intention that waste will be transported over tens or hundreds of miles to be taken to them, which clearly goes against the sustainability criteria. Can you look at that area and establish whether you think that threshold is appropriate?

Lord Hunt of Kings Heath: As you know, the thresholds themselves were extensively debated during the parliamentary passage of the Bill and, of course, I would also refer you to the waste hierarchy in terms of sustainability being a very important part of any consideration. I am certainly happy to look at issues raised like that. I suppose, inevitably, whenever you fix a maximum there is always a risk of perverse incentives, but I would be very happy to look at any issues that arise from that. I understand the point you are making, that obviously community ownership is important here.

Q793 Paddy Tipping: A quick point on design. These will be major new concepts and we all want them to look really good. The IPC has been asked to take design into account. When they came to see us they said, “We would like more guidelines from the Government on what constitutes good design.” Would you have a look at that?

Lord Hunt of Kings Heath: I have noted that, and I too am committed to good design in public buildings and I think CABE themselves have an important role to play. Obviously, energy infrastructure sometimes does not lend itself to beautiful buildings, but we will do our best, and I do think wind turbines are structures of great beauty.

Q794 Paddy Tipping: I think you would be surprised at the plinths and headstones which are a blot on the landscape that people think are lovely. I would have them pulled down like there is no tomorrow!

Lord Hunt of Kings Heath: It is an open invitation for us to look at what we say on design, and I am certainly very positive about doing that.

Paddy Tipping: Let us move on to what has become quite a controversial area, radioactive and nuclear waste, which is outside the NPS. Can we explore some of the issues.

Q795 Mr Weir: What evidence is there to suggest that effective arrangements will exist to manage and dispose of the waste arising from new nuclear power stations?

Lord Hunt of Kings Heath: We have, of course, been dealing with waste now for 50 years in the civil nuclear or, indeed, in the nuclear infrastructure in this country. I am confident that we have the right policies for dealing with waste, both in terms of interim storage and eventual disposal in a geological disposal facility. Of course, we have gone extensively into these matters both in terms of legacy, where we had the advice of the Committee on Radioactive Waste Management, and subsequently we have gone through a further assessment in terms of waste as far as new nuclear is concerned. We have a very strong regulatory system in place. I am satisfied that we can
ensure that interim storage facilities will be safe and secure and will have all the necessary regulatory safeguards. As far as the geological disposal is concerned, we had a consultation. We set out in a White Paper how we intend to take this forward. It is a very careful, staged process, starting with an invitation from local communities to express interest. We have three expressions of interest so far. I would welcome more expressions of interest. I wrote last autumn to all local authorities inviting them to consider this and we will have a very, very careful planned approach, a stepped approach, towards eventual development of a geological disposal facility, but overall I am satisfied that we do have the right policies in place.

Q796 Mr Weir: When do you expect the geological disposal site to be actually operating?

Lord Hunt of Kings Heath: We are working on a sort of guideline of 2040. I gave evidence to a Lords select committee on radioactive waste yesterday. There are views being expressed by a lot of people that we need to be more precise about datelines, and I understand this and I think we are going to work to see what we can do to give the kind of precision that people require. If you refer back to the consultation and then the White Paper, we have put an awful lot of emphasis on the voluntarism nature of the approach from local communities to accepting their being the host site or sites, and I think that is very, very important, and that is why we are not rushing ahead, we want to do this in a very careful process, but I think that these are very well made points to us about perhaps the need now for greater clarty about timing and I will try and respond to that.

Q797 Mr Weir: Given that there is the dubiety about timing, do you think it is right that the IPC cannot consider the radioactive waste in coming to a decision on a new nuclear power station?

Lord Hunt of Kings Heath: Yes, I do, because I think that the Government has given the right steer in terms of our own confidence, in terms of our policy of having both secure, safe interim storage and long-term geological disposal. As far as the whole issue of waste and the role of the IPC is concerned, we have a very strong regulatory system in this country and I expect the IPC to be able to discuss these matters with the regulators and to have the required assurance from the regulators.

Q798 Mr Weir: Even some of the Department’s own figures suggest that the interim could be for as long as 160 years; so in effect you are creating a nuclear disposal containment site within the power station for a very long time. Is that not a relevant consideration for the IPC in deciding on whether they should grant permission for a new nuclear station?

Lord Hunt of Kings Heath: I do not think the 160 years is a relevant consideration. You are right about the figure. The 100 years would apply to the waste at the end of the cycle of the generator. My understanding is that the 100 years, in terms of the time taken for cooling to take place, is a conservative estimate. Nonetheless, it is right that we work to those figures. Again, I think it is a question of trying to prevent grey areas here. We have regulators; they are very good regulators. What the IPC has to be satisfied about is that the regulators themselves feel assured with the information they have that it would be right to give consent, and I think it is better to adopt that approach. Could I bring Mr Dawson in on this?

Mr Dawson: The first thing I would say is that we are alert to the issues around radioactive waste. You asked at the beginning what the key themes were from the consultation. I do not think it is betraying any confidences to say that in the nuclear area waste has been one of the top two issues, so we know we have to pay special attention to what we say about waste in the final version of the National Policy Statement. In terms of the on-site storage of radioactive waste at the power station site, it is a conservative estimate, it is a base case estimate, it is one that is deliverable now. When a development consent application comes forward for a particular site the IPC will need to be satisfied that the regulators will be able to grant the necessary permits and consents for on-site storage of waste before they can complete consideration of the application itself. The two things are linked together and we have received representations that the way we have described the IPC’s role in respect of waste in the National Policy Statement is stark or possibly not quite what we intended, so we will need to look at the way it has been worded to make sure we have got that quite right.

Q799 Mr Weir: Part of the problem on waste to date has been the storage on site of existing nuclear stations, the lack of records and the uncertainty about what is actually stored there. The whole reason for the Geological Site CoRWM was to get over that problem, but if you are talking about leaving waste on site for 160 years, do you understand that local people are concerned that the same problems might arise over such a long period of time?

Mr Dawson: We are certainly very alert to the local people’s concerns; it is one of the things that has come through very strongly when we have visited the sites. I think we should bear in mind that new nuclear power stations are built with waste management and decommissioning in mind from the outset, so I think that the arrangements that have been in place in the past are not a good guideline to how we will manage things in the future. We have put a lot of attention, as we have developed new nuclear policy, into how waste can be managed to make sure that is planned in right from the start.

Q800 Mr Weir: Given the likelihood of dangerous climate change over the next century, obviously, again, that comes with a time-scale and many of the stations are in coastal areas, there are worries about rising sea levels, glacier melt and all the rest of it. Has that been taken into account? Will these stations and the waste thereon be defendable for that period of time?
Mr Dawson: It is something that we have considered extremely carefully. When we were assessing the sites, we looked at the projected sea level rises. It was one of the factors we took into consideration in saying whether sites were suitable or not. The arrangements for on-site waste storage will have to be confirmed by the regulators, they will need to take into account the latest projections of sea level rises and to be confident that appropriate mitigations can be put in place to protect the sites for as long as they will be there. It is not just a kind of fire and forget process: they will have to keep evaluating the latest projections as we go along to ensure that the facilities can be protected.

Lord Hunt of Kings Heath: The Climate Change Impact Assessment is based on the best projections we have at the moment, but because projections will change there will have to be a continuous programme of monitoring and reflection in terms of the defences that are required as we go ahead.

Q801 Sir Robert Smith: Will the IPC have any cognisance of the funding that will be available to make sure that this is actually deliverable over that 100-year risk?

Lord Hunt of Kings Heath: I think it is for government to ensure the arrangements are there to make sure that the funds that are established will make sure that the money is there to fund the decommissioning. Rather as Mr Weir suggested earlier in his comments about how legacy waste has been dealt with, I think we have learned a lot of lessons both about how to deal with waste but also about the issue of public liability and we are absolutely clear here that we want the companies to take the liability; and that is why under the Energy Act 2008 companies are required to set up independent funds to do so. I do not know if the Committee would like more details of how we are going to do it, but I am happy to provide it.

Q802 Paddy Tipping: In the last Energy Bill we talked about it at length.

Mr Dawson: The rule of thumb is that construction cannot start until the Government is satisfied that there is an agreed and approved funded decommissioning programme in place.

Q803 Paddy Tipping: On a factual point, if a planning application comes in for a deep nuclear waste repository, who is going to handle it? Is it the IPC or is it the local authority?

Lord Hunt of Kings Heath: That point was discussed in the 2008 White Paper, and I think there we said that we were minded that it would go to the IPC, but I think it would be fair to say we have not made a firm decision yet, and, frankly, we are not really anywhere near having to make a decision.

Paddy Tipping: We have talked a lot about nuclear energy. Let us talk about biomass, bioenergy for a moment.

Q804 Dr Whitehead: The renewables NPS does not place any requirements when looking at large biomass power station applications on the origin of the fuel that might be used in that power station. Do you think that is a mistake?

Lord Hunt of Kings Heath: I am happy to look at it. I know that there are issues around the sustainability of biomass. We are very keen, in this country, and we have been arguing very strongly in Europe and in international fora about the question of sustainability; so I can assure you that this is something that we will continue to look at and keep a very close eye on.

Q805 Dr Whitehead: Interestingly, the Environment Agency have suggested that perhaps there should be a good look at the origin and the carbon footprint of what may come in as fuel for biomass power stations given consent. As far as energy from waste is concerned, Friends of the Earth have suggested to us that actually the footprint of energy from waste power stations is higher than gas power stations. I personally do not go along with that on the grounds that you have to take account of the original carbon content of what is being made into waste-derived fuel, but I think the general point is looking at the carbon cycle of those fuels and how those bioenergy power stations might work. Are you confident that DECC has done the work on this? Would it not be a good idea to have a much better view of how those carbon cycles work to inform those NPSs and how the IPC works from that?

Lord Hunt of Kings Heath: There are two points that I would make. I would like to bring my colleague in as well. Clearly, on biomass the Department is doing some extensive work at the moment looking at biomass and future policies, and I hope that we can pick up that point in it. The second thing, referring back to a point that I made to Mr Hendry some moments ago about the waste hierarchy, our overall view is that whilst energy recovery can make a contribution to climate change, it should not displace waste from management further up the hierarchy. As you will know, it is waste prevention, reuse, recycling before you get to energy recovery. We are very mindful of that.

Ms Stuart: I think that is true. I have never seen the figures that you have quoted, but I would be surprised if they had not actually assumed that nothing is being recycled.

Lord Hunt of Kings Heath: On that, obviously we will have a look at the figures.

Q806 Dr Whitehead: Would it not be a good idea, perhaps, if those were published to underlie what is in, or not in, the relevant NPS?

Ms Stuart: I think we have made it clear in the “energy from waste” section that you are looking at the bottom of the hierarchy, effectively. I would hope that is clear, although obviously we will be looking at the points made to us. On the biomass, yes, as we have started out on this discussion the NPSs have reflected existing policy—that is what has been happening at present—but I have been talking quite intensively to my colleagues who work on the policy
side of biomass and I know they have been trying very hard in Europe to get some agreed standards. Obviously, if we can get those agreed standards, my aim is to translate them straight into NPSs without a pause, which is why I am talking to them about the timings they are suffering from, because, as we all know, European negotiation can be an interestingly long process. I think they are hoping that something will come out quite soon, a proposal from Europe, that would give us a steer as to where we are heading.

Q807 Dr Whitehead: There is a distinction, is there not, though, between saying that it would be a good idea if the waste hierarchy were not breached by perhaps a particularly intensive programme of development of energy from waste plants and actually working out how that may happen in practice so that you do not have either a number of stranded assets should the waste hierarchy work out as well as it should do, or, alternatively, that recycling and reuse is compromised by the fact that you have in place a number of known requirements for energy from waste which, therefore, pull the waste hierarchy down. Are you confident that you have actually got the empirical research available to make that suggestion that the waste hierarchy will not be breached more than a wish?

Ms Stuart: I have to say, personally I have not got the research because—this is one of these wonderful departmental things—the waste policy is actually Defra’s and we have translated that into our NPS because of the energy aspects, but certainly, talking to them, they are very keen that we are not using energy from waste. They are seeing energy from waste as last stage waste disposal, not as first preference energy creation. We need to look at this and make sure that we have said what we mean to.

Lord Hunt of Kings Heath: I wonder if we could offer to write to you with more information in this area. The general principles on this are, first of all, that it uses land and delivers CO₂ savings, second, that it uses land and second, that it uses land and delivers CO₂ savings, third, that it does not undermine global food supplies or inflate prices and, obviously, overall, that it is sustainable. We are very keen that if biomass is used, and it does have potential and I do not think we should underestimate that, and there are a lot of developers out there who are interested in investment, but it must add to the sum in terms of our climate change policies.

Paddy Tipping: You will be pleased to know we are coming towards the end of our session, but I do want to talk about carbon capture and storage and then just pick up one or two issues at the end.

Q808 Charles Hendry: First of all, Minister, can I say how much I welcome the Government’s rethink of its position on extending the CCS trials on coal towards gas as well. I think that is going to be very welcome.

Lord Hunt of Kings Heath: I hope, Mr Hendry, that will be remembered in the wash-up.

Q809 Charles Hendry: All these things will always be remembered! In relation to the NPSs and carbon capture and storage, is there a risk that the totality of the projects are not going to be looked at and they will look at the plant but they will not look at the pipeline infrastructure and the sequestration plants?

Can you be clearer than perhaps the NPS has been so far that they will look at the totality of the applications?

Lord Hunt of Kings Heath: Yes, I am quite clear that we have to look at the totality. Of course, you will know, particularly given the potential of the North Sea as storage, that if we can really make a go of CCS this has huge potential, and so, obviously, it is important that the totality of the demonstration of CCS actually takes place.

Q810 Charles Hendry: Also, in relation to the requirement, it says that applicants will need to demonstrate the economic feasibility within the combustion station’s lifetime of the full CCS chain covering retrofitting, transport and storage. The issue of economic feasibility has been raised in some of the evidence which we have had, saying that at this stage it is simply not possible to demonstrate economic feasibility because people do not know how the technology will work necessarily or how much it is going to cost. Has the Government had a chance to reflect about whether that wording is appropriate?

Lord Hunt of Kings Heath: As you know, what we set out is a programme where we want to get four demonstration projects up and running as quickly as possible, then to have the independent evaluation that looks at both the technology but also at the cost, and assuming that all is well we would then expect retrofit of those plants where they first develop CCS and then a development of new coal generation using CCS. Clearly, we are very much at the early stages of this, and one has to very much hope that as the developments take place and as we learn more the technology gets better and it becomes cheaper, because at the moment one of the big issues worldwide is the actual cost of CCS, but I have no reason to think that what we have put in the NPS is in conflict with that.

Q811 Charles Hendry: The evidence we have had, particularly from Scottish and Southern, was that that clause may, on its own, be enough to deter investment in any applications being made.

Ms Stuart: Am I right in thinking that Scottish and Southern’s point was on gas and the CCR requirement?

Q812 Charles Hendry: Yes.

Ms Stuart: One thing I would say is that this is not actually a new requirement. There has been an existing CCR requirement for gas power stations for about the last year or so, and we are still getting gas power station applications; so it is obviously not, in practice, deterring applications. We are not expecting people to prove that in 20 years’ time they know exactly what the state of the finances of the world will be: it is more that we do not want people to produce a projection that is, frankly, obviously never going to be realistically able to happen and then, when we come to the point (if we ever get that
far) where we have got proven CCS and start saying to people, “You need to do retrofit,” they say, “Oh, but it is not economically feasible.”

Q813 Charles Hendry: I think there is some overlap there. They understand they may need to have a large car park next to the facility for some extra CCS activity, but they also seem concerned about this requirement for showing economic feasibility.

Ms Stuart: Yes.

Lord Hunt of Kings Heath: I well understand that, Mr Tipping. I am sure in the Energy Bill there has been debate on the issues of the cost of this and, of course, it is the reason why there are some who argue that new coal power stations should have to have CCS on all production. The reason that we went for 300 megawatt net was a reflection of the costs involved. Can I clarify a point that Mr Hendry asked me about the IPC’s role in relation to CCS and would it cover from generation to transportation and storage. I ought to have said that in relation to storage offshore the consent regime is different, but in terms of whether government as a whole wishes to see in CCS the whole demonstration of generation, of capture, transport and storage, we do indeed.

Q815 Mr Weir: Can I clarify what Ms Stuart said? My understanding of Scottish and Southern’s concern is, although there has been a requirement before, the NPS now says that the IPC cannot grant it unless they demonstrate economic feasibility. I think the concern is about the wording in the NPS perhaps strengthening this. I wonder if you can look at that again. It may be possible to address it by a change in wording.

Lord Hunt of Kings Heath: That is a fair point. If we are giving signals that are not understood, then clearly we need to look at the wording.

Q816 Sir Robert Smith: How specific is the NPS on the need for the carbon dioxide transport network that will obviously evolve if this is going to be at all practically deliverable?

Ms Stuart: I think we have talked in the NPS about the fact that there will need to be both on-shore and off-shore pipelines and, obviously, storage for the CCS. I have to hold up my hands and say I do not think there is at present enough guidance in the NPSs about the consenting of particularly the pipelines and whether there is a difference between consenting a gas pipeline and a CO₂ pipeline, which I understand legally is technically a gas pipeline but obviously may have different impacts, and we are actually doing some work on looking at how we would make that clearer and how the consents would actually work in those cases. We are aware it is still a gas but it is a different gas.

Q817 Sir Robert Smith: After the consultation you hope to have a more definitive idea.

Lord Hunt of Kings Heath: Yes. My understanding is CO₂ pipelines come under the Pipelines Act but they are part of the IPC regime, but, as part of implementing obligations on the EU Directive on Geological Storage of CO₂ we are proposing to bring some secondary legislation in. This is also to ensure third-party access and unifying arrangements for authorising CO₂ pipelines onshore and offshore. It is an issue that we understand, and we clearly have proposals to actually deal with it. On your point about if it is doable, I do think one has to stress here that if you look at the IEA projections on use of coal as a prime energy source going ahead over the next 30, 40, 50 years, if you look at the scale of construction in India and China, unless we can develop CCS I do not see how we have got any chance at all of meeting global emission reductions targets. You come back to the importance of this country, both in terms of our own indigenous supplies in terms of energy security, but the potential, if we can really get on with this, in terms of technology export, is huge for us.

Q818 Paddy Tipping: Let us look to the future. If in the summer or autumn the NPSs are designated, energy policy evolves—it always has done; it will do in the future—and you want to make some fairly major changes in policy at some future point, what is the process for changing the NPS? What happens?

Lord Hunt of Kings Heath: We have two options really. We can go through a process of a new NPS, or we can go through a process of reviewing parts of it. I think, as I said earlier, when it comes to it, if we find that there is some aspect of the NPS that really is causing real problems, we can suspend it. I think there is a clearly laid-out process for being able to deal with it flexibly but, I hope, without causing uncertainty, because, clearly, when you look at energy infrastructure one of the points that I have really understood being in the Department is that we are talking about years and years ahead, years in the planning, in the financing, the kind of investment return, and what we are trying to do is to give as much certainty as we can but also have some flexibility in terms of being able to make changes where they are necessary. Going back to the first series of questions, what is important, because I believe the IPC must be concerned with planning consents, is that if it appears that policy needs to develop, we need to make sure that we can make the necessary interventions. If part of that is revising the National Policy Statements, then, of course, we are prepared to do so, but I hope that the work that we are doing at the moment—the scrutiny, the consultation—will make sure that what is eventually designated will be fit for purpose for some time to come.
Q819 Paddy Tipping: Let us just talk about a couple of processes. If you are going to suspend the NPS or part of it, that seems a fairly straightforward point. If you want to have a major change, presumably you have got to go through a consultation process again. **Lord Hunt of Kings Heath:** Yes, indeed. In fact any change has to go through a process of some parliamentary scrutiny. This will not be done lightly, but if it is done it will be subject to the same kind of work that we are now seeing. It is not, as if by a sleight of hand, you can suddenly make a change; it has to be very thoroughly gone into and will be subject to very transparent review.

Q820 Paddy Tipping: On that note, with a lot of work in front of us all into the future, can I thank you, Phil, Anne and Adam for coming. You have promised to let us have a one or two bits of paper. We have promised to try and produce this report by 28 March, so the sooner you write to us the better. Thank you all very much indeed. **Lord Hunt of Kings Heath:** Thank you very much.
Written evidence

Memorandum submitted by the Association for the Conservation of Energy

INTRODUCTION TO THE VIEWS OF ACE

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on three key themes: policies and programmes to encourage increased energy efficiency; the environmental, social and economic benefits of increased energy efficiency; and organisational roles in the process of implementing energy efficiency policy.

We welcome the opportunity to submit written evidence to this inquiry.

1. ACE is concerned that the National Policy Statements on the whole, and the Draft Overarching National Policy Statement for Energy (EN-1) in particular, do not sufficiently investigate the potential for reducing UK electricity demand. The Department for Energy and Climate Change (DECC) seems to view energy supply policy as entirely separate from energy demand policy. Any consideration of future supply requirements has to be founded upon a detailed assessment of energy demand.

2. ACE sees no evidence that such an assessment has taken place. The statements on the potential for reducing energy demand simply claim that any efficiency savings will be displaced by increased demand from electric heating (presumably heat pumps), electric vehicles, and an increase in the number of households. This is not an acceptably rigorous assessment.

3. It is vital that electricity demand reduction be considered fully because the successful implementation of policies in this area may negate the need for additional generating capacity. Government is relying upon technologies that are in most cases highly controversial, often unproven, and potentially very costly to meet an “electricity need” that could be reduced through the implementation of effective demand reduction policies. How do the costs and benefits of such investment in generation capacity compare to the costs and benefits of demand reduction? It appears that Government has ignored the question.

4. In 1981 The House of Commons select Committee on Energy (Sixth Report to Session 1980–1) posited this specific criticism of Government policy: Government “still has no idea whether investing £1,300M in a single nuclear plant is as cost-effective as spending a similar sum to promote energy conservation”. This report was issued at a time when Government had just announced its intention to promote a new generation of nuclear power stations (of which just one was finally built). It is plainly ludicrous that a generation later Government is still failing to address this most basic question.

5. Government frequently espouses the virtues of energy efficiency: it is the cheapest way of reducing carbon emissions, it improves energy security, it increases the productivity of our businesses and industry, saves money for householders and generates economic wealth. Yet, when designing national energy policy, Government would rather opt for controversial, unproven and/or costly technologies such as nuclear power or carbon capture and storage.

6. ACE believes that it is possible to radically reduce our electricity consumption, whilst allowing for the increasing penetration of heat pumps and electric vehicles (which would largely consume electricity during off-peak hours). One scenario sees electricity demand falling to 282 Twh in the long-term.¹ Potential demand reduction policies could include:
   — Fully insulating homes that use traditional electric heating systems, and replacing these systems with heat pumps that are between two and four times more efficient.
   — The rigorous implementation of minimum efficiency standards on all electrical products.
   — Consideration of “scrapage schemes” to accelerate the replacement of inefficient products.

7. In conclusion, energy efficiency must be given primacy in energy policy in order to reduce costs to businesses and householders, and to maximise security of supply. As such, Government must undertake and publish a thorough review of the potential for reducing the UK’s consumption of electricity, and set these options alongside those for increasing generating capacity to present the full range of alternatives for meeting the UK’s electricity needs.

January 2010

Memorandum submitted by the Association of Electricity Producers

ABOUT AEP
1. The Association of Electricity Producers (AEP) represents the many different companies, both large and small, that make the electricity upon which the UK depends. Between them, AEP members account for more than 95% of the country’s electricity generation capacity and embrace all generating technologies used commercially in the UK—coal, oil, gas, nuclear power and a range of renewable energy technologies.

UK ENERGY CHALLENGE
2. The UK faces a major energy challenge. About a quarter of our existing electricity generating capacity is scheduled to close before 2025 either because power stations are reaching the end of their operational lives or because they cannot comply with air quality legislation. Proposals for tighter limits on emissions are likely to cause a significant additional quantity of coal- and gas-fired plants to close by the early 2020s. These power stations will need to be replaced simply to keep the lights on.

3. The UK is committed to challenging climate change and renewable energy targets. The power generation sector will be central to the delivery of these and electricity producers have committed to delivering a carbon neutral electricity sector across Europe by 2050. This will require huge investment in new, low carbon forms of electricity generation, such as renewables, nuclear and fossil fuels with Carbon Capture and Storage.

4. The large expansion in renewable electricity (a six fold increase over the next 10 years) will lead to overall levels of power generating capacity rising to compensate for the variable output from many of the renewables being built. In the medium term, more power generating capacity may also be needed to meet an increase in the use of low carbon electricity in applications such as electric cars.

5. Increased levels of generation capacity, some of which will be located in areas far from the existing transmission network, will also require new and upgraded electricity network infrastructure to carry the electricity from where it is generated to where it will be consumed.

6. Massive investment in new energy infrastructure is therefore essential to maintain power supplies and reduce carbon emissions. Estimates suggest that companies will have to invest about £100 billion by 2020 and up to £100 billion more in the following decade.

7. These are very large sums of money and people that would like to invest in the UK’s electricity industry will not do so unless they are confident that they will get a worthwhile return on their investment. The UK must be an attractive place in which to invest in energy infrastructure—around the world, there are many other industries and countries competing for investment.

NEED FOR REFORM OF THE PLANNING SYSTEM
8. A business-like planning system that avoids intolerable delays is crucial to the delivery of this massive investment in new power stations. The UK needs a timely, efficient and predictable planning process because if the perceived risks to project development are greater in the UK than elsewhere in the world, then necessary investment in the UK is unlikely to be forthcoming. The old way of doing things—approval for Sizewell B power station took six years from application to consent—is no longer sensible.

9. The Association therefore firmly supports the package of measures in the Planning Act 2008, which provides developers with assurance of an efficient consenting process, with decisions being taken by an independent body on the basis of clearly defined principles and on fixed timescales.

10. Energy companies that apply for planning consent would naturally like to secure it and will strive to bring forward the best possible applications in the light of community consultation and the guidance given by the new energy National Policy Statements (NPSs). However, even refusal in a timely way is much better than the old regime when the process dragged on for years and projects became too expensive to pursue.

EFFECTIVENESS OF THE DRAFT NATIONAL POLICY STATEMENTS
11. The Association considers that NPSs are a vital and integral part of the Planning Act regime. Developers need certainty that issues of established national policy will not be opened up to review during the examination of every development proposal, increasing uncertainty and delay.

12. The suite of energy NPSs must establish a clear and stable policy framework for nationally significant energy infrastructure projects and provide the Infrastructure Planning Commission (IPC) with unambiguous guidance on the application of national energy policy in a planning context. This will allow the IPC to accept the national benefits of energy projects and focus on the assessment of their local impacts.

13. It is not just the IPC that will benefit from the new NPSs. They will also provide developers, local communities and other stakeholders with clarity on the criteria against which projects will be assessed. We consider that the energy NPSs do in general, as currently drafted, provide all parties with the necessary certainty.
14. We support the style and format of the suite of draft energy NPSs, which:
— set out established energy policy;
— determine the need for new energy infrastructure; and
— provide information on the specific impacts of energy infrastructure developments, what details
  should be included in an application, how they should be assessed and possible means of
  mitigating them.

15. When they are finally approved, these documents will help make the planning process for large
projects more business-like and will give more confidence to investors. We therefore consider that the draft
energy NPSs should in principle be designated, avoiding alterations which could undermine their
effectiveness.

16. We welcome Parliamentary scrutiny of and public consultation on the draft NPSs. Following this
process, the government should designate the energy NPSs as soon as possible. For the new Planning Act
regime to function as envisaged, all the parts of the package of reforms must be in place. Unnecessary delays
in designating the NPSs would create further uncertainty for developers and hamper the UK’s ability to meet
its energy and climate change challenges.

Establishing Need for New Energy Infrastructure

17. The Association welcomes the NPSs approach to establishing need for new power generation in the
context of the UK’s pressing security of supply and carbon reduction priorities. However, we consider that
the need case could be further strengthened, emphasising the critical importance of investment in all new
energy technologies. The NPSs should make clear that the IPC should give substantial weight to the need
case for each technology.

18. The draft Overarching Energy NPS makes it clear that “companies should be permitted to determine
the individual projects to bring forward within the strategic framework set by Government”. We strongly
support this approach, which reflects established energy policy, and consider that it would be deeply
inappropriate for the NPSs to attempt to prescribe the electricity generation mix.

19. In a competitive market, energy companies are best placed to determine which power stations need
to be built in the light of market signals and strategic policy direction from the government.

20. It is essential that the need for low carbon technologies is spelt out in the NPSs, but they must also
contain sufficient flexibility to allow developers to determine exactly which projects are promoted. This
flexibility is needed to allow the market to respond, given the urgency with which established technologies
will need to be deployed in order to ensure security of supply, future changes in energy markets and policy,
and the fact that not all projects that are consented will necessarily be built.

Non-spatial Nature of the National Policy Statements

21. The Association supports the fact that the energy NPSs, with the exception of the Nuclear NPS, do
not specify the locations where new power generation infrastructure can be built.

22. Decisions on where to locate plant are affected by a range of technical, economic, commercial,
environmental and operational factors, which the companies bringing forward development proposals are
best placed to assess. We do not consider that the NPSs could effectively establish where plant should be
built and any attempt to do so would take significant resource, potentially delaying the introduction of the
NPSs, and risk putting the NPSs quickly out of date.

Accounting for Carbon

23. The Association considers that market mechanisms can deliver long-term, cost-effective emissions
reductions, given the right framework conditions. The government should continue to press for a robust EU
Emissions Trading Scheme, and take other steps as necessary to ensure that the right incentives are in place
to secure investment in low carbon technologies in the UK. The Committee on Climate Change has recently
been established to provide an independent check that climate objectives will be delivered. Its role is to
highlight any shortcomings and recommend options for further measures for the Government to consider.

24. Within this wider framework, we therefore do not think that the IPC should need to consider the
overall carbon impact of the generation mix when assessing individual project proposals. Climate change
policy drivers will have been taken into account in the guidance in the Overarching and technology
specific NPSs.

Making NPSs a Primary Consideration in Local Authority Decision Making

25. The draft NPSs set out national policy and provide the IPC with an indication of how to assess the
national need for energy infrastructure and the local impacts of a project. We consider that these principles
should be applied equally to projects that are classed as “nationally significant” and those that fall outside
of the IPC’s remit. A large proportion of renewable energy projects in particular will fall to local authorities
for determination. We therefore consider that the NPSs should be a primary consideration for local planning authorities when taking decisions on energy infrastructure, as they will be for the IPC when considering larger projects.

January 2010

Supplementary memorandum submitted by the Association of Electricity Producers

1. The Association was pleased to give evidence to the Committee on 27 January. At the session, we undertook to provide further information on planning applications for onshore wind farms in England and Wales.

2. The number of wind farms in the planning system and their relative size varies by month and year. Based on figures supplied by the British Wind Energy Association, we understand that at the time of writing there are 2,568 MW (112 projects) of onshore wind farms in the planning system in England and Wales. Ten of these projects (total capacity 1,058.5 MW) are over 50 MW in size and would thus fall to the Infrastructure Planning Commission (IPC) for determination had they been submitted under the new Planning Act regime.2

3. Projects over 50 MW therefore currently account for 41% of the onshore wind capacity in the planning system in England and Wales, but only 8.9% by number of projects.

4. At the time of writing, the IPC’s Programme of Anticipated Projects identifies five onshore windfarms over 50 MW that might apply for consent before the end of 2010.3

5. The Committee also requested information on consenting rates for planning applications submitted to local planning authorities. Approval rates in England in 2009 were 29% of schemes and 25% of capacity, down from 57% of projects and 63% of capacity in 2007. In Wales, approval rates were 80% of projects and 95% of capacity in 2008, although only five decisions were made in that year.4

6. Please do not hesitate to contact the Association if you require any further information.

February 2010

Memorandum submitted by Billingborough and Horbling against Turbines and Billingborough Parish Council

SYNOPSIS

Our detailed comments on the Draft National Policy Statement for Renewable Energy Infrastructure (EN3) are given below using the same layout as the document itself.

To be helpful however we first summarise some of our key arguments as to what is wrong with the statement and how it can be improved. This synopsis does not cover all the points we are making and should not be taken to represent the whole of our representation. All our synopsis comments relate to on-shore wind power:

1. It is necessary to know who determines whether an application is 50MW or over. Wind farm operators clearly see the IPC route as more favourable than a local authority route to consent and there is evidence that they are therefore saying that their proposals are 50MW. Given that EN3 (wrongly) encourages flexibility, developers can go down the IPC route and then later change to a smaller scheme making a mockery of the Act. How will the IPC be required to check out the power generation capacity? Surely it cannot just take the power company’s word?

2. “Good design” is a hollow principle when it comes to wind turbines. Wind turbines will always be designed to achieve the greatest efficiency in power generation at the lowest cost (often at the sacrifice of noise considerations ) and considering their ever increasing size and industrial nature their visual design will play no part and it is cynical of EN 3 to suggest that it will.

3. Electricity grid connections must be required to be detailed in the main application as their impacts on communities, especially when overground, can be as great as the turbines themselves.

4. The final minor roads and tracks giving access to windfarms should be required to have any “improvements” removed after the windfarm construction phase. Over zealous highways authorities should not be allowed to insist on concrete kerbs/radii, metalled or concrete roads or hard drainage as all of these can add up to threatening urbanisation of the countryside and can even be used as a pretext for further development. We believe that the industrialization and urbanization of our fast disappearing English countryside is just as affected, in an insidious way,

2 See http://www.bwea.com/ukwed/index.asp
3 See http://infrastructure.independent.gov.uk/?page_id=202
by the access works to windfarms as by the turbines themselves. Indeed if the windfarms truly are temporary as the author would have us believe then these impacts threaten to last longer than they do.

5. We have great concern about EN3 setting up the perception that somehow windfarms are temporary and for this reason their impacts are less serious. 25 years is after all a generation. If for example there are adverse effects upon an historic landscape it should not be an offsetting argument (as advocated) to say that they do not matter because they will only be for 25 years. That is ridiculous! If the historic landscape is important then it is important for every generation and one cannot be missed out! It is simply wrong to steer the IPC in the direction of lessening the importance of adverse effects upon landscape, visual amenity and historic assets on the grounds of temporariness, when the life is expected to be at least 25 years. This does not happen in the whole Town and Country Planning System with any other form of development. Temporary should only be a label for a development with a life of less than three years. It is outrageous to suggest that somehow any indirect effects on historic environment features such as effects on setting will not be permanent and therefore should not count as much in weighing up the decision. Does this mean that if one wants to experience the beauty of a Cistercian Abbey in its setting one might have to come back in 30 years time (if still alive)! Does this mean that the IPC should allow windfarms all around Stonehenge? What about the thousands of other less well known historic settings that this country is known for?

6. We object to the way that flexibility for applications is advocated. There is no logical reason why windfarm applications should have greater flexibility than any other planning application—indeed because the impacts are potentially much wider, if anything they should have less flexibility. For example the mechanism for driving the rotors can vary greatly in its noise generation and this is not just to do with its MW capacity. In order to decide whether to support or object to a local application the local community and other consultees need to know precise details of the development. If the developer is able to say in debate or at the hearing that “this is just an example and the final product could be different” it will be impossible for objectors (and the IPC/local planning authority) to pin him down and there will be no sensible debate. There is no less reason for a wind farm developer to not know the layout of his windfarm than for a housing developer not to know the layout of his housing estate.

7. In its attempt to support a flexible approach EN3 advocates that the “maximum” scheme that could be built should be appraised. (This also encourages the applicant to go down the IPC route when he may intend to build a smaller development—see point 1) But what does maximum mean and this is not such a clever solution as it sounds because a smaller and cheaper turbine, which the applicant would be allowed to switch to, could well be noisier. The scheme should be the actual scheme.

8. A tolerance of up to 50 metres in the “micrositing” of turbines is unacceptable and could have unexamined effects on noise, archaeology or the historic environment. This does not happen with any other development requiring consent—what is different?

9. EN3 proposes giving special consideration to impacts affecting sites of “national designations” including listed buildings but it talks about where application sites are “in” these sites. To prevent applicants drawing their application boundaries around such designations as listed buildings or monuments the consideration needs to apply to sites which contain or are close to nationally recognised designations. It should be borne in mind that other planning legislation and advice (PPGs) refers to the importance of “the setting” of listed buildings and ancient monuments as well as the structures themselves. This important concept should also be incorporated here. The aim to weigh up any harmful impacts with environmental, social and economic benefits is admirable and is what decision making on development is all about. EN3 should make it clear that this approach should apply to all application sites and not just those within or close to national designations.

10. It is illogical to suggest that windfarms will bear greater scrutiny in greenbelts—greenbelts were introduced to stop urban sprawl and to achieve the separation of cities. There are no greenbelts where there are no cities but this does not mean to say that the countryside is any less precious—it belongs to all the citizens of this increasingly crowded country. The circumstance of greenbelts, when it comes to windfarms are therefore not “very special” relative to anywhere else.

11. All other things being equal there is no reason why a sequential approach should not be applied to windfarms meaning there is no reason why priority should not be given to siting turbines on previously developed land. If this approach is specifically banned then it will simply mean that windfarm operators will always go for the cheapest solution which means constructing on greenfield land.

12. Considerations regarding birds is not just a question of the risk of collision with turbine blades. It is also a question of not interrupting large open spaces important for the winter grazing of such species as golden plover and lapwing which require uninterrupted space to land flocks of 1000 or more birds.
13. Potential adverse impacts which are missing from EN3 include:
   - Effects of large concrete foundations on aquifers used for drinking water (e.g., the South Kesteven fen margin in Lincolnshire).
   - Effects of large concrete foundations on drainage and on carbon release in their manufacture.
   - Effects upon radar at airports and airfields (these have been used by local planning authorities and the MOD as reasons to refuse applications).
   - Effects in areas heavily used by light aviation.
   - Effects on broadcasting and mobile phone signals.

14. There should be a requirement for the land on which windfarms stand to be reinstated when they become disused for a given period of time (say a year) and not just when the consent period runs out. This is to prevent the possibility of wind turbines, towers and infrastructure standing disused for many years when their operation might cease because of changes in the economics and sources of power supply.

15. Concerning the effects of noise, keeping turbines at a safe distance from homes is a key requirement. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier, which seems to be the Government’s objective. This distance should be 2km. This is the distance recommended by La Societe de Medicins in France and it has been the distance for the search criteria for windfarm sites issued in planning advice by the Scottish Government. If there are one or two isolated homes within the two kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes — such as the Davis family in Deeping, Lincolnshire).

16. The reliance on the standard known as ETSU-R-97 for the testing of noise effects from windfarms is unreliable because it dates from 1996 when there were very few and much smaller wind turbines in the UK. Much more is now known internationally about the noise effects from windfarms and their repercussions for human health including vibro acoustic disease. This 14 year old standard must be urgently reviewed in the light of empirical evidence including that of families who have been forced to leave their homes. However this complication and arguments over the complex business of measuring noise could be completely removed if a minimum distance of 2km between turbines and human habitation was adopted.

17. It is stated that “The IPC should use ETSU-R-97 to satisfy itself that the noise from the operation of the wind turbines is within acceptable levels” but will the IPC really carry out its own independent tests? Experience has shown that it is very easy for applicants to contrive the results of noise tests. This is particularly the case because the practice has developed of using laboratory/workshop readings for noise from particular turbines and this does not simulate the actual field conditions. Neither does it simulate the cumulative effect of several turbines combined with wind noise. The actual arrangement of the turbines on site can significantly affect noise generation. It is vital that the noise tests are taken from the same operational turbines that the applicant proposes to construct. If a new machine is envisaged then it should not be accepted until field tested in real operational conditions.

18. As advocated IPC should condition consents in respect of the maximum noise levels of machines. But control is much more effective and easier before a consent is given. How is the IPC going to monitor noise levels after developments have been constructed? Is it really going to close down turbines that are too noisy? This amounts to shutting the stable door after the horse has bolted.

19. Requiring wind turbines to be a minimum distance of 2km from any human habitation would obviate the need for any complex testing and control of shadow flicker.

1. THE PURPOSE OF ENERGY NATIONAL POLICY STATEMENTS

Introduction

1.1.1 The Government’s transition to a low-carbon economy sounds like fait accompli in terms of policy. It needs to be recognised that whereas many of the measures to affect a low carbon economy are desirable anyway, they are not all (for example covering the whole of England’s countryside with wind farms) and it should be recognised that many people still question the evidence for man-made global warming and the effects of carbon dioxide and that consequently the Government’s policy may be wrong and may have to be changed. It can be dangerous to back the measures to carry out a policy without constantly re-examining the policy itself, especially when there are many vested interests in the policy, both financial and political. In this way the low carbon economy is like the Emperor’s New Clothes.
Role of the NPS in the Planning System

1.2.1 and 1.4.1 It is evident that the new Infrastructure Planning Commission (IPC) is being required to have primary regard to the NPSs and EN3 and therefore if the NPSs in general (and EN3 in particular) are too heavily bent towards Government Policy without allowing a fair consideration of wider social, economic and environmental considerations then the IPC will not be a truly independent body but simply a puppet of the Government (a dangerous step towards totalitarianism). The document must be equitable both in allowing the weighing up of the costs and benefits of planning decisions and in allowing both sides of the argument on a proposed development to be heard in a balanced way. This has been an important attribute of the British Town and Country Planning System since 1947. The law may well have been changed but this does not throw out the principles of equity.

Infrastructure covered by this NPS

1.7 The Act itself makes it clear that any renewable energy project for onshore wind of over 50MW is covered. By implication any project under this limit will go down the route of a normal planning application to a local authority in which case the NPSs will not be the primary determinant of the result? But who decides the size of the project in MW? This is not as simple as it seems especially as the draft EN3 itself and the IPC (see letter to me attached) are both advocating flexibility and it is clearly evident at present that windfarm developers will want to push all applications down the IPC route because they will expect a more favourable result. Is it just sufficient to say that the power generation is over 50MW? If impacts are to be considered for a maximum size rather than an actual size then applicants will tend to exaggerate the possible sizes of their developments just to get consent (and then be free to switch to something smaller). That would make a mockery of the system and of Parliament.

2. Assessment and Technology—Specific Information

2.1.1 This seems to be saying that the need for any application coming before the IPC cannot be questioned. This seems to be saying that both man-made global warming is proven beyond doubt and that wind turbines (or any other specific technology forming an application) are the best means of provision of renewable energy. One or both of these statements may well not be true and it is not equitable for the Government to try to close down any debate on these matters. History shows that planning inspectors and judges have found it inequitable to adopt a position that one important aspect of a decision (ie need) cannot be debated. All planning decisions are about weighing up benefits with costs and by costs we mean social, economic and environmental costs. If the benefits cannot be examined then how can they be weighed up with the costs? The author’s stance is approaching totalitarian.

2.2.1 Even the least articulate applicant will have no difficulty in stating how his or her application “fits” with the NPS. That will be what is called a “no-brainer”!

Good Design

2.4.1 and 2.4.2 “Good design” is a hollow principle when it comes to wind turbines. Wind turbines will always be designed to achieve the greatest efficiency in power generation at the lowest cost (often at the sacrifice of noise considerations) and considering their ever increasing size and industrial nature their visual design will play no part and it is cynical of EN 3 to suggest that it will. This is virtually acknowledged in para 2.7.3.

2.7 Onshore Wind

2.7.1 Just because windfarms are “the most established large scale sources of renewable energy in the UK” does not mean that they are the best, nor that they should continue to be the main source. The reason why they are the most established is entirely a result of the Government’s financial regime which favours power companies building them—they are not naturally economic and they represent old technology, not new. In Gordon Brown’s tele-conferencing input to the post Copenhagen de-briefing conference at the Queen Elizabeth Conference centre he talked about “low-carbon investment” being “one of Britain’s main industries with half a million jobs”. But we have missed the boat with wind turbines having closed our last manufacturing plant and we should be concentrating on new technologies in wave and tidal power which also have the advantage of not intruding on residents everyday lives. These options should be financially incentivised much more, not wind turbines.

Predicted Wind Speed

2.7.7 It is agreed that wind speed increases with height above ground level, which is the reason why turbines are becoming taller. Wind speed does not vary hugely across the country however and is less likely to be the reason for a particular siting of a windfarm than the perceived sparsity and inarticulateness of the local population. Indeed the latter is probably the key factor in power companies siting their projects but is not mentioned in EN-3.
Electricity Grid connections

2.7.12 should also say that the grid connection, especially where overground by using pylons, can have considerable adverse impacts on the amenity of residents and on landscapes. All applicants should be required to set out detailed proposals for these connections at the time of the main application for the wind farm. Because of the possible adverse impacts it is not acceptable for electricity grid connections to form subsequent applications once the development is approved.

Access Tracks

2.7.15 Access tracks should be required to be largely removed and the land re-instated once construction has taken place. This is to protect the countryside because creating urban type roads with metalled surfaces and concrete kerbs is one of the most sinister effects of onshore windfarms in terms of erosion of countryside character. Ironically it is often likely to be an over zealous local highways department which wrongly insists on these urban type standards.

Project Lifetimes

2.7.16 EN3 should positively state that consents should be conditioned so that upon decommissioning wind turbines should have their concrete foundations removed to at least one metre’s depth.

2.7.17 and 2.7.18 It is not just a question of requiring decommissioning after a set life of say 25 years. Technology may change fast and the turbines may stop being used after a much shorter period. There should therefore be conditions that require any turbines that have not been generating electricity for a specified period (e.g. one year) to be decommissioned and removed. This is to prevent the countryside from being littered in future with dead turbines or their towers just because the act of finally removing them and reinstating the ground is too costly for their owners. 2.7.18 has not been thought through sufficiently.

2.7.19 We object strongly to the first sentence of this paragraph, if not the whole of it.

We have great concern about EN3 setting up the perception that somehow windfarms are temporary and for this reason their impacts are less serious. 25 years is after all a generation. If for example there are adverse effects upon an historic landscape it should not be an offsetting argument to say that they are lessened because they will only be for 25 years. It the historic landscape is important then it is important for every generation and one cannot be missed out!

Britain’s world leading role in Town and Country Planning since the innovative Act of 1947 has many time considered the definition of a “temporary” planning permission. This has always varied between one and three years and has never been considered for as long as 25 years. In the planning of housing the life of a house has often been considered as 30 years, yet houses are never regarded as temporary! To say that wind turbines are temporary when they should have a life of 25 years and when in any case they are likely to be replaced with new machines is not a credible argument in their support.

It is simply wrong to steer the IPC in the direction of lessening the importance of adverse effects upon landscape, visual amenity and historic assets on the grounds of temporariness, when the life is expected to be at least 25 years. This does not happen in the whole Town and Country Planning System with any other form of development. Temporary should only be a label for a development with a life of less than three years.

Flexibility in the Project Details

2.7.20 The fact that “many different makes and models of on-shore wind turbines are available” does not require the flexible and lax attitude to these developments promulgated in the following four paragraphs (2.7.21 to 2.7.24). This seems to be just an excuse for giving the power companies a licence to do what they want and for making generic and vague applications which presumably the author thinks will be able to be made quicker. There are many makes and types of home available in the provision of housing but, if anything, matters there are going the other way, requiring more and more detail with any planning application as this country becomes more and more crowded. How much more important is the detail and fixing the detail in these industrial scale developments which have the ability to affect many people’s daily lives.

2.7.21 This paragraph shows great naivety. There is no logical reason why windfarm applications should have greater flexibility than any other planning application—indeed because the impacts are potentially much wider, if anything they should have less flexibility. For example the mechanism for driving the rotors can vary greatly in its noise generation and this is not just to do with its MW capacity. In order to decide whether to support or object to a local application the local community and other consultees need to know precise details of the development. If the developer is able to say in debate or at the hearing that “this is just an example and the final product could be different” it will be impossible for objectors (and the IPC/local planning authority) to pin him down. Also in response to an objection the developer can say that he will alter the design (at some vague point in the future) whereas in practice there is very little that a developer can do to alter the design of a windfarm.

Why should the wind farm operators not know which turbine they will use? They should be forced to, otherwise it cannot be tested properly—for noise and other effects. The aim of this paragraph seems to be to give operators a charter for applying for one thing and building another. For example what will happen
if these paragraphs stand is that the application could be for a relatively quiet turbine, only to be replaced by a much noisier (and cheaper) one once the work is tendered following consent. This is like applying to extend a listed building in natural stone and then building it in concrete blocks.

Are these paragraphs (2.7.20 to 2.7.24) written so that the windfarm operators can keep their costs down rather than the best development (if any) achieved?

2.7.22 The author must have been hoodwinked here by the power companies. There is no less reason for a wind farm developer to not know the layout of his windfarm than for a housing developer not to know the layout of his housing estate. The answer is that precise permissions should be given for precise developments and if circumstances change thereafter then variations can be sought. We are not trying to speed windfarms through the planning process at any cost. The forestry example is extremely weak.

2.7.23 This paragraph should be removed (as should the whole section on flexibility) as it merely encourages applicants to invent reasons why their applications are vague and endorses a lazy or even arrogant approach

2.7.24 The author evidently thought that assessing the “maximum case” was a clever way around any criticism of a flexible approach. This clearly has not been thought through. We strongly object to the notion that if something bigger is evaluated as being acceptable then something smaller must be as well. This is flawed logic. For when it comes to maximum do we mean maximum generating capacity of turbines, height of turbines, noise of turbines, numbers of turbines, area of windfarm etc etc? As written it would be perfectly possible for a windfarm operator to apply for a windfarm of say 18 3MW turbines and then once approved to replace it with 18 much noisier and cheaper 2.3MW machines. This would make a mockery of the crucial noise section of the Environmental Assessment as the wrong machines would have been tested. Please believe us that noise emissions vary considerably between machines and not necessarily in proportion to their generating capacity. Moreover it is no good saying that if changes need to be made later these can be run past the IPC (or LPA) because once granted permission it will be very difficult to refuse such changes, especially if the flexibility provision in EN3 is allowed to stand (note that in several places the draft EN3 states that on receipt of the IPC (or LPA) because once granted permission it will be very difficult to refuse such changes, especially if the flexibility provision in EN3 is allowed to stand (note that in several places the draft EN3 states that on technical matters the windfarm operator knows best anyway).

Stating that the maximum adverse effects should be considered rather than the accurately assessed effects of a specific development gives the windfarm operator an unfair advantage in the debate with consultees and the examination of the proposal by the IPC. This is because when challenged he can constantly revert to saying “well the effects could be this but actually we very much intend that they won’t so they should be less”. Such a stance then becomes almost impossible to argue against as the applicant can just keep moving the goalposts. The Environmental Impact Assessment, required by law, is meant to be a serious scientific assessment but it can only be so if the development is precisely defined—the flexibility argued in this section will make a mockery of any EIA and the developer himself will be able to decry it by saying that it is only appraising a theoretical scheme and not the one he is actually likely to build.

**Micrositing**

2.7.25 and 2.7.26 Our comments on paras 2.7.22 to 2.7.24 apply equally here. Why should there be this degree of flexibility in siting the turbines or other infrastructure which is unprecedented in the tried and tested British Town and Country Planning System. If someone applying for a house was to be allowed to move it by 30m to 50m without a new or amended consent all hell would be let loose. What is the difference? Why do windfarms require any greater flexibility than any other development? If there is uncertainty on the part of the operator this uncertainty should be removed at the preparatory stage of the detailed plans and EIA. Encouraging such flexibility is encouraging an attitude where the operator simply sticks something in for approval in order to gain approval and then thinks about what he really wants to construct. “Unforeseen events” can arise with any development.

Para 2.7.26 seems to be backtracking by saying that the IPC may decide that the so-called tolerance or flexibility of the design of the scheme might be restricted. This just muddles the point of this sub section further. “Tolerance” is the wrong word as in technical use it implies something that cannot be helped (as in manufacturing tolerance)—in this day and age siting can be assessed down to 30cm to 50cm or finer never mind 30m to 50m.

This whole sub section should be removed.

**Repowering**

2.7.27 and 2.7.28 Of course the proposal to re-power is a “commercial matter for the applicant”. What are we being told here? Who would have thought otherwise? The proposal to construct any development is a commercial matter for the applicant. This is unnecessary and incredibly naïve.

2.7.29 and 2.7.30 Of course re-powering requires a new application.
National designations

2.7.32 This paragraph starts by using the words “in sites” with various designations. Surely this does not just refer to the boundary of the site which the applicant has drawn for his application? For he could draw his site boundary to deliberately miss such designations such as listed buildings. The start should be changed to “In sites which contain or are close to nationally recognised designations. . . . Bear in mind that other planning legislation and advice (PPGs) refers to the importance of “the setting” of listed buildings and ancient monuments as well as the structures themselves. This important concept should also be incorporated here. The last part of this long sentence clearly and correctly mentions weighing up any disbenefits of harm to say listed buildings (should be and their settings) with any “environmental, social and economic benefits”. This allows an examination of the need for the electricity generation and the amount of it which is right in equity but which seems to have been ruled out at the beginning of EN3. Weighing up costs and benefits is the only way to resolve such dilemmas and nothing can be off the agenda.

Green Belts

2.7.33 This paragraph is interesting and should be applauded for wanting a wide and equitable discussion of the arguments for and against a windfarm. It expresses the same approach as for national designations above. There is no reason why such an approach should not apply everywhere in open countryside because many other areas of the country are protected by local planning policies often embodied in statutory development plans. It is illogical to suggest that windfarms will bear greater scrutiny in greenbelts—greenbelts were introduced to stop urban sprawl and to achieve the separation of cities. There are no greenbelts where there are no cities but this does not mean to say that the countryside is any less precious—it belongs to all the citizens of this increasingly crowded country. The circumstance of greenbelts, when it comes to windfarms are therefore not “very special” relative to anywhere else.

We hope that the government is not suggesting here that the view of windfarms in greenbelts might be abhorrent to city dwellers but that they are quite acceptable in other countryside. The increasing demand for power is predominantly from our increasing population which lives in cities. It is not equitable for the source of this power to be simply pushed out of sight into country areas.

Other locational considerations

2.7.34 This paragraph seeks to give carte blanche to wind farm operators to apply for windfarms wherever they see fit on the pretence that the wind generation circumstances of a particular location are so crucial. If this is the case then the government is having the wool pulled over its eyes by the power companies. Wind speeds and currents do not vary that much over the UK and in particular over a local area and there is every reason to encourage windfarms to be moved to previously developed land or land where the impacts are not so severe.

The sequential test should therefore apply exactly as it does to other development all other considerations being equal—ie approximate wind speeds, separation distances from homes etc.

The sequential test should not simply be dropped but should be offset by the special siting considerations that apply to windfarms.

If the sequential test is dropped then this will make a charter for windfarm operators to be simply lazy. They will choose that land which is easiest and cheapest to develop (ie greenfield) hiding behind the pretence that this is the only place where the windspeed is just right.

Biodiversity and Geological Conservation

2.7.36 and 2.7.38 to 2.7.41 It is not just that birds and bats might be struck by rotating blades. The introduction of massed turbines into previously open winter grazing spaces for birds like lapwing and golden plover can render those spaces useless as there is not enough clear space to get the flock down. These species graze at about seven metre centres so a very large uninterrupted area is required to land a flock of 1,000 birds.

IPC Decision making

2.7.43 It is strange how this section picks out birds, bats and peat as if these are the only considerations of particular importance to windfarms under the heading of Biodiversity and Geological Conservation. Another very important consideration is the effect of the large concrete foundations on aquifers (groundwater used for drinking) and ground drainage.

Mitigation

2.7.44 and 2.7.44 This sub section is naïve and has absolutely nothing to say. Has it been written by a child?
Future Surveys and Monitoring

2.7.46 Such monitoring requirements are a good idea but it is naïve to think that the IPC by simply placing a monitoring requirement on the wind farm operator will achieve objective results. Any monitoring must be independent and not instructed by the windfarm operator who clearly is biased.

Historic Environment

Applicant’s assessment

2.7.48 Yes, “visualisations” usually will be required! But please do not think that these are in any way objective or scientific—they have a tendency to do the job that the applicant wants them to do. Local authorities often have to appoint their own specialist consultants to evaluate independently the work of the applicant in the EIA—this raises the question of whether the IPC will be required to do that and whether the results will be publicly available.

IPC Decision Making

2.7.49 It is absurd to state that “onshore wind turbines are not permanent features in the landscape”. With a life stated as typically 25 years and the chance that they will be continuously renovated or replaced, wind turbines are as permanent as houses. As stated before the Town and Country Planning system recognizes temporary uses as those with a life of up to only three years. This statement is ridiculous. 25 years is a generation. It is outrageous to suggest that somehow any indirect effects on historic environment features such as effects on setting will not be permanent and therefore should not count as much in weighing up the decision. Does this mean that if one wants to experience the beauty of a Cistercian Abbey in its setting one might have to come back in 30 years time (if still alive)? Does this mean that the IPC should allow windfarms all around Stonehenge? What about the thousands of other less well known historic settings that this country is known for?

There should be a requirement for the land on which windfarms stand to be reinstated when they become disused for a given period of time (say a year) and not just when the consent period runs out (it is pointless having a long consent period as we show next). This is to prevent the possibility of wind turbines, towers and infrastructure standing disused for 25 years when their operation might cease for a host of unknown reasons.

2.7.50 See our remarks under 2.7.49. This just repeats the Philistine attitude of the author. The “length of time consent is sought for” is a total red herring—in any other planning application there is no requirement to say how long the development is for because all development is regarded as permanent (unless it is a temporary consent for up to three years). Indeed if after a long period of time a building needs replacing the planning system usually allows it to be replaced once planning consent has been given in the first place. There is no reason to suppose that windfarms will be any different—indeed EN3, earlier, encourages replacement.

Where on earth has this idea of windfarms having their impacts lowered in importance because they are not permanent come from? The reason why we protect and conserve our historic landscapes is so that people can enjoy them—to take them out of the equation for 25 years or longer is simply not an option.

Mitigation

2.7.51 This is a non-sequitur. The NPS has not mentioned below ground archaeology so far. In any case the injury to below ground archaeology can be indirect and does not have to be below the actual works. This paragraph achieves nothing—indeed it perhaps encourages applicants not to research such things completely in advance of starting work.

2.7.52 The naïve approach returns. This basically says it does not really matter if we do not research the archaeology properly because we can always move things later!

2.7.53 The naivety gets worse. This just re-emphasises the approach that things can always be moved (precisely sited) later (so it doesn’t really matter if we get them wrong first time). If this principle was applied to the whole 50 year old Town and Country Planning system in Britain it would fall down. Applicants would only show roughly what they intended to do and then they could do almost anything by way of correction. Once consent is given control goes.

Landscape and Visual

2.7.57 Having just said, correctly, in para 2.7.56 that wind turbines are large structures and will always be visible in the landscape it is suggested here that by “careful design” and “arrangement” of the turbines on the site the adverse effects on landscape can be minimized. If the effects are adverse the only real solution is to choose another site—the author is clutching at straws if he thinks that moving around 130metre high turbines within a site is going to make any significant difference to their landscape and visual impact.

2.7.58 Keeping turbines at a safe distance from homes is a key requirement. This concerns noise impacts even more than visual amenity. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier which seems to be the Government’s objective. This distance should be 2km. This is the distance recommended by La Societee de Medicins in France and it is the distance for the search criteria for
windfarm sites issued by the Scottish Government. If there are one or two isolated homes within the two kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes—such as the Gray family in Deeping, Lincolnshire).

2.7.59 Having just said in 2.7.57 that windfarms might be rearranged to minimize landscape impacts (a contention which we have argued is likely to make little difference considering their height) the proposition is then taken away in this paragraph. Why is reducing the electricity generating capacity of the windfarm apparently made off the agenda by this paragraph? Surely if compromise can be achieved between adverse impacts and electricity provision the design of a windfarm might be changed to accommodate adverse landscape impacts (in 2.7.57) and then contradict this to say so long as the power production is not affected. Is the maximum power production such a holy cow that it cannot be changed? As we have said earlier many applicants may well play the game of submitting “maximum” schemes only to build smaller and cheaper schemes when they come to tender the turbine provision. So presumably the author is thinking that the windfarm might be made smaller in terms of power production if the developer is happy but not if he is unhappy. This is not equitable. He cannot be forced to construct in any case.

NOISE
Applicant’s Assessment

2.7.63 to 2.7.68 The reliance on ETSU-R-97 in this and following paragraphs for the testing of noise effects from windfarms is unreliable because it dates from 1996 when there were very few and much smaller wind turbines in the UK. Much more is now known internationally about the noise effects from windfarms and their repercussions for human health including vibro acoustic disease. This 14 year old standard must be urgently reviewed in the light of empirical evidence including that of families who have been forced to leave their homes (such as the Davis family at Market Deeping in Lincolnshire) or whose lives have been made a misery (such as the Rashleigh family near to the Bicker windfarm in Lincolnshire—see precognition by Steve Rashleigh, attached at Appendix 1).

2.7.65 It is stated that “The IPC should use ETSU-R-97 to satisfy itself that the noise from the operation of the wind turbines is within acceptable levels” but will the IPC really carry out its own independent tests? Experience has shown that it is very easy for applicants to contrive the results of noise tests. This is particularly the case because the practice has developed of using laboratory/workshop readings for noise from particular turbines and this does not simulate the actual field conditions neither does it simulate the cumulative effect of several turbines combined with wind noise. The actual arrangement of the turbines on site can significantly affect noise generation. It is vital that the noise tests are taken from the same operational turbines that the applicant proposes to construct. If a new machine is envisaged then it should not be accepted until field tested in real operational conditions.

2.7.68 A correction is required. The words ground transmitted must be inserted before low frequency in the last line (as earlier in the paragraph) because all noise from turbines is low frequency.

Mitigation

2.7.69 This mitigation in order to reduce ambient noise can be achieved by so-called “good design” but it should be spelt out that the variables of this design which will change noise effects are (a) the precise type of turbine (b) the height of the turbine and (c) the distance from any human habitation. It is therefore extremely important that these variables are pinned down in the application and consent and not subject to the flexibility advocated earlier in EN3.

A great deal of time and effort in studying, debating and testing noise effects could be saved (and possibly ETSU-97-R not reviewed) if a set minimum distance between any turbine and any place of human habitation was made.

Keeping turbines at a safe distance from homes is a key requirement. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier which seems to be the Government’s objective. This distance should be 2km. This is the distance recommended by La Societee de Medicins in France and it has been the distance for the search criteria for windfarm sites issued in planning advice by the Scottish Government. If there are one or two isolated homes within the two kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes—such as the Davis family in Deeping, Lincolnshire.

2.7.70 and 2.7.71 This is weak. Yes the IPC should condition consents in respect of the maximum noise levels of machines. But control is much more effective and easier before a consent is given. How is the IPC going to monitor noise levels after developments have been constructed? Is it really going to close down turbines that are too noisy? This amounts to shutting the stable door after the horse has bolted. This provision would be much more effective if the application and consent was required to be for specific
machines and turbine locations—it is the concept of flexibility earlier in EN3 that contradicts the recognized need to control noise levels. All these details should be fixed at the time of application (they can always be changed with a new application or amendment just like normal planning applications).

**Shadow Flicker**

This section needs to have its logic broken down. Shadow flicker is a real problem, as the section acknowledges (see evidence of Steve Rashleigh at Appendix 1 in relation to the Bicker windfarm).

If it is right that shadow flicker only occurs within eight rotor diameters of a turbine then we agree that a zone of 10 rotor diameters should be drawn (2.7.75). But because shadow flicker can occur in this area under certain conditions then no amount of testing will remove this possibility. The whole problem is therefore solved and unnecessary work for the applicant and the IPC avoided by simply stating that because of the risk of shadow flicker no turbine shall be constructed within 10 rotor blade diameters of a human habitation.

Of course if our proposal to limit all turbines to a minimum distance of 2km from any human habitation this has the advantage of removing any concerns about shadow flicker as well as noise.

**Mitigation**

2.7.80 This is naïve. No condition can remove the possibility of shadow flicker except through requiring relocation of the turbine to the distance where the risk cannot occur (10 rotor diameters as stated above).

**Traffic and Transport**

We believe that the author has got the guidance right in this section in respect of the possible adverse effects on communities of heavy traffic during the construction period. This largely applies to where traffic is using the existing main highways through villages and close to homes and one aspect of this possible impact (in addition to disturbance, noise and road safety effects) is the effect on the stability of older buildings, many of which, built before the 19th Century, do not have proper foundations. This impact should be acknowledged.

However there is one very important adverse impact which the section does not identify. This is the threat of the increased urbanization of the countryside brought about by the new construction or so-called improvement of minor roads and tracks right up to the windfarms. In para 2.7.91 the statement correctly identifies that after construction the use of these final sections of access roads is very light. If these roads are required by the highway authority to be widened, given black-top concrete surfaces and (worst of all) given concrete kerbs and radii and hard drainage then there will be an immediate and sinister erosion of the rural nature of these areas (someone may even start arguing that these roads are used for other forms of development).

All works to widen and “improve” minor rural roads and tracks for the purposes of construction traffic should be conditioned to be removed once the windfarm is operational. Our concern is that over zealous highway authorities will get their standards books out and require everything to be upgraded to an urban standard. Much heavy machinery—combine harvesters, drainage equipment etc uses these routes already and the routes simply recover. This should be the same for windfarms. No permanent improvements should be required.

We believe that the industrialization and urbanization of our fast disappearing English countryside is just as affected, in an insidious way, by the access works to windfarms as by the turbines themselves. Indeed if the windfarms truly are temporary as the author would have us believe then these impacts threaten to last longer than they do.

2.7.95 This paragraph importantly acknowledges the need for “non-permanent highway improvements” which reflects the point we are making about therefore not requiring (urban) highway standards that would be required for permanent routes (concrete kerbs etc). However it is worrying that the IPC is being guided in the direction of keeping these routes just in case a future windfarm comes along in the vicinity. This will tend to lead to the routes becoming permanent and therefore subject to the creeping highways urbanization that we so fear.

**Other Impacts**

EN3 should mention other possible adverse impacts including:

1. The adverse effect of turbines upon radar at airports and airfields (safety consideration)—see Appendix 2 where South Kesteven District Council in association with the MOD has used this as a recommendation for refusal of a windfarm.
2. The adverse effect of turbines in areas with frequent light aviation use (safety consideration)—see Appendix 2.
3. The effect of the large concrete foundations upon the water table—both aquifers for drinking water and upon ground drainage.
4. The effect of large concrete foundations upon carbon generation.
5. The effect on TV and mobile phone reception.

January 2010

APPENDIX 1

PRECOGNITION BY STEVE RASHLEIGH
MONTREATMONT PUBLIC INQUIRY

1. My name is Steve Rashleigh, my wife and I live at White House Barn, North Drove, Bicker Fen PE20 3BQ. Our home is on the Fens and has two and a half acres of land. Our family run a double glazing business.

2. During the summer Wind Prospect erected thirteen REpower 2mw wind turbines at Bicker Fen. From the beginning they were noisy. We complained and were told it was early days and it was only a temporary problem. When the remaining turbines were erected and it was operating properly there would not be a problem.

3. We waited but when the development was completed the noise problem was worse.

4. Our home is approximately 800m from the closest turbine. It is a barn conversion and has buildings on three sides. The noise seems to enter the courtyard and bounce round the buildings. The noise we experience sounds just like an old steam train.

5. The noise is almost constant as the noise we receive comes with the prevailing wind.

6. We were told that we would not notice the noise so much when it was windy. This is not the case, when it is windy the noise is very much worse. It is a thumping noise like an old steam train coming in.

7. During the day when we are moving around and the television is on, it is bearable. At night it is not. The thumping noise just goes on all night. Sometimes it is impossible for us to get to sleep.

8. We have done everything we can to try to kill the noise. We already had double glazing but, at our own expense, we installed 6mm secondary double glazing. We now have four layers of glass at our windows. This has reduced the noise a little but it is still unbearable at night. Unfortunately our bedroom windows face the turbines.

9. We have also spent £1,000 and planted trees between us and the turbines but of course it will be some time before we know whether they will have an effect on the level of the noise.

10. We wrote to Wind Prospect and asked them whether they would pay for these trees but they did not reply.

11. We have spent a considerable sum to try and reduce the noise from the windfarm and have received no help whatsoever from the developers/operator.

12. In contrast, when E.On built a substation near to other properties to take the power from the turbines to the grid they provided eight neighbouring properties with double glazing free of charge—We know this is correct because our company installed the double glazing.

13. Although the noise is the main problem we have with these turbines we also suffer from shadow flicker.

14. We can suffer shadow flicker for over an hour. It is very difficult to cope with this. We close the curtains but you can still see the shadows flickering. We are particularly concerned about the shadow flicker as our son is epileptic. He is not living at home at the moment but we have to be very careful when he visits.

15. We have complained to Trevor Gait of Fenland Wind Farms/Wind Prospect but he has done nothing.

16. We have complained repeatedly to Boston Borough Council. They have been reluctant to act but at last we understand that they are now obliging Fenland Wind Farms to commission a noise investigation. This is due to commence on 6 December 2008. We cannot understand why they are allowing the turbine developer to undertake this survey. We believe this should have been commissioned by the Council and undertaken by independent noise consultants.

17. At the moment life is unbearable and we are worried that in the event we ever wished to sell our home it would not be possible to find a buyer.

18. We are very disappointed with the lack of concern shown by Wind Prospect/Fenland Wind Farms and hope that between them and Boston Borough Council something will be done to reduce the noise and shadow flicker and improve the quality of our lives.

19. In view of the problems we have experienced, we wish to warn people of what can happen and at the same time object to the Montreathmont development. We were assured that noise would not be a problem and this has not been the case. This Company is obviously unable to ensure that noise is not a problem with their turbines and we do not believe that they should be allowed to erect further turbines until they have resolved the problems at their existing operating developments.
APPENDIX 2
PROPOSED NESLAM WINDFARM, SOUTH KESTEVEN LINCOLNSHIRE. REPORT TO THE DEVELOPMENT CONTROL COMMITTEE. SEPTEMBER 2009

THE REASONS FOR RECOMMENDED REFUSAL ARE:

1. The Defence Estates have advised that the proposed development would have a detrimental impact on the Air Traffic Control radar at RAF Cottesmore, and RAF Cranwell. The proposed development would also adversely affect the Precision Approach Radar at RAF Cottesmore, to such an extent that the RAF would be unable to provide a full air traffic service in the area of the proposed wind farm. There are also two locally operated aerodromes in the area and it is considered that any degradation of the radar systems in this area would be detrimental to air traffic safety. Acceptance of the proposed development would therefore be contrary to the advice contained within Planning Policy Statement 22 (PPS22).

2. It is considered that the erection of six 125m high wind turbines at Neslam Farm, would have significant and detrimental impact on the setting and visual amenity of a number of heritage assets in the area including St Andrews Church Sempringham, St Andrews Church Billingborough, and Sempringham Priory. The proposed development is therefore considered to be contrary to the guidance contained within PPG15, PPG16 and PPS22, and policies 26, 27 and 40 of the East Midlands Regional Plan 2009, and policies EN1, C1 and C2 of the saved policies of the South Kesteven Local Plan. Consideration has been given to the wider environmental and economic benefits of the proposal but it is considered that they do not outweigh the harm which would be caused to the setting of the heritage assets in this area.

3. The proposed development would be located within 580m of Dove Cottage a residential property on Neslam Road. The noise assessment contained within the submitted Environmental Statement (ES) is based on a candidate turbine (Vestas V90 2MW turbine operating in mode 2). Based on the guidance contained within ETSU-R-97 it is considered that an appropriate upper daytime limit would be 38dB(A) given that the site is located within a tranquil rural location. The noise assessment contained in the ES indicates that the candidate turbine could only just achieve this level operating in a quite running mode. Given that the assessment is based on a candidate turbine and this may not be the final turbine used the Council is concerned that the proposed development would be unable to comply with any conditions restricting the noise output to 38dB(A). Given the lack of certainty in the ability of the development to comply with the necessary noise conditions it is considered that the proposed development would result in an adverse impact on the residential amenity of the occupiers of Dove Cottage due to increase noise disturbance. It is therefore considered that the proposed development would be contrary to the guidance contained within PPS22, policy 40 of the East Midlands Regional Plan 2009, and policy EN1 of the saved policies of the South Kesteven Local Plan.

4. The proposed 125m high turbines would because of their height, and movement of the blades appear intrusive and oppressive in the outlook from Dove Cottage, Herron Lodge, Neslam Fen Farm, Gosdale Farm House, Gosdale Farm and Church Farm. It is considered that the proposed development would have a significantly detrimental impact on the residential amenities of the occupiers of these properties. The proposed development is therefore considered to be contrary to the Guidance contained within Planning Policy Statement 22 (PPS22).

Memorandum submitted by the Blackwater Against New Nuclear Group

The Blackwater Against New Nuclear Group (BANNG) is a Citizens' Based Organisation formed in early 2008 to oppose the proposed development of a new nuclear power station at Bradwell.

The government’s process of consultation on the Draft Nuclear NPS cannot by any standard have been deemed to be open and effective. It has failed to clearly inform people around the Blackwater estuary of the main differences between the operation of new nuclear power stations at Bradwell and the operation of the old power station. We believe effective communication would have resulted in residents understanding the following differences:

— High level radioactive waste could be stored on site for 160 years or more. DECC hopes that by then a national repository will have been built elsewhere to accommodate this. This can not be guaranteed.
— A new more powerful nuclear power station would require far more cooling water from the relatively narrow, shallow estuary. This would result in far more serious damage to fishing and oyster industries, ecology and marine life.
— There is a proposal to build 2 additional nuclear power stations at Bradwell which would require cooling towers due to a lack of sufficient cooling water in the estuary.
— The location for this very large nuclear complex, next to the old partly decommissioned power station, is a vulnerable low lying site which must be securely protected for 160 years against increasing threats which include rising sea levels, flooding, storm surges and tsunami.
— Mersea Island is only 2 miles downwind of this proposed Bradwell complex and now has a population of some 7,500 people, rising to 15,000 in the holiday season. In 1962 there were only 3,000. It is claimed there is no need for an emergency evacuation plan even though the only access road regularly floods at high tide, preventing departure.

— Claims that increased employment would benefit all local communities are questionable since Bradwell is not particularly accessible to communities on the north side of the estuary. On the contrary the presence of a prominent nuclear complex is just as likely to cause a decline in major employment in the valuable tourism, holiday, sailing, fishing and oyster cultivation industries around the Blackwater estuary.

We maintain that the Draft NPS and associated reports for nuclear power justifying the Bradwell site are very superficial and biased. They omit relevant facts which would have been known to competent authors and even make claims of reasoned judgement when none is evident. This leads us to the view that there is a bias intended to guide the IPC to accept a site which should not have been justified for inclusion as suitable.

BANNG urges that the Bradwell site should be classified as unsuitable.

1. **Waste Storage**

   1. (a) The Statement admits that high level waste will remain on site for around 160 years (D1). It also states that radioactive wastes, including spent fuel and intermediate-level waste, can be safely and securely stored “on the site . . . until it can be sent for disposal in a geological disposal facility”.

   The Government has adopted a process of “volunteering” by communities for selecting a deep geological disposal site to host stores for radioactive waste . . . to secure public confidence (3.8.11). Contrary to this there is no such process of “volunteering” for the storage of low, intermediate and high level radioactive waste from new nuclear power stations which would have to be stored at the proposed Bradwell site.

   There is as yet no guarantee of this geological disposal route or its timescale for the long term storage of high level waste, and the Bradwell site becomes by default both that of a nuclear power station and a high level radioactive waste store, upon which no evaluation of risks or local consultation or acceptance has taken place, and wastes therefore, may well have to be stored indefinitely on a coastal site increasingly liable to inundation.

   1. (b) BANNG maintains the voluntarism principle which applies to legacy waste storage should also apply to so called “interim” high level waste storage for new build, which could remain on site for 160 years or longer.

2. **Flooding Storm Surge and Tsunami**

   2. (a) The majority of the Bradwell site is in flood zone 3, high probability. (5.6.24)

   The Environment Agency needs to explain what it means when it says that “it is potentially reasonable to conclude that a nuclear power station (and waste storage facility?) . . . could potentially be protected against flood risks throughout its lifetime” (5.6.28).

   Potentially reasonable is not yet reasonable. It is therefore unreasonable to make this claim.

   BANNG totally rejects the subsequent amended version of this view expressed in 5.6.31 that makes the unsubstantiated jump to “a nuclear power station could potentially be protected against flood risks through its lifetime, including the potential effects of climate change, storm surge and tsunami”. Given that it is clearly impossible to predict with any confidence the effects of coastal change over such a long timescale, or the ability of agencies to reliably protect the site over such long timescales.

   BANNG demands that any site approved for nuclear power or a nuclear waste operation can be guaranteed safe for life prior to site approval.

   2. (b) At the West Mersea DECC presentation on 10 December 2009, Peter McDonald advised that climate change projections up to 2100 have been used and that assessments beyond this would be dependent on a regular cycle of reassessments, probably every 10 years, throughout the life of the station. Given current uncertainty on climate change effects and the consequent lack of 160 year projections, it is therefore possible that the Bradwell site may become unsustainable earlier than planned.

   2(c) BANNG considers it unethical to proceed with the Bradwell site under these circumstances.

3. **Health Risks of Nuclear Reactors at Bradwell**

   3. (a) Much of the opposition to any new nuclear reactor at Bradwell, Essex, rests upon continuing anxiety about the past and future health risks to local populations, as attempts to establish the truth about such risks remains very difficult for ordinary members of the public. There is also mistrust in the nuclear industry’s openness regarding problems and accidents.

   3. (b) Many people believe that investigations in the Blackwater area have suggested excess levels of cancer and higher levels of breast cancer mortality arising from the Bradwell power station (Busby and Bramhall, 2002). More recently, a reworking of the data on childhood leukaemia in the Blackwater area, following the German KiKK study, indicates a possibility of higher levels than in the population at large.
In February 2009 Magnox Electric were found guilty of allowing a radioactive leak at Bradwell to continue for 14 years and were fined a total of £400,000. The leak only came to light during decommissioning work and not as a result of any routine safety inspection. Mike Weightman, chief inspector of the Nuclear Installations Inspectorate, said it was not possible for them to “check every feature of a complex plant”. Cases like this do nothing to give peace of mind to those living near nuclear installations.

3. (c) Please see Annex A for a detailed report on research into health risks.

3. (d) The Government’s view that a nuclear power station would “pose very small risks to safety, security, health and proliferation” is clearly open to challenge, and therefore BANNG believes the Precautionary Principle should apply and that any risk should be avoided by not constructing a new nuclear power station and high level waste store.

4. DEMOGRAPHICS/EVACUATION PLANS

4. (a) The demographics assessment (C1) suggests the site meets semi-urban criteria but fails to take account of the transient holiday populations, such as the large numbers in the caravan and camping sites on Mersea Island and around the estuary during the summer. There is also no consideration of the potential risks posed to substantial urban populations within 20 miles, including Southend, Chelmsford, Colchester and Clacton.

4. (b) In the event of an accident, evacuating the 7,500 residents of Mersea Island only 2 miles downwind could be impossible, since the only access road to the Island is regularly blocked for several hours by tidal flooding.

4. (c) In addition the transient summer population of day visitors and longer term tourists in caravans and tents totaling some 7,500 would need immediate evacuation under nuclear emergency planning, as in the Sizewell off-site emergency plan. This applies to people without the shelter of permanent buildings in the event of an incident.

4. (d) It is difficult to understand how a planned evacuation of the Island could be arranged safely. If the public was advised to remain on the Island during an emergency it is probable many would attempt to leave in anticipation of an incident worsening or of being cut off by the tide.

Other communities around the estuary such as Tollesbury also have restricted access roads which could make evacuation very difficult.

4. (e) Another concern, as outlined following exercises by the Government Nuclear Emergency Planning & Liaison Group, which simulated the crash of an aircraft on the old Bradwell site, is that site emergency plans refer only to credible accidents, and not to outcomes of deliberate acts such as that of terrorism.

4. (f) BANNG considers that under these circumstances local populations have a right to expect plans for their safe evacuation to be a prerequisite for site acceptability, not merely a subject for later consideration by an applicant (5.6.9).

5. IMPACT OF COOLING WATER INTAKE, OUTFALL AND BIOCIDES ON FISHING AND OYSTER INDUSTRY AND ECOSYSTEM

5. (a) Many fish, larvae, eggs, spawn and other forms of marine life are killed by the intake of power station cooling water. Larger fish are trapped and killed on filter screens which are designed to prevent them passing through the cooling system, while larvae, eggs, spawn and smaller fish pass on through the system and the sudden heating of the water during this process kills them also (Dr P Henderson Piscies Conservation). There is no reference to this in AoS table 6:2 Summary of Potential Significant Adverse Effects.

5. (b) The Blackwater is a relatively shallow and narrow estuary and this limits the availability of the huge amounts of cooling water required by a nuclear power station.

The old Bradwell power station of 242 MW required an average of 1.88 million tons of cooling water per day (British Energy). At frequent intervals the cooling system also had to be treated with chlorine to prevent a build up of marine growth, thus keeping it clear of obstructions.

5. (c) These actions are known to have had an adverse effect on the fish and oyster numbers in the estuary. For example, West Mersea oystermen know that the foreshore and sea bed on the Bradwell side of the estuary became completely sterile and barren, with the ground very bleached, for one and a half miles either side of the cooling water inlets and outlets. At the time British Energy denied responsibility for this. Native Oysters also disappeared from the northern shore of the Bradwell coastline. Six months after the closure of the power station in 2002 this coastline began to regenerate, with new growth appearing along with new oysters.

5. (d) During the operating life of the old power station the cultivation of native oysters could only be maintained by importing all seed oysters from elsewhere around the UK coast. Today by contrast, the oyster industry is healthy and sales are increasing, with none normally imported because stocks have been rising along with employment. Total weight of oyster sales from West Mersea are now approximately 250 tons per annum and increasing. 15 years ago, sales were approximately 100 tons per annum. This example appears to confirm that marine life suffered during the lifetime of the old power station.
5. (e) A new EPR power station of 1.65GW will require 6.22 million tons of cooling water per day, over three times the volume required by the old reactor. This volume represents 10% of the total estuary volume of exchange water each tide. Temperature rises of up to 10°C are forecast on the south shore in the vicinity of the power station, with a 1°C to 2°C increase elsewhere. This rise in temperature in the River Blackwater is likely to have a much greater impact on its ecosystem than previously. The larger cooling system will also have to be treated with more biocides to prevent fouling of pipe-work. These biocides, such as chlorine, sub-react in water to form more complex and potent biocides with increased half-life. Such biocides are likely to further affect the eco-system on a larger scale than before. The increased volumes and velocity of water will also cause greater scouring of the sea-bed, resulting in much larger dead areas.

5. (f) It takes 10 days to totally refresh the water in the estuary, a very low refresh rate when compared to the open sea. This low refresh rate, together with one-tenth of the estuary daily tidal volume passing through the reactor, means that the incidence of damage from cooling water circulation would be far greater than in the open sea, and far more significant than previously experienced.

5. (g) The commercial inshore fishing industry and the oyster industry are directly and indirectly important to the local economy. The eco-system of the estuary will be more seriously affected by this development which will in turn affect the local industries dependent upon it.

5. (h) The oystermen and fishermen fear that if a new power station is built, then the larger temperature increase in the estuary might cause a significant increase in the breeding rate of the Pacific Oyster which would not only seriously endanger the relatively fragile Native Oyster, but also threaten other marine species and marine birds in the estuary by causing a fundamental change of the fertile mudflats around the estuary into rocky shores. These mudflats support life forms at the base of the existing food chain.

5. (i) West Mersea is the only remaining oyster fishery area in the UK which cultivates the Native Oyster. In other locations they are only dredged.

Mersea Native Oysters are also known as Colchester Native Oysters, and are a heritage industry with an international reputation.

The Native Oyster has been identified as a species in the UK which needs further protection. (Institute of Estuarine and Coastal Studies 14 May 2001, English Nature)

5. (j) The Blackwater also supports a unique endangered species called the Blackwater Herring which would be vulnerable to greater changes in the ecology of its habitat.

The consequences of the above serious issues do not feature prominently in the NPS, Habitats Regulations Assessment or Appraisal of Sustainability Report and it is implied that that risks can be mitigated (Table 6.2 AoS Report Bradwell).

5. (k) Threats to the marine ecology and therefore the fishing and oyster cultivation industries in the Blackwater Estuary rule it out as a suitable site for new nuclear power stations.

6. ENVIRONMENTAL EFFECT ON WETLANDS AND ADJOINING RAMSAR, SSSI AND OTHER DESIGNATED AREAS

6. (a) The whole of the Blackwater estuary neighbouring the site, except for the pleasure beaches of Mersea Island, is designated SAC, and the all the intertidal mudflats, with the above exception, are designated SPA, RAMSAR and SSSI sites. A large proportion of the intertidal mudflats are also designated NNR. The proposed complex immediately adjoins these sites. Cooling water would be obtained from and returned to these areas.

6. (b) The industrialisation of this area of importance with reactors, radioactive waste stores, cooling towers and pylons will prejudice those designations. RAMSAR sites in England are protected as European sites, as set out in the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). The proposed site and adjoining RAMSAR wetlands are important habitats for birdlife which may be affected. These sites are an important example of natural or near-natural wetland type found within the bio-geographic region.

6. (c) BANNG notes that the Statement says is not possible “to rule out adverse impacts on sites of European Nature Conservation Importance”.

BANNG does not believe that:

“there is an imperative reason of overriding public interest that favours the inclusion of this site . . . despite the inability to rule out adverse effects on European sites at this stage”.

6. (d) On the contrary, BANNG considers this issue alone is enough to warrant the site being excluded from further consideration.

7. EARTHQUAKE RISK WITH REFERENCE TO THE MAJOR EARTHQUAKE OF 1884

7. (a) A major earthquake occurred in the area in 1884, the “Colchester Earthquake” or “Great British Earthquake”. The most severe reported in this country for over 400 years. Although this was centred south of Colchester near Mersea Island it also caused much structural damage in the Bradwell area. While assurances have been provided that the reactors themselves would be resistant to an earthquake, no assurance has been received about cooling systems, such as pipe-work on the sea-bed or cooling towers on which they are dependent, or facilities for storage of radioactive waste,
7. (b) It is unlikely the emergency services could successfully deal with the wide ranging consequences of an earthquake and a nuclear incident, especially if tidal problems were to coincide.

7. (c) We maintain that the earthquake risk affects the site sufficiently for it to be classified as “unsuitable” in the SSA (5.6.120).

8. Effects on Communities

8. (a) The Statement says that “a nuclear power station may also bring alternative economic benefits to a region which could have the potential to offset some disbenefits”. (5.6.112)

BANNG utterly rejects the argument that “the likely enhancement in employment, community wealth, housing stock and other associated neighbourhood infrastructure should improve community well-being and health generally”. These benefits may apply near Bradwell, but it is extremely unlikely they will apply elsewhere.

8. (b) The AoS Report (P59 Adverse effects on communities: Population, Employment and Viability) makes no mention of the potential adverse effects on communities relating to loss of employment in holidays, tourism, leisure, fishing, oyster cultivation and sailing related industries. The potential decline in property values and the possible difficulty attracting new industries to the area is also omitted.

8. (c) On the contrary, we consider the detriments to the tourist, fishing and leisure economy and the negative image created by a massive nuclear complex will far outweigh any increases in employment associated with a new plant.

9. The Consultation Process

9. (a) It is unfortunate that by responding to the various stages of the government consultation process, participants appear to legitimise it. The only hope for any redress is to describe the actual experience on the ground at each stage to show the inadequacy of the process on which the National Policy Statements are based.

9. (b) The process has been flawed at every stage. Most importantly, there has been no emphasis on the proposal to store highly radioactive spent fuel and intermediate wastes on site at Bradwell for around 160 years. This is a glaring omission that should render the consultation process invalid.

When this issue was discussed at meetings, it was members of the public who raised it, not the representatives of British Energy or the Department for Energy and Climate Change.

The process at grassroots level has occurred in six stages as follows:

9. (c) British Energy (BE) Roadshow

During November, 2008, British Energy took a Roadshow to communities around the Blackwater estuary. The aim was to inform people about proposals for a new nuclear power station at Bradwell and to consult them on the proposals.

Attendance at these was low due to lack of awareness, inconvenient timing and the apparent requirement for pre-registration.

9. (d) The large towns of Colchester, Chelmsford and Clacton were not included although they have a legitimate interest in what happens at Bradwell.

Audiences at Tollesbury and West Mersea expressed a great deal both of hostility to the idea of a new power station and of scepticism at British Energy’s claim that the chances of an accident were “vanishingly small”. Other concerns included the storage of spent fuel well into the next century on such a vulnerable site; evacuating Mersea Island in the event of an accident; the deleterious effects on the Colchester Native Oyster industry and the marine ecology; health issues.

Those attending clearly did not trust the nuclear industry. Local communities had been promised that the old nuclear power station would be decommissioned and the site returned to greenfield within 25 years and now this has been revised to 100 years.

9. (e) Draft Strategic Siting Assessment (SSA) Criteria

The Blackwater Against New Nuclear Group (BANNG) made a substantial and well informed response to the SSA consultation. The response drew attention to many problems with the criteria, particularly demographics, flooding and coastal processes. Unfortunately, it seems that scant attention has been paid to this by the Government.

9. (f) Justification

The Blackwater Against New Nuclear Group (BANNG) made a substantial and well informed response to the Justification consultation and, along with several other groups, called for a Public Inquiry into whether new nuclear practices in the form of new power stations could be justified. Unfortunately, it seems that scant attention has been paid to this by the Government.
9. (g) "Have Your Say"

The “Have Your Say” consultation on the nominated sites lasted only one month.

BANNG made a substantial and well informed response to this, reminding government of its responses to the SSA and Justification consultations. Scant attention was paid to this.

The restrictive structure of the template, depth of knowledge required and the lack of time available is known to have been a major deterrent for many people.

9. (h) Department of Energy and Climate Change (DECC)—Exhibition and Public Meetings

“The Government wants to hear your views” was the claim for these events, but few members of the population knew about them, resulting in low attendances. There were 52 members of the public at the meeting in West Mersea and only 28 at Maldon. Residents at Bradwell have complained in the press that they were denied a consultation meeting even though they would be most affected.

A show of hands at the West Mersea meeting showed that only three people out of the 52 attending had received a DECC leaflet. DECC claim 11,000 of these were distributed door to door. The Mersea Island Courier 4 December 2009 included an article by BANNG informing readers of the exhibition and public meetings and the Editor took it upon himself to publish a DECC leaflet. While petitioning outside the exhibition in Maldon on 11 December, the Secretary of BANNG discovered almost everyone she spoke to knew nothing about the event or the public meeting. She directed members of the public to the exhibition, otherwise there would have been very few attending.

9. (i) Public Meeting at West Mersea 12.30 on Thursday 10 December, 2009

Despite the inconvenient timing, there was a good turnout of Mersea Islanders keen to press home their objections to the proposed new power station.

Among the points made by those attending, were that a massive nuclear power station, and possibly up to three, would create a major industrial complex that would totally transform the landscape, ecology, economy and amenity of the Blackwater estuary. More than that, such a project imposed high risks and potential dangers threatening the security and safety of many thousands of people within a short distance of the power station. In the event of a major incident, it was doubted that emergency planning procedures would be able to cope with evacuation of the population.

The shallow Blackwater estuary could hardly cope with providing cooling water for one of these giants, let alone two or three, for which cooling towers would be necessary. The threat to fishing, oysters, the tourist trade and, indeed, the well-being of the Blackwater community would persist over many generations. Bradwell was among the most vulnerable sites and the idea of highly radioactive waste being safely managed 160 years hence was frankly incredible.

Questioners were not generally given an opportunity to query the response given to them with the result that few of their questions were satisfactorily answered.

9. (j) Public Meeting at Maldon on 10.00 Saturday 12 December, 2009

Similar questions were raised and again virtually none were answered.

Several pointed out that without the approach from BANNG outside the previous day’s exhibition they would not have known about the meeting. Once again this could hardly be described as a satisfactory consultation.


The statement presents a limited, superficial, biased and misleading view of evidence particularly in relation to the Bradwell site.

The brief period allowed for consultation on this National Policy Statement, the quantity of material needing to be read and understood, and the difficulty in obtaining the material, has made it once again extremely difficult for many people to participate. We are also concerned that most people will not have realised the importance of this NPS becoming accepted until it is too late to influence the decision.

9. (l) We urge the government to reject the Bradwell site in this NPS. However if it is decided to list the site we request the reasons for its acceptance are set out along with the reasons why the objections from us and others were rejected.

9. (m) The assertion that the ten listed sites are the only suitable locations in the whole country, and that they are all essential, and should therefore all be accepted, due to “Imperative Reasons of Overriding Public Interest” appears to almost consign the whole consultation process to the waste bin.

9. (n) We hope that our submissions will help to prove this is untrue.
Annex A

10. Research into Health Risks from Bradwell and Other Nuclear Installations

10. (a) There are two sides to the debate about nuclear installation health effects. The “orthodox” approach rests, primarily, upon criteria of risk drawn from short term exposure to high levels of radioactive material: Hiroshima and Nagasaki atom bomb survivors, plus some experiments involving the subcutaneous placement of radioactive material and irradiation of non-human subjects. Statistical procedures are also applied, post hoc, to aggregate health data which often have the effect, intentionally or unintentionally, of smoothing out many apparent cancer clusters. [See: C Busby, Wolves of Water, Green Audit, 2006, pp 322–27]. Moreover, where cancer clusters have been detected around nuclear installations, their significance has been discounted through the deployment of atom bomb based criteria of risk. [see, for instance, the discussion in pp 24–6 of the 9th COMARE report, of 2004].

10. (b) Relatively low levels of radioactive material can have a cumulative effect that could be damaging to some of its recipients, particularly during their developmental years. With an emphasis upon water borne contaminants, particularly in muddy estuaries, the unorthodox side focuses upon clusters of cancers amongst populations of settlements immediately bordering the waters adjoining nuclear installations.

10. (c) The emergence of the debate between orthodox and unorthodox positions led, in 2001 to the formation of an internally adversarial body—the Committee Examining Radiation Risks of Internal Emitters (CERRIE) to supplement the work of the existing Committee on Medical Aspects of Radiation in the Environment (COMARE). CERRIE’S functioning between 2001 and 2004 proved to be highly acrimonious [Busby, pp 406-28; and Radioactive Times, vol 6, no 1, May 2005] but did result in a final report that highlighted many areas of continuing uncertainty. CERRIE had also planned further research into nuclear health issues around Bradwell, but this was cancelled when the committee’s work was suddenly subjected to an arbitrary deadline in summer of 2004. Whatever the intrinsic merits of this action, it remains a tactical and presentational miscalculation of major proportions for a government that was eventually to commit itself to a programme of new nuclear reactors.


10. (e) COMARE’s 9th report in October 2004 was devoted to a detailed and well-balanced response to the CERRIE final report and identified numerous areas of continuing concern and need for further research. COMARE’s subsequent 10th and 11th reports continued to highlight uncertainties and further research needs. However, they also continued to emphasise both disputed statistical techniques and criteria for radiation risk drawn from exposure to atomic bomb blasts, and to focus overwhelmingly on childhood cancers, rather than cancers subsequently contracted by adults living near nuclear installations.

10. (f) COMARE’s approach to the identification of health risks from nuclear installations is highly cautious. This is quite understandable in the light of the irresponsible alarmism over the MMR inoculation. However, the anxieties of many who live close to nuclear installations have not been quelled by its work and general faith in orthodox scientific positions has not been encouraged by the example of the determined resistance to early suggestions of a link (by Richard Lacey, in particular) between BSE and its human equivalent. This general unease, moreover, comes against a background of growing distrust for government statements and official statistics as reported by the Financial Times [report of 30 December 2009—High Levels of scepticism over data revealed”] and widespread concern at the kinds of statistical operations—“tricks”—of which staff at the climate change unit at the University of East Anglia have recently been accused.

10. (g) The controversy about the health effects of nuclear installations is likely to fester indefinitely unless new approaches to research are adopted. One avenue would be to undertake detailed, longitudinal studies of relatively discrete populations, such as Tollesbury in Essex, where cohorts can be identified and their development tracked with relative ease. The second, and even more powerful, possibility has just arisen with the announcement by 454 Life Sciences of the successful sequencing of cancerous tumors [See the report by EmaxHealth: “Breakthrough in DNA Sequencing for Cancer Research”, http://www.emaxhealth.com/ 51/6413.html]. Such DNA sequencing could, eventually, provide concrete evidence about the genesis of individual tumor, thus highlighting the cause(s) of specific cancers and providing powerful ammunition for those victims who might wish to seek redress from past and future operators of nuclear installations, where low-level radioactive contamination can be proven to have been in any way culpable.

10. (h) The Energy and Climate Change Committee is uniquely placed to investigate further many of the continuing controversies over the health effects of the operation of UK nuclear reactors and their implications for new nuclear construction. Key questions include:

— Are the orthodox statistical techniques appropriate, particularly: the radial analysis of areas of potential effect, that otherwise ignore topographical features; and the adoption of “Bayesian smoothing” to reduce the apparent incidence of cancer clusters. Moreover, are the criticisms directed against advocates of the unorthodox position fair, particularly the claim of “Texan sharpshooter targeting” in the identification of cancer clusters? [see: Busby, pp 322–27]
— Is the orthodox focus upon the effects of exposure to high level radioactive material valid, or should more attention be paid to longer-term exposure to lower level radioactive materials, particularly those that are water-borne?

— Is there not now a case for initiating longitudinal studies of relatively discrete communities to establish whether there have, or have not, been cancer clusters amongst their long-term residents? Earlier work by J F Bithell (whose work is relied upon by COMARE to counter the implications of the KiKK report) and colleagues, suggested the possible desirability of something along just such lines [J F Bithell, S J Dutton, G J Draper, N M Neary “Distribution of childhood leukaemias and non-Hodgkin’s lymphomas near nuclear installations in England and Wales”, BMJ, 20 August 1994]. Also, might it now be timely to encourage the application of DNA sequencing to cancers developed in the vicinities of nuclear installations?


— Why, moreover, has COMARE turned the focus of its major reports away from nuclear power stations’ health effects since its last report on the issue—the 11th report of July 2006, save for ad hoc responses to external stimuli like the publication of the German KiKK report? Is the government’s revival of the nuclear energy option significant in this respect?

10. (i) In exploring these questions, the ECC committee might consider:

— Interviewing members of CERRIE to investigate its functioning and findings, particularly its chairman Professor Dudley Goodhead, a key secretary, Dr Ian Fairlie, Dr Chris Busby of Green Audit and Richard Bramhall of the Low Level Radiation Campaign.

— Interviewing one or more experts in statistical techniques to establish the appropriateness of the specific statistical techniques that have been employed in identifying levels of cancers (particularly childhood) in the work of COMARE and its contributors.

— Interviewing one or more of the authors of the German KiKK study to determine their view of the reworking of UK nuclear cancer clustering by Bithell, et al. [J F Bithell, T J Keegan, M E Kroll, M F G Murphy and T J Vincent, Childhood leukaemia near British nuclear installations: methodological issues and recent results, Radiation Protection Dosimetry, 2008, 132(2)]

— Interviewing the head of the Health Protection Agency to establish his/her view of the current state of research on the health effects of radioactive materials and exposure.

— Recommending longitudinal studies of rates of cancer in discrete communities near nuclear reactors, like Tollesbury in Essex.

— Interviewing the head of the Welcome Trust to review the prospective contribution of DNA sequencing to the identification of specific causes of cancers commonly found in communities adjoining nuclear reactors.

January 2010

Supplementary memorandum submitted by Blackwater Against New Nuclear Group

Further to the presentation made by members of the Blackwater Against New Nuclear Group, the following points might be pertinent to the consideration of the issues raised in the Annex of the Group’s written presentation, on the issue of health risks from the Bradwell nuclear power station.

Contributor

Professor R J Barry Jones is an emeritus professor of the University of Reading, a resident of Tollesbury (overlooking the site of the existing Bradwell nuclear reactor), and a contributor to the submission by the Blackwater Against New Nuclear Group.

Summary

The debate about the past health effects of the Bradwell nuclear power station focuses on the public disagreements between the Committee on Medical Aspects of Radiation in the Environment (COMARE), on the one side, and Green Audit and the Low Level Radiation Campaign (LLRC), on the other.
The controversy over Bradwell’s nuclear health impact is interesting in the light of some recent issues that have arisen over global warming data and the claimed treatment of unfavoured authors in the “peer” refereeing of articles on stem cell research.

It remains important, therefore, to secure answers to some of the persistent questions concerning the assumptions and methodologies of those on both of the sides of the nuclear health effects debate.

THE COMARE APPROACH

The position of COMARE has two (public) elements: First, criticisms of the statistical “evidence” presented by Green Audit (and to a lesser extent) the Small Area Health Statistics Unit (SAHSU); and, second, the maintenance of an “orthodox” position that rests upon mutually reinforcing statistical methodologies and radiation risk criteria drawn from the experiences of victims of past nuclear explosions.

Much of the argument used in press releases from COMARE to dismiss concerns about cancer incidences in Bradwell’s locality rests upon statistical “errors” that were quite trivial when compared with some of the statistical “anomalies” that have been revealed in respect to the treatment of the historical record of global temperatures by researchers at the University of East Anglia’s climate change centre. Some of the Green Audit “errors” arose as a result of intermittent access to official data. Moreover, many were corrected in subsequent Green Audit reports.

A second COMARE line of attack concerned the choice, by Green Audit, of groups of wards in Maldon and Burnham for comparison of cancer rates. [see: COMARE press release of 2003 on “Cancer mortality around the Bradwell Nuclear Power Station, Essex”]. It is impossible for the outsider to resolve this issue directly. The criticism rests, in part, upon the claim that Green Audit adopted “Texan sharpshooter targeting” to identify communities at risk [on which, see: C Busby, Wolves of Water, Green Audit, 2206, pp 323–5]. Green Audit’s claim, however, is that contamination of estuarine waters and muds by low level radioactive material may be particularly harmful to residents over the longer term. Thus, Maldon and Burnham were chosen to test this proposition directly, given that Maldon abuts the Blackwater, whereas the nearby Burnham, does not (as a cursory examination of a relevant map would demonstrate).

A third COMARE line of attack concerned the lack of peer referencing by reputable journals of Green Audit’s papers on nuclear health risks, particularly those associated with Bradwell.[see: COMARE press release of 18 March 2003] This line of attack, however, is seriously flawed in its (nave?) neglect of the exclusionary effects of a prevailing orthodoxy upon prospective publications that adopt a thoroughly unorthodox approach and that promote unorthodox conclusions. The recent controversy about publication of stem cell research papers illustrates this problem.

It is worth noting that the language and content of COMARE’s official reports on the effects of nuclear installations and of nuclear radiation are noticeably more circumspect that the language adopted in the periodic press releases, with conclusions qualified by significant caveats and the highlighting of areas of additional, necessary research.

THE GREEN AUDIT APPROACH

Green Audit and the LLRC have also advanced serious lines of criticism against the work of COMARE or, more specifically, the “orthodox” research that is used to support its overall judgements on the health risks of nuclear installations.

The orthodox position on nuclear health risks depends, according to critics, on the following integrated procedures: (a) attempt to deny the existence of any cancer clusters near nuclear installations; (b) where any cluster appears to exist, subject it to two powerful caveats: (i) emphasise the multi-causality of many cancers; (ii) reference the “risk” criteria based upon the experience of victims of nuclear explosions and/or major accidents and, hence, (iii) “demonstrate” that such clusters as have been identified must, therefore, be a result of one or more of the cancer causing factors other than exposure to radioactive materials in, or in the vicinity of, nuclear installations. [see, for example, the concluding paragraph of “Cancer mortality around the Bradwell Nuclear Power Station, Essex”, COMARE, 2003]

The resort to multi-causality in the dismissal of radioactive materials as a cause of cancer clusters has, however, been a serious intellectual and tactical mistake. If cancers, and their clusters, do, indeed, have multiple causes (and, indeed, complex interactions amongst these causes) then longer term exposure to low level radioactive material could be one of these causes. In some areas neighbouring nuclear installations, then, it is possible that other cancer causes (population “mixing” for example) might be lower than “normal”, but “compensated for” by the presence of nuclear “causes”. Thus, even if the overall level of cancers (and cancer deaths in particular) appears to be normal in some areas bordering nuclear installations, the damaging effects of radioactive material may still exist and have been making up for the relatively low level of other cancer-causing factors. The uneven distribution of genetic susceptibility to damage by radioactive exposure merely compounds this complication.

Statistical measures that purport to dispel claims of cancer causation in the vicinity of some nuclear installations may thus fail to achieve their purpose, because the aggregate statistics are disguising the effect. This serious possibility is little considered in COMARE’s successive reports on the health risks of nuclear
installations. However, the uncertainty generated by multi-causality of many cancers reinforces the urgency for the DNA sequencing of those cancers for which nuclear installations have been thought to be responsible.

Central to the initial attempt to deny the existence of cancer clusters around nuclear installations is, according to Green Audit, the deployment of a technique of “Bayesian smoothing”, the effect of which would seem to be to blend relatively small populations into their surrounding populations and, hence, dissolve any apparent clusters of cancers in specific wards (irrespective of other reasons to suspect that there might be a radiological effect). [Busby, pp 325–7]

At the heart of the justification of such statistiﬁc approaches (which go well beyond anything suggested, or undertaken, by the University of East Anglia climate research group members) is a prior supposition that exposure to low level radioactive material cannot cause cancers, or other serious health effects, in human beings because the levels of exposure are so much lower than anything experienced in atomic explosions or other major nuclear accidents, irrespective of the form of exposure to the low level radioactive material, the length of that exposure, or the developmental state of those experiencing that exposure.

A number of issues in the debate between the orthodox and critical approaches to the health effects of nuclear installations thus require resolution by a genuinely independent and impartial authority. COMARE, unfortunately, has failed to satisfy this continuing, and increasingly pressing, need for a number of substantive and procedural reasons. The substantive issues of prior assumptions and statistical procedures have been reviewed, brieﬂy, above. Procedural issues are also worthy of attention, however.

COMARE has criticised Green Audit for its failure to secure peer group refereeing for its proposed and actual publications. This, however, is nave with regard to the problems confronting proponents of unorthodox views. The problem here, is that: (i) the orthodox position is supported by contested statistical procedures and (ii), that experimental proof of the cancer inducing effects of longer-term exposure to, low level radioactive material upon human beings, especially when embryos and/or during childhood, would be difficult, if not impossible to obtain (for obvious ethical reasons).

BALANCE AND INDEPENDENCE

Caution over health issues is clearly warranted (as the MMR debacle demonstrates). However, understandable caution may be substantially reinforced by considerations. Reputations are at stake when orthodox scientiﬁc positions are challenged and it is all too common for challengers to be dubbed as mavericks (Richard Lacey during the early days of the BSE crisis) or frozen out. Dr Chris Busby reports his exclusion from the important forum, the Oxford conference on childhood Leukaemia in September 2004 [Busby, pp 426–8]. Advocates of politically embarrassing positions may, moreover, be expelled from ofﬁcial agencies, as shown in the case of Professor Nutt dismissal from the Advisory Council on the Misuse of Drugs.

A further, serious issue confronting the ultimate independence of COMARE is that of research finance. The well-being of university departments, and the professional progress of their staff members, is increasingly dependent upon the receipt of research funds from external sources. This may also be true of more research orientated departments in major hospitals.

The major source of funding for those undertaking research into nuclear health effects—whether physical or statistical—has been the government—directly from interested departments of state, or indirectly via ofﬁcial agencies like the Medical Research Council or and Health Protection Agency. Unfortunately, the government has also been the most heavily “interested” party in the ﬁndings of research into nuclear health effects, if only because of the very substantial litigation costs that might arise from any substantiated claims of health damage from past exposure to nuclear tests and/or the operation of a range of nuclear installations. The ﬁnancial interest in maintaining the orthodoxy of the absence of adverse health effects from nuclear installations has merely been reinforced by the recent revival of interest in a new generation of nuclear generators. It is to be doubted seriously, therefore, whether substantial research funds are likely to have been secured for serious attempts to establish a positive link between nuclear installations and health damage and sensible researchers will have been well aware of this tacit constraint. Dr. Busby and Green Audit have certainly found it extremely difﬁcult to secure even the most minimal level of funding for their endeavours.

Such considerations bear seriously upon the claimer disinterest of COMARE’s membership, COMARE’s 9th report, of 2004, includes a statement of the criteria for declaration of members’ interests. These criteria focus exclusively upon links with the “radiation industry” [p 37] and members’ declarations of interests are confined to such links. There is no mention, whatsoever, of governmental funding flows, direct or indirect, despite their clear salience. Such considerations do not disprove the orthodox position on nuclear health risks, but they do raise questions that require further review.

Such difficulties with the “embedded” character of the nuclear health establishment make it all the more important that the debate between the upholders of the orthodox position and their critics is adjudicated, authoritatively, by experts in statistics and research procedures that have no connection with the nuclear industry, no need for continuing funding from government, directly or indirectly, or an existing, strong position on the necessity for new nuclear generating capacity.
The unresolved questions about the health effects of nuclear installations remain urgent because of the proposed programme of new nuclear reactors, many in areas where the past operations of nuclear power stations have generated suspicions of damage to the health of local populations. New nuclear reactors will continue to release low level radioactive materials into the environment and these materials will continue to wash into estuaries, like the Blackwater, and deposit on their extensive mud flats. Worse, high level nuclear waste will now be stored on the sites of any new nuclear reactors, at least for the time being, increasing substantially the risks of release of radioactive material into the waters that they border.

February 2010

Further supplementary memorandum submitted by Blackwater Against New Nuclear Group

ADDITIONAL EVIDENCE AS REQUESTED FOLLOWING PRESENTATION OF EVIDENCE TO SELECT COMMITTEE, 27 JANUARY 2010 BY CHAIRMAN ALAN WHITEHEAD

This additional submission takes the form of a list of criticisms of the contents of the Draft NPS reports and associated documents which illustrate the quality of these and provide additional support for the demand that this exercise is flawed and should not be approved.

The list includes only those criticisms which have been particularly notable. There are others.

DRAFT OVERARCHING NPS FOR ENERGY EN-1

1.1.2 result in adverse impacts outweighing the benefits.

No suggestion given on how this is evaluated.

1.3.5 generation of electricity from renewable sources other than wind, biomass or waste is not within the scope of this NPS.

This excludes some of the options such as tidal, or wave power which the UK is well placed to benefit from.

2.1.8 applicants should demonstrate to the IPC that they have considered and planned for the impacts of climate change on their proposal.

How can they do this for nuclear at vulnerable sites like Bradwell when they only have 100 year climate projections and the sites will be occupied for over 160 years?

2.1.14 We need sufficient capacity to meet demand at all times.

The document makes only passing reference to planning to reduce energy demand.

3.1 within the context of the overall strategic framework set by Government, in principle, new nuclear power should be free to contribute as much as possible towards meeting the need for 25 GW of new non-renewable capacity. The Government expects that under this approach a significant proportion of the 25 GW will in practice be filled by nuclear power.

Nuclear contribution is thus left to decisions of the market place, not government planning. Alternatives must be planned if 25GW deemed essential.

The IPC does not need to consider the relative advantages of one technology over another given the Government’s view that companies should be permitted to determine the individual projects to bring forward within the strategic framework set by the Government, taking account of the clear benefits of a diverse energy mix.

This further shows the weakness of government planning and also states the importance of diversity, yet having already limited it in 1.3.5 above.

3.3.10 Over these longer time horizons demand is likely to rise, particularly as a result of increased demand.

This does not make sense.

3.4.3 Wave and tidal—the UK has significant potential for wave and tidal energy, but many of the technologies for making use of the wave resource and tidal currents are still at the prototype or demonstration stage, although proven technology exists for tidal range generation. Para 1.3.5 explains how this NPS relates to wave and tidal generation.

See 1.3.5 above, where there is no mention of wave and tidal power.

3.8.7 The figures in this section show that approximately 40 GW of energy will flow into the midlands and southeast in 2020 from elsewhere in the country. The NPS makes no attempt to deal with this imbalance of supply with demand. The transmission losses incurred, and the omission of combined heat and power due to remote power station locations, will add to energy inefficiency rather than improving it. This adds to the national energy need unnecessarily.

4.1.1 (iv) The IPC should take into account adverse impacts—environmental, social and economic—including those identified in this NPS and the relevant technology-specific NPS, as well as local impacts identified in the application or otherwise. The IPC should ensure it takes account of any longer-term adverse impacts that have been identified and any cumulative adverse impacts.
4.1.1 (v) *If the IPC is satisfied that the adverse impacts identified (including any cumulative adverse impacts) outweigh the benefits of the proposed development (taking into account measures to avoid, reduce or compensate for those adverse impacts) consent should be refused.*

These statements are not reflected in nuclear NPS-6 where IROPI is regularly mentioned together with the comment that all nuclear sites are needed even if significant adverse impacts cannot be mitigated.

4.2.1 *All proposals for projects that are subject to the European Environmental Impact Assessment Directive must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project. The Directive specifically refers to effects on human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. The Directive requires a description of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects at all stages of the project, and also of the measures envisaged for avoiding or mitigating significant adverse effects.*

When considering a proposal, the IPC should satisfy itself that likely significant effects have been adequately assessed, and should request further information where necessary.

The Appraisal of Sustainability for Bradwell does not follow these directives. Is it realistic to expect a developer to be more rigorous than DECC and the NPS?

4.2.2 *While not required by the EIA Directive, the IPC will find it helpful if the applicant also sets out information on the likely significant social and economic effects of the development, and shows how any likely significant negative effects would be avoided or mitigated. This information could include matters such as employment, equality, community cohesion and well-being.*

Comment as above.

4.4.3 *Given the level of need for energy infrastructure as set out in this NPS, the IPC should have regard to the possibility that all suitable sites may be needed.*

4.6.5 *Under guidelines issued by BIS (then DTI) in 2006, any application to develop a thermal generating station under Section 36 of the Electricity Act 1989 must either include CHP or contain evidence that the possibilities for CHP have been fully explored.*

This section of the report states the importance of combined heat and power but this importance is not reflected in the choice of sites for nuclear.

4.8.6 *Applicants should use the latest set of UK Climate Projections to ensure they have identified appropriate measures to adapt to the risks to the proposed infrastructure.*

These projections extend for 100 years, whereas sites will need to be secure for 160 or more years.

4.8.10 *The IPC should satisfy itself that there are not critical features of the design of new energy infrastructure which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections, taking account of the latest credible scientific evidence on, for example, sea level rise.*

Inadequate planning, as above.

4.8.12 *Adaptation measures can be required to be implemented at the time of construction where necessary and appropriate to do so.*

Adaptation measures must be required would be more acceptable.

4.10.3 *The IPC should work on the assumption that the relevant pollution control regime will be properly applied and enforced. It should act to complement but not seek to duplicate it.*

This appears to be contradicted by:

4.10.8 *The IPC should not refuse consent unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.*

Evaluation of pollution controls compliance must carried out to do this.

4.18.9, 10, 11, 12, 13 These relate to the importance of protecting designated conservation sites but then states that these designations should not be used to refuse development consent. Yet Dungeness has been classified as unsuitable for these reasons. *Consultation on draft National Policy Statements for Energy Infrastructure, Dungeness Summary P 71.*

4.18.17 *Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The IPC should ensure that these species and habitats are protected from the adverse effects of development, where appropriate, by using conditions or planning obligations. The IPC should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm.*

More direction here.
2.3.1 Nuclear power is low-carbon, economic, dependable, safe, and capable of increasing diversity of energy supply and reducing our dependence on any one technology or country for our energy or fuel supplies. Excluding nuclear power as an option for generating electricity would make it harder and more expensive to meet our emission targets. It could also jeopardise the security of the UK’s energy supply.

The claims here are contestable.

3.6.2 The potential for delivering CHP from a nuclear power station is constrained by the need to minimise the radiological consequences to the public in the unlikely event of a serious nuclear accident. Consistent with the SSA demographic criterion applied to the siting of new nuclear power stations sites are likely to be located away from major population centres, which may limit the viability of CHP schemes.

This is in conflict with the desire for CHP and illustrates the government’s confusing demographic criteria.

3.8.18 Based on domestic and international experience the Government is satisfied that interim storage facilities are and will be safe and effective, and will remain so for as long as is necessary, for example through building of new stores and periodic refurbishment of stores if needed, until geological disposal is available for use. In the event that geological disposal facilities are not available to accept radioactive waste in accordance with the indicative timetable set out above, the Government is satisfied that interim storage will provide an extendable, safe and secure means of containing waste for as long as it takes to site and construct a geological disposal facility.

This states indefinite storage beyond 160 years is possible.

4.2.9 The Government has also concluded that nominated sites in lower flood zones should not be considered as reasonably available alternatives to those in the higher flood zones. This is because the NPS sets out that all the sites listed in this NPS are needed in order for the Government to meet its objectives on climate change and for the UK to become a low carbon economy.

All sites needed, again.

4.6.1 The AoS identified that the potentially suitable sites share the following landscape issues: the sites are generally in less populated areas that may have value for visual amenity and as landscape resources; they are coastal/estuarine sites; and that the scale of the facilities means that the scope for visual mitigation is quite limited. In addition, because of the timescales involved, there is some uncertainty over future land uses once sites are decommissioned.

This is not the case at Bradwell due to the proximity of the north coast of the estuary, less than 2 miles, and the importance of employment in holidays, tourism and sailing in the estuary. The value of visual amenity is important to these industries.

4.6.3 Visually-intrusive cooling towers can increase a nuclear power station’s visual impacts on the landscape. However, with the exception of Oldbury, cooling towers are not the preferred option proposed by the nominators for cooling.

This is untrue. Iberdrola, currently the most likely site developer, in their letter of interest in Bradwell, sent to DECC March 23rd 2009, clearly stated their wish to construct up to three reactors including cooling towers as required for reactors 2 and 3.

4.7.1 The AoS identified that there are likely to be positive effects of local economic significance, although these are less significant at the regional scale except where there are clusters of potentially suitable sites for new nuclear power stations, particularly in the south-west and north-west of England.

The AoS omits mention of negative economic effects which are likely to occur.

4.8.7 Given the potential for positive employment opportunities as a result of the development of new nuclear power stations the IPC should give significant weight to the effect of employment on human health and well being.

More of the same.

4.13.1 The objective of Government’s policy on demographics and the siting of nuclear power stations is to limit the radiological consequences to the public in the unlikely event of a serious nuclear accident. This policy is a measure of prudence over and above the stringent regulatory requirements imposed on nuclear operators to prevent such accidents.

This prudence does not extend to credible emergency plans for the 15,000 on West Mersea who are regularly cut off by tides. If the stringent regulatory requirements are indeed sufficient then the power stations can be placed closer to where they are needed.

5.6.5–10 Covers demographics at Bradwell and the need for any emergency planning to be covered at the time of an application. This implies that effective plans are possible even over 160 or more years. In the case of West Mersea this seems unlikely. Who would pay for this? The site operator? What if major expenditure is required after decommissioning but during the indefinite interim waste storage period?
5.6.28 The Environment Agency has advised that it is potentially reasonable to conclude that a nuclear power station within the nominated site could potentially be protected against flood risks throughout its lifetime, including the potential effects of climate change, storm surge and tsunami, taking into account possible countermeasures. The Environment Agency have noted in making this assessment that it is likely that any new development at Bradwell would be built on higher or raised ground so reducing the need for protection.

This statement is extremely weak and could be considered unreasonable due to the compounded number of potentials. It is not helped by the reliance on 100 year projections to deal with a 160 + year problem.

5.6.31 This site passes this criterion. This is because, based on, in particular, the advice of the Environment Agency and the findings of the Appraisal of Sustainability, it is reasonable to conclude that a nuclear power station within the nominated site could potentially be protected against flood risks throughout its lifetime, including the potential effect of climate change, storm surge and tsunami. This takes into account the potential identified by the Environment Agency to protect the site and to mitigate risks although, as with all sites, the potential effects of any mitigation on the surrounding area will have to be carefully considered as part of a flood risk assessment should any application be forthcoming.

The environment agency carries the can for this woolly statement which has now been hardened up to look better.

5.6.56–62 Cover the potential impacts on the sites of international importance covering almost all of the Blackwater Estuary and around the Dengie Peninsula. These areas immediately border the proposed site and extend within it.

57. The Appraisal of Sustainability findings on sites of international importance are taken from the Habitats Regulations Assessment. Taking into account the strategic nature of the plan and the information available, the Habitats Regulations Assessment at this strategic level cannot rule out potential adverse effects on Dengie SPA/Ramsar site, Blackwater Estuary Ramsar Site, Colne Estuary SPA/Ramsar site and the Essex Estuaries SAC, through impacts on water resources and quality, air quality, habitat and species loss and fragmentation/coastal squeeze and disturbance. The designation identified fall immediately adjacent or slightly within the site boundary and the Habitats Regulations Assessment finds that there is a risk that development activities encroach into these designated areas, for example the potential for a marine landing facility, cooling water infrastructure and upgraded coastal protection measures could all have adverse impacts.

58. In the wider context, the Habitats Regulations Assessment also concludes that adverse effects cannot be ruled out on the Mid-Essex SPA/Ramsar as a whole (for water quality impacts and impacts on birds) and the Abberton Reservoir SPA/RAMSAR (for impacts on birds only). Government notes the scope for avoidance and mitigation identified in the Habitats Regulations Assessment for sites of international importance, and the need for more detailed studies should an application for development consent come forward.

61. Given that the Habitats Regulations Assessment has not been able to rule out adverse impacts on sites of European nature conservation importance, the Government has carefully considered whether it is appropriate to include this site in the NPS.

62. Annex A of this NPS sets out that the Government has concluded that there is an Imperative Reason of Overriding Public Interest that favours the inclusion of this site in the Nuclear NPS despite the inability to rule out adverse effects on European sites at this stage.

The IPC is directed to ignore all the listed site impacts. So it now passes. What is the point of designated sites? Dungeness?

5.6.85 The nomination described different cooling technologies and stated a preference for direct cooling from the Estuary. Some responses during the opportunity for public comment were received about whether cooling towers would be necessary at the site. The nominator of the site has noted that the “direct cooling option will require long cooling water culverts to reach deep water to obtain the coolest water and to permit dispersion of the thermal plume to avoid any significant impact on designated ecological sites” but has indicated that direct cooling is the preferred option for the site if it can be achieved. The Environment Agency has advised that there is access to suitable sources of cooling at the site.

No mention of additional reactors with cooling towers as per Iberdrola application.

5.6.86 There were public concerns about whether local ecology around the site, including the local oyster beds, could be adversely affected by the intake and outfall of cooling water from the site and whether this could impact on the local fishing industry.

5.6.87 The Appraisal of Sustainability for Bradwell has identified potential effects on water quality and fish/shellfish populations in nearby coastal waters due to the abstraction and release of sea water for cooling. Indirect effects on nationally and internationally designated habitats, including from the thermal impact of cooling water discharges have also been identified. The Appraisal of Sustainability considers this of potential wider significance because of indirect effects on national and European designated sites.
5.6.88 The Environment Agency has advised that there is an important spawning site for herring on Eagle Bank. The Blackwater Estuary provides a major nursery ground for herring, sprat, bass, and a range of flatfish species. Migratory trout, smelt, eel and twaite shad are all present.

Some of the risks to the estuary are included here but the AoS is biased towards mitigation of effects in the restricted waters of the estuary, which will be impossible given the huge volumes of water passing through a new system.

5.6.109 Part 4 of this NPS (Human health and wellbeing) sets out that the risk of an accident resulting in exposure to radiation for workers, the public and the environment is very small because of the UK’s strict regulatory regime. Part 4 should be referred to for further guidance.

This is not convincing in the light of a recent prosecution:

**BRADWELL OPERATOR GUILTY OF 14-YEAR RADIOACTIVE LEAK**

- Buzz up!
- Digg it
- Terry Macalister
- guardian.co.uk, Friday 6 February 2009 20.38 GMT
- Article history

The nuclear power industry suffered an embarrassing blow today when the operator of the Bradwell-on-Sea plant was found guilty of allowing a radioactive leak to continue for 14 years.

Magnox Electric Ltd, the operator of the site, denied some of the allegations but was found guilty of breaking the Radioactive Substances Act 1993 over the way it dealt with waste on the premises.

The Environment Agency, which brought the company to court, said the case demonstrated how the operator had failed to carry out inspections on a holding tank between 1990 and 2004. The company pleaded guilty to two separate offences for failing to maintain the tank.

“Our prosecution sends a clear message to the nuclear industry that we require the highest standards of operation at all such sites and will take firm action, even if the environment beyond a site’s boundaries is not affected,” said Phil Heaton, team leader of the agency’s nuclear regulation group.

Peter Fenn, hearing the case at Chelmsford crown court, said he would pass sentence on Magnox Electric on 17 February. Mark Harris, prosecuting on behalf of the Environment Agency, said radioactive liquid had leaked into the ground because the tank had been poorly designed and badly maintained.

The most senior figure in nuclear safety had been forced to defend the regulation of the Essex nuclear power station in an interview the Guardian published on Monday. Mike Weightman, chief inspector at the Nuclear Installations Inspectorate, said it was not possible to “inspect or check every feature of a complex plant” but he insisted that as soon as the leak was discovered the safety body did all it could to ensure that the cause of the problem was identified and dealt with.

This resulted in a fine of £250,000 plus £150,000 costs.

The leak was only discovered due to the diligence of a decommissioning worker.

**CONCLUSION ON THE NOMINATED SITE AT BRADWELL**

5.6.121 Given that the site meets the SSA criteria, and having considered the evidence from, inter alia, the public, regulators, the Appraisal of Sustainability and Habitats Regulations Reports, the Government has concluded that the site is potentially suitable.

5.6.122 This assessment has outlined that there are a number of areas which will require further consideration by the applicant, the IPC and/or the regulators should an application for development consent come forward, including amongst other things flood risk, seismic risk, the impact on biodiversity and the potential impacts of cooling technology. However, the Government has concluded that none of these factors is sufficient to prevent the site from being considered as potentially suitable as part of the SSA.

No mention of negative economic impacts.

**COMMENTS FROM THE APPRAISAL OF SUSTAINABILITY FOR BRADWELL**

**COPY OF SUMMARY OF KEY FINDINGS**

A number of the strategic effects identified for Bradwell will be similar across all the nominated sites, including positive effects for employment and well being. However a number of potential strategic effects have been identified that are of particular note for the nominated site at Bradwell. These are discussed below:

There are potential negative effects on three national and internationally protected nature conservation sites, including the Essex Estuaries and Blackwater Estuary; effects on water quality and fish/shellfish populations in nearby coastal waters due to the abstraction and release of sea water for cooling.

Part of the site is in flood zone 3 and therefore at a higher risk from coastal flooding.
There are both hard and soft flood defences already in place, but these may require upgrading over the lifetime of a new power station. This could have potential effects on erosion and visual appearance of the coastline. These effects are significant, but mitigation opportunities are likely to be available following further study.

A new nuclear power station would be set in the context of the existing nuclear power station at Bradwell, but the surrounding area is predominantly undeveloped and there is limited potential for mitigation of the adverse impact on the local landscape. There are no significant adverse effects anticipated on nationally designated landscapes.

Potential setting effects upon nearby scheduled monuments and listed buildings, and the West Mersea Conservation Area, could also be of regional or national importance, depending on distance and sight lines. The impact on the setting of Othona Roman fort and St. Peter’s Chapel would be of exceptional significance.

However, mitigation could be applied by siting the proposed facility close to the existing power stations on the western side of the nominated site. Detailed assessment will be required at the project level Environmental Impact Assessment stage.

There remains some uncertainty relating to the significance of some effects and the most appropriate mitigation. It is expected that the mitigation measures will be refined iteratively as part of the development of the proposals for the nominated site, and will be assessed further in the project level Environmental Impact Assessment.

1.19 To provide a standardised approach to the appraisal of the nominated sites, the assumptions about generic design characteristics have been summarised into a base-case. The base-case was used to guide the assessment for each site, except in cases where a nominator has provided further detail at variance to the base-case. For example, if a nominator is proposing cooling towers instead of abstracting water for cooling, this has been considered in the assessment.

This is not true, Iberdrola have stated they expect to need cooling towers when they construct reactors 2 and 3.

2.3 Bradwell lies some 40km to the east of Chelmsford and 4km from the town of West Mersea across the Blackwater River and Estuary. It is 2km from the village of Bradwell-on-Sea, with the hamlet of Bradwell Waterside adjacent to the west. Other nearby settlements on the Dengie peninsula include Tillingham, Southminster and Burnham-on-Crouch to the south and Ramsay Island to the west. Tollesbury village lies 4km across the estuary to the north west, and the town of Maldon lies some 15km to the west up the estuary. The site lies to the east and south of Bradwell “A” power station, and comprises open agricultural land (largely arable), the former Bradwell Bay airfield, an existing electricity sub-station, a farmstead (Weymarks Farm), other agricultural buildings and areas of foreshore.

This section omits mention of Colchester 15km, Brightlingsea 10 km, Clacton-on-Sea 17km, Southend-on-Sea 27km.

Chelmsford is only 30 km away, not 40.

2.4 The nomination is for a nuclear power station development incorporating:

At least one nuclear reactor

The nomination includes three reactors.

4.65 The site is located next to the Blackwater Estuary. There are three identified Shellfish Waters in close proximity, located in channels that feed into the estuary: Strood Channel, Tollesbury Channel and Scolt Channel. A large area of the Blackwater Estuary itself, adjacent to the site, is marked as designated Shellfish Waters on a 1999 schedule but it is not shown on the 2007 maps. There are Bathing Waters at West Mersea, 3km to the north of the site. The quality of these Bathing Waters has not been classified.

This acknowledges that there is a holiday and tourism area only 3km away, but no mention of impacts on this are documented.

5.5 The construction of a nuclear power station at Bradwell is likely to have localised adverse effects on air quality in the short term (five to six years), including dust and emissions from construction vehicles, Heavy Goods Vehicles (HGVs) and traffic movements generated by the estimated construction workforce. This has the potential to affect residential properties in the surrounding area and villages.

If three reactors are constructed this disruption could continue for 15 to 25 years.

5.9 There is a very low risk of an accidental release of radioactive emissions from the Bradwell site, which could have a significant strategic effect on air quality. The HSE/NII and the EA will consider this matter during their risk assessments, which will be carried out as part of the consenting process to ensure that risks to public health and safety through accidental release of emissions are within acceptable limits. Whilst the risk is very low, the potential for a large number of people to be adversely affected means that, at this stage of assessment, the potential for strategic adverse sustainability effects has been identified.
The meaning of this is unclear, large numbers of people could be adversely affected.

Should this mean the site is not suitable?

5.15 Water intake from the coastal waters for cooling purposes could lead to the incidental mortality of fish and other aquatic species. Fish, larvae and eggs can be sucked into condenser units and be subjected to heat before being returned to the sea. This could lead to loss of fish or invertebrate food sources and could have an adverse effect on the important bird assemblages for which the SPA/Ramsar sites are designated. The design and siting of the intake system should be carefully considered so as to avoid/minimise depletion of such food sources.

This directive to avoid/minimise is not possible, for reasons previously presented at HoP. The demand for much larger volumes of cooling cannot be sustained by the estuary without major damage to ecology, fish and oysters.

5.25 Whilst there is likely to be significant positive effects for employment and local communities, the magnitude of these effects is reduced at a regional and national scale. An exception to this is likely to be the Isle of Mersea, which although relatively close to Bradwell, is located on the north coast of the estuary and has no direct transport links to the site. On a strategic regional level, impacts are considered to be positive.

West Mersea is very close to Bradwell. Similar problems apply to Tollesbury, Brightlingsea, Colchester, Clacton.

5.30 It is commonly perceived that proximity to a nuclear facility such as a power station would have an adverse effect on property values. However, the evidence for this is inconclusive and contradictory. A study of effects in America found that property values were actually increased in the vicinity of nuclear facilities, although the authors caution that this finding is subject to several caveats including being based on a small sample and may be unrepresentative. It is suggested that in relatively poor areas, or where the local economy is depressed, the income generated by employment at a new nuclear facility may have a positive effect on local property values. For the present appraisal, any effect on property values is not considered to be strategically significant because it is limited to the local area.

These comments may apply to areas near Bradwell on the south side of the estuary, but the north side of the estuary is currently a relatively affluent area.

5.31 Strategic Effects on Communities: Population, Employment and Viability: Positive effects of local economic significance are likely to occur, although these are less significant at the regional scale. A potential negative effect of regional significance is the project leading to a shortage of local construction labour available to other industries. Bias again.

5.56 It is possible that the presence of a nuclear power plant may lead to increased stress levels in certain individuals, due to potential perception of risk associated with living or working near a power station. However, there is little literature available on this potential impact which suggests that it has not been a significant problem in the past. In any event, in the case of the nominated site, people living and working nearby have had a long time to get used to there being an adjacent nuclear plant so this is unlikely to be a problem at this location.

This claim is totally at odds with surveys currently being conducted around the estuary and cannot be regarded as evidence based information. It is unjustified speculation.

5.58 Strategic Effects on Human Health and Well-Being: The rigorous system of regulation of routine discharges from the proposed nuclear power station at Bradwell should ensure that there are no unacceptable risks to the health of the local population when the plant is operating normally. There is also a very small risk of adverse health impacts arising from an accidental release of radiation but the multiple safety features within modern nuclear plants makes such an event exceedingly unlikely. Overall, the likely enhancement in employment, community wealth, housing stock and other associated neighbourhood infrastructure should improve community well-being and health generally.

Most of this section is again speculative and not evidence based. The last part could not be further from the truth for most of the area.

The first part claiming how safe it is should justify placing closer to areas of energy need.

5.59 The main impacts of the development within the footprint of the proposed facility would be felt at a local to regional scale. Potential setting effects upon nearby scheduled monuments and listed buildings, and the West Mersea Conservation Area, could also be of regional or national importance, depending on distance and sight lines. However, the impact on the setting of Othona Roman fort and St. Peter’s Chapel would be of exceptional significance especially if the development occurs on the eastern side of the site. However, mitigation could be applied by siting the proposed facility close to the existing power station on the western side of the site. Detailed assessment, including consultation of the Essex Historic Landscape Characterisation, consideration of Conservation Areas and other heritage assets will be required at the project level EIA stage.
The location of the development on the site will have to be spread along towards St Peter’s Chapel and Othona Fort if three reactors are built.

5.68 Strategic Effects on Landscape: The AoS has identified potential, adverse indirect effects on the local surrounding landscape and some direct effects on features of the site. There are no significant adverse effects anticipated on nationally designated landscape. However, there are likely to be indirect adverse effects of the development on nearby Special Landscape areas. In visual terms, the new power station would be seen in the context of existing power station facilities, prior to any decommissioning. It is predicted that there will be limited further potential for mitigation of these local visual impacts, given the scale of the development, until after decommissioning. Therefore, overall, impacts are considered to be of minor adverse strategic significance.

This ignores the probability of damage to tourism and holidays due to the visual intrusion.

5.76 If cooling water is returned to the sea at elevated temperatures, this could have adverse effects on both sediment transport and water quality in coastal waters. Nearby coastal waters include the Essex Estuaries SAC, the Blackwater Estuary SSSI/SPA/Ramsar site and the Dengie SSSI/SPA/Ramsar sites. A more detailed appraisal is required by the developer at the project EIA level to assess the implications of this thermal discharge. This process will include an assessment of the impacts of any discharges to the aquatic environment, including impacts on specific designated sites under both the Habitats and Shellfish Directives.

This is grossly understating the impacts known to result from power station cooling water extraction, see press article below.

NUCLEAR PLANTS SUCKING THE SEA LIFE FROM BRITISH WATERS, RESEARCHERS CLAIM

From The Times
14 April 2008
Robin Pagnamenta, Peter Stiff and Lewis Smith

The nuclear industry in Britain is killing billions of fish every year and taking a devastating toll of stocks, an Oxford University academic suggests.

The impact can be so severe in the worst-affected regions of the seas around Britain that death rates are equivalent to half the commercial catch for some species.

Coastal power plants that have cooling systems that extract water from the sea are to blame for the destruction, according to Peter Henderson, an environmental researcher. Figures he has compiled suggest that the damage to fish stocks is much more severe than records have indicated previously. He calculated that had the young fish killed in power stations survived they would have added thousands of tonnes of fish annually to Britain’s stocks.

With a new generation of nuclear power stations likely to be built over the next 20 years the threat posed to fish stocks needed to be addressed urgently, he said. The net impact on fish populations was poorly understood because too few studies had been carried out.

Dr Henderson is concerned that too little account is taken of the impact on fish stocks of the deaths of many billions of eggs and young caused by coastal power plants, both nuclear and conventional.

The number, weight and species of fish and crustaceans removed from filters at power plants can be measured accurately, but it is much harder to assess the impact of the deaths of eggs, larvae and small fish.

“The number of animals killed is colossal,” Dr Henderson, an associate lecturer at the University of Oxford and director of the Pisces Conservation environmental consultancy, said. “Very small fish get sucked in in very large numbers.”

The impact on populations is compounded by the loss of prawns and shrimps which, like young fish and eggs, form an important part of the diet of larger animals. At Dungeness nuclear power station at Romney Marsh, Kent, where huge numbers of sprats are known to form shoals, the outfall pipes have been known to become clogged with dead fish. “We are talking as many as 250 million fish in as little as five hours,” Dr Henderson said.

In the southern region of the North Sea it was calculated that the mortality of eggs and young was so high for sole that it had been equal to 46% of commercial fishing. Similarly, herring mortality off parts of the East Coast was 50 per cent of commercial landings.

Dr Henderson also identified the English Channel as a badly affected region because of the number of nuclear power stations on the coast on both sides of the Channel. Coal-fired stations and other installations such as those in the petrochemical industry present similar problems, but nuclear plants are among the biggest extractors of water.
Water is pumped from the seas in vast quantities, with British nuclear plants extracting at up to 60 cubic metres (2,100 cubic ft) per second. The Gravelines plant on the French north coast pumps at up to 120 cubic metres per second.

Once the water has been used to cool the reactors it is pumped back into the sea where, having been warmed up, it attracts a variety of marine creatures, many of which get caught up in the intake systems and killed. Fish that are too young or too small to be caught by the 1cm mesh screens—especially pipe fish and eels—travel through them, as do eggs and larvae, and pass into the reactors’ cooling pipes. Many die after being heated to 30°C (86°F), chlorinated and given small doses of radiation.

The toll of fish stocks can be avoided at new nuclear plants with the introduction of dry-cooling, said Dr Henderson, who called for this method to be adopted, despite the higher costs, if another generation of nuclear power plants is built.

Callum Roberts, Professor of Marine Conservation at the University of York, said that the report, which had not been subjected to peer review, raised serious questions about the role of nuclear and other power stations in damaging fish stocks. “I think it’s interesting that the quantity taken by the power stations is large, especially if you look at the possible cost in the future of prematurely killing these fish,” he said.

“It has become more significant over the years because of the decline of inshore stocks and, indeed, of the decline of some species going so far that they are reaching the status of becoming endangered, like the eel. We have to look at this problem.”

The Centre for Environment, Fisheries and Aquaculture Science has been commissioned recently to carry out an environmental survey of the waters near where four new nuclear plants are expected to be proposed. British Energy commissioned the survey to check which fish and other marine animals were found around Sizewell, Dungeness, Hinkley Point and Bradwell. Researchers will attempt to establish the quantity of fish in the four areas, how nuclear plants have affected them in the past and what impact could be expected if new power stations were built there.

“All of these sites are suitable for new nuclear power stations,” said Sue Fletcher, of British Energy, who maintained that the industry would “strongly contest” any suggestion that unsustainable quantities of fish were killed in cooling systems. “It has become more significant over the years because of the decline of inshore stocks and, indeed, of the decline of some species going so far that they are reaching the status of becoming endangered, like the eel. We have to look at this problem.”

Emily Lewis-Brown, a marine campaigner for WWF, the wildlife charity, said it was concerned that coastal power stations represented a frequently overlooked, additional burden on British fish populations. “There is evidence to suggest that when power stations stop killing fish, local populations start doing better,” she said.

5.82 Strategic Effects on Water Quality and Resources: The AoS has identified potential, adverse, effects on water quality and coastal processes, including sediment transport. Adverse effects on water resources, including groundwater resources, could occur through increased demand, particularly during construction. Indirect effects on nationally and internationally designated habitats, including from the thermal impact of cooling water discharges have also been identified. This is of potential wider significance because of indirect effects on national and European designated habitat sites.

The work to assess these significant adverse impacts should be conducted as part of the AoS report. To leave this until later when an application is received implies these effects can be mitigated.

6.2 The AoS has explored both adverse and beneficial potential effects of building a new nuclear power station at Bradwell. Both beneficial and adverse effects were identified as potentially significant at the local level and it is recommended that these need to be further considered by the developer, regulators and the decision-maker (the IPC), during project level assessments.

The AoS is very biased towards finding beneficial potential effects and overlooking or minimising adverse effects.

Table 6.2 is supposed to document the Potential Significant Effects, Adverse and Beneficial, and this table is the basis for findings in the NPS EN-6 for Bradwell.

Distortions are:

Biodiversity and Ecosystems Potential Significant Effects

Adverse Effects
- Discharge of heated water into aquatic habitats could alter ecosystem in Essex Estuaries SAC and Blackwater Estuary SPA/Ramsar sites.
- Abstraction of water for cooling purposes could lead to incidental mortality of fish and aquatic invertebrates, with secondary effects on the interest features (particularly birds of the Blackwater Estuary and Dengie SPA/Ramsar sites).

These adverse effects are grossly understated, “could lead to incidental mortality”, should read “will lead to incidental mortality”. The adverse effects of biocide use do not appear.
Communities: Population, Employment and Viability

Adverse Effects

There is no mention under this heading of loss of employment in tourism, holidays, leisure, sailing, fishing, oyster cultivation, loss of property values, difficulty attracting new industries.

The inclusion of the Bradwell site has been assisted by the bias shown in the AoS, and had the report been more balanced then it is believed the site would have been excluded without the need for further consideration.

Memorandum submitted by Varrie Blowers

A1. It is most unfortunate that by responding to the various stages of a Government-set consultation process on the proposal to build a new nuclear complex at Bradwell, participants appear to legitimise that process. The only hope for any redress for this situation is for respondents to describe the actual experience on the ground of each stage of the consultation process. This will establish the inadequacy of the process on which the National Policy Statements are based.

A2. The consultation process has been flawed at every stage. Most importantly, there has been no emphasis on the aspect of the proposal that represents a major departure from past practice: the storage of highly radioactive spent fuel and intermediate wastes on site at Bradwell for around 160 years. The proposal to build a new station and the proposal to store spent fuel have been conflated and I am afraid this looks like an attempt to deceive the public. As it is intended that spent fuel would be stored over the long-term at Bradwell, the public needs to be properly informed and consulted on this proposal in a process separate to that for a new nuclear power station. It is quite disgraceful that when the issue of spent fuel storage was discussed at meetings, it was well-informed members of the public who raised it, not the representatives of British Energy or the Department for Energy and Climate Change.

A3. There has further been no emphasis on the other ways in which a new nuclear power station would differ to its predecessor:

— the much higher burn-up of fuel in a new power station resulting in a period of 100 years in which to cool down; and as a result of this; and
— the requirement for more than three times the amount of cooling water to be taken from the shallow and vulnerable Blackwater estuary, which would have a very damaging impact on the oyster and fishing industries, the environment and ecology of the estuary and its marine life.

A4. The consultation process as perceived at the grassroots-level has occurred in six stages to date: British Energy Roadshow; Draft Strategic Siting Assessment; Justification; ‘Have Your Say’; DECC exhibition (West Mersea, Maldon, Bradwell) and public meetings (West Mersea and Maldon); Draft National Policy Statements.

A5. I would contend that at each stage proper consultation has not occurred and that affected local communities—the focus of the consultations—have not been properly engaged. This has been an exercise in “consultation done” box-ticking for Government.

1. British Energy (BE) Roadshow

1.1 British Energy was surprised at the small numbers attending some of these events during November, 2008 and there was a tendency for it to conclude that the majority of people were quite happy with the proposals. It should have been obvious to BE that it is very difficult for many people to attend meetings held on weekday afternoons.

1.2 The requirement to pre-register to attend these events seems also have deterred some people, who were concerned about how their details would be used and that they would be photographed attending.

1.3 Towns in the area with large populations—Colchester, Chelmsford, Southend and Clacton—were not included as venues although they have a legitimate interest in what happens at Bradwell. Nor was Brightlingsea directly downwind of Bradwell.

1.4 At the meetings at Tollesbury and West Mersea, the audiences expressed a great deal both of hostility to the idea of a new power station and of scepticism at British Energy’s claim that the chances of an accident were “vanishingly small”. As members of an island community two miles over the Blackwater estuary from Bradwell, the audience at the West Mersea meeting was particularly hostile and felt that its concerns fell on deaf ears. These concerns included: the storage of highly radioactive spent fuel well into the next century on such a low-lying site liable to flooding and storm surges in the next 50 years; the virtual impossibility of evacuating Mersea Island in the event of an accident; the deleterious effects on the Colchester Native Oyster industry and the marine ecology of the estuary.

5 Although this is a Personal Submission, I am the Secretary of the Blackwater Against New Nuclear Group (BANNG) and have also contributed to the group’s submission to the Committee.
1.5 It was apparent from the meetings that those attending did not trust the nuclear industry. Local communities had been promised that the old nuclear power station would be decommissioned and the site returned to greenfield within 25 years. As a result of a lack of funding, that time has been revised to 100 years.

1.6 At the Tollesbury meeting, it was pointed out that little or no mention was being made of the proposed storage of highly radioactive nuclear waste at Bradwell. The BE representative countered by saying that “spent fuel” storage was referred to in BE’s literature. The point was made by a member of the audience that most lay members of the public did not know what spent fuel was and that the industry was cynically taking advantage of this ignorance instead of raising public awareness and consulting on this vital issue separately.

2. DRAFT STRATEGIC SITING ASSESSMENT (SSA) CRITERIA

2.1 The Blackwater Against New Nuclear Group (BANNG) made a substantial and well-informed response to the SSA consultation. The response drew attention to many problems with the criteria, particularly demographics, flooding and coastal processes. Unfortunately, it seems that scant attention has been paid to some of the criticisms and others have simply been ignored. Responses from the Government have been general rather than specific and there has been virtually no change made to the criteria.

3. JUSTIFICATION

3.1 The Blackwater Against New Nuclear Group (BANNG) made a substantial and well-informed response to the Justification consultation and, along with several other groups, called for a Public Inquiry into whether new nuclear practices in the form of new power stations could be justified. Unfortunately, it seems that scant attention has been paid to the responses by the Government and the requests for a Public Inquiry have simply been ignored.

4. “HAVE YOUR SAY”

4.1 The “Have Your Say” consultation on the nominated sites appears to have been an “extra” stage added in to the Government’s consultation process. The consultation period was short, one month.

4.2 The Blackwater Against New Nuclear Group (BANNG) made a substantial and well-informed response to the “Have Your Say” consultation, taking the opportunity to remind government of the group’s responses to the SSA and Justification consultations. Again, it seems that scant attention was paid to this.

4.3 Individual members of the public found it extremely difficult to take part in the “Have Your Say” consultation. The Dept. of Energy and Climate Change provided a template of questions to be answered on different aspects of the criteria and which required some very detailed knowledge. This restricted and attempted to channel public comment. It may be that this deterred responses. It is to the credit of those members of the public who took part that they did so regardless of the many obstacles that needed to be overcome.

5. DEPARTMENT OF ENERGY AND CLIMATE CHANGE (DECC)—EXHIBITION AND PUBLIC MEETINGS

5.1 The DECC Exhibition was obviously regarded by the Government as an opportunity for local communities to see the proposals for the Bradwell site; the public meetings as an opportunity for local communities to make known their feelings on the proposals to DECC. “Your views make a difference” and “The Government wants to hear your views” declared each of the 11,000 leaflets that DECC hoped had been distributed (in some places door-to-door) around the Blackwater estuary. DECC acknowledges that this did not happen as planned. The resulting lack of advertisement of the events was reflected in the numbers attending the exhibition and public meetings.

5.2 In an article in the Mersea Island Courier (4 December 2009), the Blackwater Against New Nuclear Group (BANNG) informed readers of the Exhibition and public meetings. The Editor of the Courier took it upon himself to find a DECC leaflet and publish it. While collecting signatures for the BANNG Petition outside the Exhibition in Maldon on 11 December, I discovered that almost everyone to whom I spoke knew nothing about this or the public meeting to be held on 12 December in Maldon. In the interests of openness and democracy, I directed members of the public to the Exhibition, otherwise there would have been very few attending. I also informed them of the public meeting. Those petitioning for BANNG in the afternoon did likewise.

5.3 Neither the Exhibitions at West Mersea and Maldon nor the public meetings in both places attracted large numbers of people and the absence of adequate advertisement of the meetings certainly contributed to this. There were around 60 members of the public at the meeting in West Mersea and around 30 at Maldon.

Public Meeting at West Mersea on 10 December, 2009

5.4 Despite the inconvenient timing of the public meeting, in the middle of a working day, there was a turnout of around 60 Mersea Islanders keen to press home their objections to the proposed new power station. In a series of hard-hitting and well-informed contributions from the floor, the inadequacies of the Government’s draft National Policy Statement on Nuclear Energy in relation to Bradwell were vigorously
exposed. Among the points made by those attending, were that a massive nuclear power station, and possibly up to three, would create a major industrial complex that would totally transform the landscape, ecology, economy and amenity of the Blackwater estuary. More than that, such a project imposed high risks and potential dangers threatening the security and safety of many thousands of people within a short distance of the power station. In the event of a major incident, it was doubted that emergency planning procedures would be able to cope with evacuation of the population.

5.5 The shallow Blackwater estuary could hardly cope with providing cooling water for one of these giants, let alone two or three, for which cooling towers would be necessary. The threat to fishing, oysters, the tourist trade and, indeed, the well-being of the Blackwater community would persist over many generations.

5.6 Members of the audience took exception to the lack of emphasis on the proposed storage of highly radioactive waste on this most vulnerable site and the idea of it being safely managed 160 years hence was frankly incredible.

5.7 The format of the meeting, whereby members of the public asked questions from the floor which were answered by Department of Energy and Climate Change officials from the platform, allowing little questioning of responses, was not regarded as a satisfactory way of engaging the public.

Public Meeting at Maldon on 12 December, 2009

5.8 Similar questions were raised at the Maldon meeting. It was pointed out by several attending that without the information provided by members of BANNG outside the exhibition at Maldon on 11 December, they would not have known about the public meeting.

(The Committee would find it informative to read the transcripts of both public meetings.)

Choice of venues for Exhibition and public meetings

5.9 It is doubtful that West Mersea would have been included as a venue for the Exhibition had it not been for the activities of the Blackwater Against New Nuclear Group (BANNG). The Chair of BANNG, Professor Andrew Blowers, OBE, was instrumental in DECC agreeing to hold a public meeting there. Originally, only Maldon and Bradwell were scheduled as venues for the Exhibition with one public meeting at Maldon.

5.10 The Exhibition and public meetings were not taken to places where large populations have a legitimate interest in the building of a major nuclear complex nearby. Colchester is more or less on the doorstep and Chelmsford is within a 20 mile radius. There are other significant populations, too, such as Southend, Clacton and Brightlingsea. These towns were not included by DECC in its leaflet distribution.

6. DRAFT NATIONAL POLICY STATEMENTS

6.1 The Blackwater Against New Nuclear Group (BANNG) will be submitting a substantial and, once again, well-informed response to the consultation on the Draft NPSs.

6.2 Many individuals are also proposing to respond to the consultation.

6.3 From a cursory look at the NPS EN-6, it is clear that the Government is framing the consultation by asserting that nuclear power is necessary and that ten existing sites are the best locations for new nuclear power stations.

Consultation Period (9 November 2009 to 22 February 2010)

6.4 Bearing in mind that the Government assures the public that “Your views make a difference” and “The Government wants to hear your views”, the consultation period, with the Christmas season intervening, is extremely short.

6.5 The shortness of the consultation period is exacerbated by the vast amount of material to be trawled through—by ordinary members of the public. It is to be hoped that the people whose views matter to the Government so much will not be deterred.

Evidence to the House of Commons Committee on Energy and Climate Change on the Draft National Policy Statements

6.6 It is not helpful for those wishing to submit evidence to the Committee that this is required by 15 January—over one month before the Government’s deadline.

7. BLACKWATER AGAINST NEW NUCLEAR GROUP (BANNG): RAISING PUBLIC AWARENESS AND CONSULTATION VIA PETITION

BANNG’s Main Aims

7.1 BANNG is a citizens-based organization, founded in West Mersea. It has five main aims:

1. to raise public awareness among the Blackwater communities of the potential consequences for health, environment and safety of proposals for new nuclear development;
2. to identify key issues of concern and to gather credible and responsible research and information to pursue the case against nuclear development;
3. to challenge any proposals for future nuclear power at the Bradwell site by presenting robust evidence and arguments to local and national decision makers, regulatory bodies, the nuclear industry, non-government organisations, the media and the general public;
4. to support the early and successful decommissioning and clean up of the existing Bradwell nuclear site as an integral element of the long-term protection and conservation of the Blackwater estuary; and
5. to call for an open, transparent and deliberative decision making process in which local communities are afforded full access to all information and involvement in key decisions affecting them.

7.2 The Chair of BANNG, Professor Andrew Blowers, OBE, is an expert on the social and ethical issues of radioactive waste management. He is a former member of two Government committees: Radioactive Waste Management Committee (RWMAC) and the first Committee on Radioactive Waste Management (CoRWM). He was also the Government appointed non-executive Director of Nirex.

7.3 BANNG relies on volunteer supporters to help it to carry out its aims. It is not a government department with a large staff, such as DECC. It does not have the huge financial resources of the nuclear industry, nor its privileged access to the “ear” of government.

7.4 And yet BANNG, since its inception in April, 2008, has done more than government, local authorities (excepting Colchester Borough Council and now West Mersea Town Council), Members of Parliament and the nuclear industry to make people aware of what is proposed for the Bradwell site—including the storage of highly radioactive spent fuel until the end of the 22nd century—and to respond to each stage of the Government’s consultation process. It is thanks to the hard work of BANNG that there were so many well-informed contributions made at the DECC public meetings in West Mersea and Maldon (see item 4 above).

BANNG Petition

7.5 BANNG is currently collecting signatures for its Petition. The Petition statement is as follows:

To the Secretary of State for Energy and Climate Change,

We, the undersigned, wish to express our strong opposition to the construction of a new nuclear power station at Bradwell and the storage of highly radioactive waste on site.

We, therefore, demand that the Government reject this proposal.

Further, we demand that the site of the former Bradwell power station be returned to greenfield status within 25 years of closure as proposed by the Nuclear Decommissioning Authority.

7.6 BANNG supporters have been collecting signatures door-to-door on Mersea Island, at Bradwell and Southminster. Collections have also taken place on the beaches at West Mersea and Bradwell, in Maldon, Colchester and Tollesbury. Supporters have also attended local fetes to collect signatures. It is intended to continue to collect signatures at other communities around the Blackwater estuary in the coming months.

7.7 While claims are made by the Government that local communities welcome the prospect of a new nuclear power station at Bradwell, the experience of signature collectors is somewhat different. The BANNG Petition represents the only opportunity for people living around the Blackwater and other stakeholders, such as the many caravan owners, beach hut owners and holidaymakers, to be asked face-to-face for their views. BANNG petitioners have found that the overwhelming majority of the thousands of people they have approached is against a new power station at Bradwell.

7.8 The BANNG petitioners have been astounded at the number of people around the Blackwater who were unaware of the proposals to build a new nuclear power station at Bradwell until asked if they would sign the Petition. This was particularly marked in Maldon, where the District Council will have a significant say on any Planning Application.

7.9 The BANNG petitioners have been further astounded at the number of people—from those at the highest level of national and local representation to workers in the nuclear industry—who were not aware of the proposal to store highly radioactive spent fuel at the Bradwell site until the end of the 22nd century.

7.10 It has been left to a small group of unpaid volunteers to explain the Government’s proposals to local communities. That must speak volumes for the adequacy and efficacy of the Government’s consultation process on Bradwell as a suitable site.

8. Conclusion

8.1 The Government might be said to be conducting a “hit and miss” consultation on its proposals for a major nuclear complex at Bradwell. It has failed (as did British Energy) to include large towns with a legitimate interest in what happens at Bradwell as venues for the DECC Exhibition and public meetings. It also failed to advertise the events adequately. Both these failures have denied thousands of people the opportunity to be part of a public debate on an issue that will have huge implications for their lives.
8.2 With respect to the lack of emphasis on the proposal to store highly radioactive spent fuel on the Bradwell site until almost the end of the 22nd century, it seems that British Energy and the DECC have deemed it sufficient to make mention of this here and there in their literature and at the DECC Exhibition, as though such storage is in the normal run of things. Since both the size of a new power station and the long-term storage of highly radioactive waste on site are both significant departures from the situation that pertained in relation to Bradwell A, consultation can only be carried out on a properly informed public. “Sleight of hand” has no place in such serious proceedings. Once again the public has been denied the opportunity to understand or to have a debate on this vital issue.

8.3 It is difficult to imagine how members of the public—whose views the Government declares it wants to hear—will be able to cope with the consultation on the National Policy Statements, particularly within the time constraints imposed.

8.4 From grassroots-level, it appears that the Government has failed to engage properly with the public on its proposals not only to build a new nuclear power station but also a highly radioactive spent fuel store at Bradwell and the consultation process has been merely a box ticking exercise.

9. POSTSCRIPT—A LEVEL PLAYING FIELD

Funding for Colchester Borough Council Investigations

9.1 Colchester Borough Council has been made aware of and takes very seriously the concerns of many of its residents about the proposals for Bradwell. The Council would like to be able to carry out investigations into some of the issues raised but lacks the funding to do so.

9.2 In order to allow the Council to carry out its duties to its residents in relation to issues for which a Council would not normally make budgetary provision, perhaps the Government or the nuclear industry would provide the funding for independent research to be undertaken. This would demonstrate that both are indeed keen on proper consultation. A Borough Councillor suggested this at the DECC public meeting at West Mersea on 10 December but received no reply.

Funding for Local Groups

9.3 It would help if some funding were provided for local groups to carry out their work more effectively, in order to engender a more balanced and genuinely participative debate.

January 2010

Memorandum submitted by Bradwell for Renewable Energy

We are a grass-roots group, comprised of people in Essex, which has been in existence in various forms since 1987. Our concerns are of nuclear power generation at Bradwell, in the fragile environment of the Dengie Peninsula and our support of renewable energy projects in our county.

Public consultation usually means that individual voices are ironed out in the outcomes. We therefore use verbatim quotes from the DECC consultation meetings in Mersea and Maldon, to show the Honourable Members how strongly locals feel, and indeed, how well informed they are. The links to these quotes can be found at:

http://data.energynpsconsultation.decc.gov.uk/documents/transcription_bradwell.pdf (i) for Mersea
http://data.energynpsconsultation.decc.gov.uk/documents/transcription_bradwell2.pdf (ii) for Maldon

THE CONSULTATION PROCESS INVOLVING THE NATIONAL POLICY STATEMENTS

We have serious concerns over the nature and procedures over the public consultation:

1. Organisation of the events:

Neil Mortimer: Are you going to make certain that every household knows that they can reply to the consultation that is going on? Most people here found out about the meeting accidentally, and the timing is most inconsiderate for a lot of people who are going to work ... I am bunking off work to be here. There are a vast number of people at work now who would like to be here listening and making comment.” (i) page 17.

Barry Turner: We had a meeting in Mersea a few days ago and a poll of the 40-50 people who attended showed that only three or four had been informed of this by one of the 11,000 leaflets you claim to have circulated ... there were a few who had seen a single advert in the local free paper which was put in on the initiative of the publisher himself ... (ii) page 8.

We ask why there were no meetings planned for Colchester, which is nearer than Maldon, especially given that the Colchester Borough Council Strategic Overview and Scrutiny Panel arranged an excellent meeting at Mersea with a variety of speakers of different persuasions, encouraging public follow-up at their subsequent meetings. Their work gained much trust and public support.
2. What is the value of the public contribution?

Adam Dawson (DECC) "I want to re-emphasize that your views are important". (ii) VI page 4.

There is no explanation of why the public’s views are important, how they will be factored in to any decision-making process. There is a suspicion that the consultation exists as a box-ticking exercise:

Judy Ratcliffe: I do worry that the exercise is illusory. It is the first time I have been moved to comment at all when I saw the exhibition yesterday I was even more worried not less. It kept coming back to phrases like “imperative reason of overriding public interest” but we are the public. (ii) page 9.

These Draft National Policy Statements and the creation of the Infrastructure Planning Commission represent the most radical shake-up in planning for many years. For the public, the draconian overriding of public interest in favour of the national good should mean a much more structured and detailed consultation process, as after a decision is made there will be no redress, no public inquiry. The nearest example to that desired state of affairs would be CoRWM 1’s consultation process. There should be a detailed audit trail of issues raised, and how they are dealt with, with a clear explanation of how far the public’s views have been taken into account. There should be pro-active attempts to involve local interest groups. It is essential to engender public trust and understanding of the difficulties involved, whether or not in the final analysis they agree with the results.

For those preparing for the consultation, this has been a most unwieldy process, suitable for civil servants, but not user-friendly for the public. For example, it would have been useful to have a collation of all material relating to each chosen nuclear site, rather than ferreting around tightly bound copies. The lone individual has no hope.

As for the overall nature and content of the consultation meetings, Barrie Jones concludes his views: I know you mean well, but I am sorry I do not believe what you are saying and I find it difficult to see how you can really believe it yourself. . . . (ii) page 32 From someone who has argued respectfully and cogently (see his previous statement), this is indeed a damning indictment of the consultation process and bodes ill for any public recognition of legitimacy in the democratic process.

3. Gaps in the Consultation Process

Elizabeth Doyle . . . while I appreciate consultation I do not feel this is informed consultation because, flicking through your literature today, any negative point or assessment, is met for potential for mitigation . . . (i) page 29.

This is a common criticism of many consultations, that the consulter is in a defensive mode, and is seeking to persuade the consultee that all will be well, come what may. This is hardly an honest approach. For example: Adam Dawson: we have been managing radioactive waste for 50 years in this country". Those of us who have taken part in the CoRWM stakeholder engagement process know that it is only now that a management strategy is being developed, and that some storage methods existing from the past leave a lot to be desired in terms of present day safety standards.

(a) New build waste

Missing documents: Valerie: An important document is missing: The arrangements for the management and disposal of waste from New Nuclear Power Stations: a Summary of Evidence is missing. (i) page 30

It is of great concern that the public is not to be consulted on the high burn up fuel remaining from the generation of these new reactors, necessitating being stored on site for up to 160 years, as, unlike the Magnox fuel, it is too hot to be taken to Sellafield in the previous fashion. The omission gives an incomplete view of any possible detriment to the environment, such as climate change, coastal erosion and geomorphologic influences.

BRARE recently signed a joint letter from campaigning groups to Professor Robert Pickard, Chairman of CoRWM 2, to remind him that, early in 2008 he said: “The recommendations of CoRWM were accepted for legacy waste and active nuclear facilities, but the Committee recommendation was for this waste only. For waste from new nuclear builds, a new safety case and a new evaluation has to take place.” (New Civil Engineer) http://www.nce.co.uk/news/2008/01/government_must_move_on_geological_nuclear_storage_says_corwm_chair.html

We are concerned that, according to the NNPS the Government is satisfied that effective arrangements will exist. “As a result the IPC need not consider this question” (3.8.20). To bolster this argument DECC argues “waste from new nuclear power stations would not require a technically different solution.” (i) page 21

The Nuclear Decommissioning Authority has been working on assessments of this new fuel, and has asked the Environment Agency to report. This report is not due until the Spring. Therefore we the public are not party to the information for this consultation.
(b) Radiation and health

This is of great concern to those living around the Blackwater Estuary. It is therefore alarming that no account can be taken of COMARE’s commentary on the KiKK study on childhood leukaemias near German nuclear power plants, as it will only be published after the Justification consultation has ended. Justification is the key to whether any of these reactors will get the go-ahead.

Stephen King: Environmental Health practitioner: “In my opinion, as a public health practitioner, it is highly likely that bringing up children near a nuclear power plant involves exposing them to an elevated risk of childhood cancer. I would like to know what the Government and nuclear industry can tell local residents to clearly show that nuclear power plants will not adversely affect the health of their children.” (i) page 23.

Evidence of bias

The overall format of the consultation documents, with nearly 2.000 pages on nuclear, suggests a nuclear hard sell.

The public consultations are taking place mainly around the proposed nuclear sites.

Energy efficiency and conservation measures are not the hot topic of the energy generators. Yet an overall energy infrastructure plan needs to include this. Why has the Government’s Low Carbon Transition Plan not been included in the consultation? Otherwise how can consultees judge whether DECC’s portfolio is balanced (“we want a balanced portfolio”. (ii) points 6 & 8.)

“climate needs nuclear” DECC (i) page 10. The NNPS states that the site has been chosen because of the rush to secure energy supply, and to mitigate climate change (5.6.3) Nuclear will achieve only 4% of carbon reduction needed. What about the 96%? Energy efficiency is up to seven times more cost effective. Money spent on nuclear means less effect on climate change reduction. (Amory Lovins. More profit with less carbon. Scientific American Sept 2005 http://sciam.com/media/pdf/Lovinsforweb.pdf

Why has the low Carbon Programme and ENTEC not been integrated into the consultation and into the assessment for national structures? One answer lies in the NNPS 2.5.1: “…nuclear power should be free to contribute as much as possible towards meeting the need for 25GW of new non-renewable capacity”. Does it really matter how this capacity is filled? How about leaving it to the market? This matters greatly to the concerned public around the proposed nuclear sites, vulnerable as they are to a decision that could be made of overriding public interest.

4. Characteristics of the Bradwell site, the Blackwater estuary and the Dengie Peninsula

(a) Flooding and erosion

Bradwell is a preferred site even though it is in flood risk zone 3 (NPS 4.22).

At 4.20 the NPS states that: “coastal change is a key consideration alongside other specifics related to coastal environments”.

At 4.27 the Environment Agency comments that the existing flood defences leave much to be desired in parts.

At 4.31 “. . . nominated site could potentially be protected against flood risks through its lifetime”.

D2 states that the EA believes coastal processes are possible to mitigate.

D10 talks of the flood zone defences and possible effects on erosion and on the visual landscape.

D6 describes the area as an internationally designated site of ecological importance, with potential for adverse effects from construction. At 5.6.9 advocates that more detailed work needs to be carried out.

Mention is made of possible detriment to fish stocks.

In spite of this, at 5.6.52: Reason of Overriding public interest will be used to override concerns about the Habitats Regulations Assessments…This site therefore passes this criterion.

Barry Turner: predictions of sea level rise are increasing. How can we assume that the Bradwell site is safe for 160 years?” “. . . we are talking about absolutely ridiculous assumption…nonsense”. (i). page 23

Frank Izzert: you talk about a fund being set up by the developer to pay for the whole lifetime of this nuclear power plant, but are you going to ask the developer to pay for the protection of the communities around the River Blackwater? (ii) page 13.

Noelle: I do not know whether you have actually walked along this coast and had a look across there. The other end of the island loses a metre a year. Over 160 years that is 160 metres. There is no Dengie Peninsula in 160 years so I do not know how on earth you can decide how much that is going to cost.”. (i)m page 26.

Extract from Parliamentary Question from Rt Hon Bernard Jenkin, MP (305573)
What representations he has received from English Nature on the environmental effects of proposals for a new nuclear power station at Bradwell, Essex. [305573]

Huw Irranca-Davies

The Government requested and received comments from Natural England-formerly English Nature-on the appraisal of sustainability and habitats regulations assessment reports on the site at Bradwell, which was nominated in the Government’s strategic siting assessment process.

Mr. Jenkin

I thank the Minister for his response but, even though I am an enthusiast for new nuclear power stations, may I draw his attention to the serious concern expressed to me, particularly by local fishermen and oystermen, that the volume of the outfall from a new power station is likely to be four times greater than that from the previous power station, thus causing serious continuing damage to the ecology of the Blackwater estuary? Can he assure me that that will be addressed, perhaps by ensuring that the intake and outfalls will be sufficiently far away?

(b) Fish stocks

Varrie Blowers: We thought we would like to give you a surprise. We here have some world-famous native Colchester oysters for you to try…I do not know if you realise this, but if a new station is built at Bradwell, it will have a devastating effect on the marine ecology on the Blackwater Estuary and on the oyster industry and on the livelihoods of oystermen and fishermen. "(the oysters were graciously declined) (i) page 2

In response to the potential dangers of cooling water plumes on fish stocks, DECC notes: "since no discussions have been made on the technology that would be used, it has not been possible to give a definitive assessment at this stage". (i) page 16

This uncertain state of affairs does not suit Bernard Jenkin: “MP fears nuclear plan fish threat” http://www.essexcountystandard.co.uk/news/localnews/4355142.MP_fears_nuclear_plant_fish_threat/

(c) Emergency Planning and Evacuation of Mersea Island

John Bouckley: I am a councillor on Colchester Borough Council and after the meeting here earlier in the year the Borough set up a task and finish group to study this whole topic because there were so many adverse comments at the first meeting. All sorts of things have come out, and I sympathise with many of the questioners here today. For example we found that Mersea was not included in any emergency evacuation. We were astonished. We were told to tell the police: ‘they will probably tell you to stay indoors’;

Over the years there has been constant concern over evacuation when there is just one road out, and when the island is flooded at high tide. Mersea has a unique geographical characteristic that does not seem to fall within the remit of the regulatory authorities.

(d) The contribution of a new nuclear power station to the local “public good"

In its guidance to the IPC the Government states: “multiple safety features within modern nuclear power stations make an untoward event “exceedingly unlikely”. Recently the Health & Safety Executive has criticised the two proposed designs. This reflects difficulties in the problematic construction of one such reactor in Finland. Almost in the same breath, at section 108 it states: “Overall the likely enhancement in employment, community wealth, housing stock and other associated neighbourhood infrastructure should improve community well being and health generally”.

Ian Clarke: …you talk in terms of community well being, that a new power station will enhance employment and wealth, will improve the local housing stock and infrastructure. These are the most incredible claims; it is a total nonsense to say that, when there is also to be taken into account the detriments that this will cause in terms of anxiety, potentially in health, in blight and on the local economy, as you have heard. No assessment has been made of this. The NPS is a charade. It is vague, it is tendentious, and it is open to question. Actually there are so many holes in it that we should be able to make fun of it, but it will make no difference, because my experience is that you will just carry on ramming it down people’s throats.” (i) pages 20-21

Conclusion

Ian Clarke’s comments above encapsulate many of the concerns of the ordinary people living in this area. It is difficult to see, with the detailed recommendations that the Government has imposed on the IPC, how independent this body will be. Furthermore, we understand that the final decision rests not with an independent body, but with the Secretary of State himself. This is not a good state of affairs. We have just learned that a decision on the Energy Strategy will be made before the General Election, which confirms our view that this consultation is a biased and politicised exercise. The reputation of Parliament has had a knocking recently. The most important change in Infrastructure Planning in decades is being rushed through, compromised by ineptitude and political expediency. We are relieved that an Early Day Motion expressing concern at this turn of events has been announced.
We are grateful the Energy and Climate Change Select Committee is interested in our views. You are our main hope. Whatever the outcome, due process must be seen to have been followed, so that any conclusion can be seen to have been fairly and justly arrived at.

January 2010

Memorandum submitted by Mr Phillip Bratby

DRAFT NATIONAL POLICY STATEMENT (NPS) FOR NUCLEAR POWER GENERATION (EN-6)

EXECUTIVE SUMMARY

The current regime for the licensing of nuclear power stations is briefly described. The procedure has been successfully developed over many years. The applicant submits a safety case to the Nuclear Installations Inspectorate (NII), which grants a licence if it is satisfied that the risks to the general public and workers are as low as reasonably practicable. EN-6 is proposing the addition of a dangerous prescriptive element to the licensing regime. This interference in the licensing process must be resisted and the relevant sections of EN-6 should be deleted.

The effect of a new fleet of nuclear power stations upon the needs to store higher level waste is minor and it is expected that technological developments will be such that the safe long term storage of the wastes will be available when needed.

INTRODUCTION

1. My name is Phillip Bratby. I have a first class honours degree in physics from the Imperial College of Science and Technology (London University) and a doctorate in physics from Sheffield University. I am a semi-retired energy consultant, being the sole director of my own consultancy company. I worked in the military and commercial nuclear power industry for over 33 years. My main areas of expertise are in the safety and operation of pressurised water reactors. I was involved in the Sizewell B project from its inception, including the Sizewell B public inquiry, the design, construction, commissioning and first 10 years of operation.

PART 1 NUCLEAR LICENSING

2. The license to operate a nuclear power plant in the UK requires the applicant (licensee) to submit a safety case to the regulator (Nuclear Installations Inspectorate (NII)) which decides, based on the safety case and use of the NII Safety Assessment Principles (SAPS) and the guidance provided by the Technical Assessment Guides (TAGs), whether to grant a nuclear site licence. The NII does not prescribe the contents of the safety case or the data or methods on which it should be based. The onus is upon the applicant to produce a safety case that the regulator finds acceptable in that the overall risk to workers and members of the public is broadly acceptable or tolerable and is as low as reasonably practicable (ALARP). The tolerable level of risk (TOR) to the public and workers from nuclear power stations was developed by the Health and Safety Executive (HSE) following recommendations made at the Sizewell B Public Inquiry.9 The NII SAPS have been developed over many years and contain best practices to ensure safe operation of nuclear power stations.

3. The NII SAPS state: NII inspectors use these Safety Assessment Principles (SAPs), together with the supporting Technical Assessment Guides (TAGs), to guide regulatory decision making in the nuclear permissioning process. Underpinning such decisions is the legal requirement on nuclear site licensees to reduce risks so far as is reasonably practicable, and the use of these SAPs should be seen in that context.

4. In addition, the NII states:10 1.13 The licence conditions provide the basis for regulation by HSE. They do not relieve the licensee of the responsibility for safety. They are non-prescriptive and set goals that the licensee is responsible for meeting, amongst other things by applying detailed safety standards and safe procedures for the facility.

5. Thus it can clearly be seen that the UK licensing process is non-prescriptive. The adoption of a prescriptive licensing regime in the USA was one of the factors relevant to the Three Mile Island Accident. The imposition of prescriptive licensing rules by the US Nuclear Regulatory Commission (NRC) led the vendors to concentrate on the large loss of coolant accident (LOCA) to the virtual exclusion of the higher risk small LOCA. The UK regulatory regime enables the applicant to make his own safety case, which, through the use of a probabilistic safety analysis (PSA), ensures that all envisaged hazards and risks are included in the safety case so that the risks are made as low as reasonably practicable (the ALARP principle).
6. However, section 3.7 of EN-6 “Climate change adaptation” appears to be imposing prescriptive licensing rules on applicants. EN-6 states:

3.7.6 In consultation with the EA and NII, applicants should use the latest set of UK Climate Projections and the Government’s latest national Climate Change Risk Assessment when available, to ensure that they have identified appropriate measures to adapt to the risks of climate change. Applicants should apply as a minimum, the emissions scenario that the independent Committee on Climate Change suggests the world is currently most closely following—and the 10%, 50% and 90% estimate ranges. These results should be considered by the applicant alongside relevant research which is based on the climate change projections.

3.7.7 In addition the applicant should apply the high-emissions scenario—high impact, low likelihood—to those elements of their application that are critical to the safe operation of the station.

3.7.8 Should a new set of UK Climate Projections become available after the preparation of the ES, the IPC should consider whether they need to request further information from the applicant.

7. It is noted that a projection is essentially meaningless—one can draw a straight line through any trend and call it a projection. As long as a projection is not considered to be a prediction or a forecast, then it is just speculation and no weight should ever be attached to it in terms of planning or risk assessment and mitigation.

8. With regard to the effect of climate on nuclear power stations, the NII SAPS state:

208 External hazards include earthquake, aircraft impact, extreme weather, electromagnetic interference (off-site cause) and flooding as a result of extreme weather/climate change (this list is not exhaustive).

226 The reasonably foreseeable effects of climate change over the lifetime of the facility should be taken into account.

703 The timing of decommissioning should be considered on a case-by-case basis. Factors to be considered for their relevance should include: p) future uncertainties including climate change;

9. Thus use of the NII SAPS will ensure that an applicant’s safety case is based on a proper risk assessment of all external hazards, which includes any hazards resulting from changes to the climate. The NII does not prescribe what climate model should be used in calculating the risk and in mitigating the effect of the risk to make it ALARP. It is the responsibility of the applicant to determine and justify the current and future climate hazards that it should mitigate by design and operation and justify in the safety case.

10. The safety case of the licensee is maintained during operation through the Station Safety Report (SSR). This is a living document, maintained up-to-date as the station and its environment change. Similarly, the risks are maintained up-to-date through use of a Living Probabilistic Safety Assessment (LPSA), which accounts for changes to the station and its environment. Furthermore, a Periodic Safety Review (PSR) is carried out by the licensee every 10 years and continued operation requires approval by the NII. Thus the safety of the station is maintained ALARP by these non-prescriptive processes which will of necessity include any environmental changes, regardless of the cause and will use the best available sources of data.

11. In addition, the safety analysis performed by applicants or vendors of nuclear power plants is performed using configured, quality controlled computer codes which have been verified and validated and which have acceptable documentation consisting of user manuals and quality assurance manuals. The UK climate model on which the UK Climate Projections are based does not appear to be of the required quality to be used in a safety case. It is stated that “We’ve taken the Met Office Hadley Centre science as the basis for our projections and we’ve created 400 different models from that, representing all that we know about the uncertainty in our model. We’ve then, also, combined that information with information from 12 international known models from around the world, which have been in the Intergovernmental Panel on Climate Change”. Combining information from different models is not a statistically valid procedure. Under no circumstances should nuclear licensing be based upon the projections from a combination of 13 different computer models with little in the way of validation, verification, user manuals and quality control.

12. Furthermore the UK Climate Projections do not model external climate forcing. These scenarios assume no future changes in natural external forcing, apart from a prescribed repetition of the 11 year cycle of solar insolation based on past observations. It is evident from a study of the UK Climate Projections that many non-evidence-based assumptions are made and very little confidence can be placed in the projections. Indeed the IPPC states that “Models continue to have significant limitations, such as in their representation of clouds, which lead to uncertainties in the magnitude and timing, as well as regional details, of predicted climate change and it is known that cloud processes are among the most difficult to simulate with models and cloud feedbacks remain the largest source of uncertainty in climate sensitivity estimates.”

12 http://www.metoffice.gov.uk/climatechange/guide/ukcp/dr_vicky_pope_talk_about_ukcp09_transcript.pdf
13 http://ukclimateprojections.defra.gov.uk/content/view/2036-517
13. The revelations from the emails and data leaked from the Climatic Research Unit (CRU) of the University of East Anglia have cast considerable doubt upon the science behind the hypothesis of man-made climate change, further under-mining the validity of the climate projections.

14. Were applicants to follow the prescriptive method of EN-6 which states at section 3.7.3: Climate change is likely to mean that the UK will experience hotter, drier summers and warmer wetter winters. There is a likelihood of increased flooding, drought, heat waves, intense rainfall events and other extreme weather events such as storms, as well as rising sea levels and thereby ignore other potential changes to the climate, there is a danger of underestimating the risks from external climatic events. The ongoing extreme weather in the UK reinforces the message that it would indeed be foolish to assume for safety purposes that winters would be warmer and wetter.

15. For example, one area which the safety case addresses is ensuring that staff can get to the power station in extreme weather conditions, which includes snow storms, blizzards and ice conditions and that the power station continues to be operated within the boundaries of the safety case. The prescriptive nature of section 3.7.3 of EN-6 suggests that the applicant should ignore such winter conditions because we are going to experience warmer wetter winters. Furthermore a cooler climate could result in falling sea levels and the potential for a frozen sea leading to loss of cooling water. A range of ambient cooling water and air temperatures are justified within the safety case. The analysis of such hazards should be addressed as part of the risk assessment in the safety case as stated in the above SAPS and not ignored as section 3.7.3 of EN-6 would appear to be prescribing.

16. Section 3.4 of EN-6 correctly identifies that the IPC does not get involved in the regulatory process:

> the IPC should make its decisions in relation to a development consent application on the basis that:

— the relevant licensing and permitting regimes will be properly applied and enforced;

— it does not need to consider matters that are within the remit of the nuclear regulators.

and

> The IPC should not review or revisit any regulatory decision that has already been made in relation to the proposed development. This will help to ensure that there is clarity and clear division between the regimes for planning and regulation of the nuclear industry.

17. A National Policy Statement should not be used as vehicle to impose prescriptive licensing rules on applicants for nuclear power stations.

**PART 1—CONCLUSIONS AND RECOMMENDATION**

18. The current nuclear plant licensing regime ensures that the safety case includes all risks and ensures that the risks are maintained ALARP throughout the lifetime of the plant. It is a dangerous precedent for a NPS such as EN-6, to interfere prescriptively in the licensing process. The IPC does not consider matters that are within the remit of the NII as discussed in section 3.4 of EN-6. Section 3.7f of EN-6 is irrelevant to the IPC and should be deleted from EN-6. All references to UK Climate Impacts Programme 2009(UKCP09) should be deleted from EN-6.

**PART 2—RADIOACTIVE WASTE MANAGEMENT**

19. I am in agreement with section 3.8 of EN-6 concerning “higher level waste” (High Level Waste (HLW) and Intermediate Level waste (ILW)) for the following reasons:

— The major concern is the storage and ultimate long term disposal of legacy waste. This is of no relevance to the issue of the waste from a new fleet of nuclear power stations.

— The waste from a new fleet of new nuclear power stations will be a minor contributor to the total waste ultimately requiring long term disposal.

— The waste from a new fleet of new nuclear power stations can be safely stored in on-site cooling water ponds until such time as long term disposal is available. The activity and heat load rapidly decay and the requirements in terms of cooling, chemistry and security are simple and straightforward. The alternative to on-site ponds is transfer to on-site sealed casks in dry fuel stores after a few years in a pond. The sealed casks are cooled by natural air circulation. The casks have a design life of 100 years.

— It is inconceivable to imagine that by the time ultimate long term storage of the waste from a new fleet of new nuclear power stations is required (~120 years from now for HLW), major technological advances will not have been made. Better solutions will inevitably be found.
PART 2 — CONCLUSIONS

20. The long term disposal of ILW and HLW from a new fleet of nuclear power stations is not a significant safety issue.

January 2010

Memorandum submitted by Braystones Residents

There are aspects which I believe will be open to challenges by judicial review:

1. the flawed consultation process;
2. whether the government, elected and unelected representatives, and associated departments have acted as salesmen and nuclear industry agents in the process instead of being impartial;
3. if the proposed changes mean that approval of a large project automatically grants approval to necessary changes in the infra-structure thereby removing any possible local objections;
4. whether the promotion of nuclear power has been given an unfair advantage to the detriment of alternative forms of generation;
5. why expert advice has been ignored and/or distorted and salient information not made available;
6. why no plan for dealing with the current and future nuclear waste has been completed before the consultation has been completed;
7. why the proposed framework contains nothing to control the proportions of generation from the various available forms—leaving it to a very biased and sometimes unethical industry to determine;
8. why the country is being stampeded into making hasty, ill-considered and flawed legislation when the ultimate impact of any CO₂ reduction by this country will be miniscule in comparison to the emissions of other countries. The amount of change achieved will be small, and it would thus be of little consequence if a little more time is spent to get a correct, robust, fair and, above all perhaps, secure system in place;
9. whether the statements made and actions of those responsible for the decision-making process amount to a predetermination of the outcome, prior to the public’s wishes being known;
10. whether the proposed changes in legislation and processes will leave the opportunity for improper use of power akin to the criminal operations of Enron.

SUMMARY OF POINTS INCLUDED

Consultation Process

— Restrictive nature/short deadlines restricting proper assessment and consideration.
— Exclusive nature.
— Bias of establishment/councils/quangos/committees.
— Structure of councils/quangos/committees.
— Minuted misleading statement by chair of West Cumbria Sites Stakeholders Group.
— Request for investigation into conduct and rôle of Mr J Reed, MP—especially re statements on Radio Cumbria and to the House.
— Secrecy of initial planning and future developments and the effect thereof.
— Lack of involvement of a category of stakeholders—viz residents.
— Recorded objections by DECC seemingly incomplete.
— Redfern Enquiry.
— Failure by DECC and Prime Minister’s Office to respond to written enquiries.
— Use of premium websites for publication of reports—eg ICRP reports.
— Best practice rules not followed.
— English Heritage response/deluging people with material in one release.
— Effect of development which will be ancillary to reactor sites.

Braystones Specific

— Lack of information re effect of proposals on the infra-structure.
— Impracticability of Mr. Miliband’s timescales.
— The unsuitability of Braystones as a nuclear site.
Ev 216  Energy & Climate Change Committee: Evidence

— Future of Braystones Beach permanent residents.
— Planning blight—likely to last for many years.
— General detrimental effects.
— Impact on marine and terrestrial environment.
— Unfair geographical distribution of energy production vis a vis energy users.
— Impact of Human Rights Act—precautionary principle, right to enjoy own home.
— Recent flooding events.
— Difficulties with emergency procedures.
— Toxic legacy and risks of re-circulating the sediments of the Irish Sea.
— Potential child abuse by ignoring health aspects—personal culpability.
— Consideration of holistic effects of proposals for the “Energy Coast”.
— Concerns re. nuclear industry’s largesse.

General Nuclear.
— Manipulation of House procedures to benefit nuclear development – Speaker’s enquiry.
— Problems connecting to the national grid, power and heat dissipation.
— Failure to comply with agreements—eg Rio de Janeiro.
— International CO2 production proposals nonsensical.
— Holistic appraisal of proposed developments—not isolated sites individually.
— Employment characteristics—boom and bust effects.
— Motivation of member of parliament.
— Foreknowledge and decision-making.
— Financial non-viability of proposals.
— Government’s policy not to subsidise new-build nuclear.
— Current rules—local and national requiring developer to pay for all aspects of proposals.
— Misleading advertising on behalf of nuclear campaign.
— Lack of consideration of the whole process—CO2, HFC, and N2O generation by nuclear industry; nuclear tests more damaging than CO2.
— Frequent requests by Sellafield for increases in permitted discharges—air and marine.
— Security of supply.
— Storage of waste—security.
— Misleading statements by Mr. Miliband in his support of the nuclear industry.
— Misleading statements re. timescales.
— Failure to complete new-build nuclear on budget or on time.
— Coastal asset should not be handed to outsiders—ultimate destination of profits.
— Alternative utilization of funding.
— Cleaning up Cumbria’s establishment and reducing the influence of the nuclear industry.
— Failure of nuclear experiment.
— No such thing as “electricity too cheap to meter”.
— Half a century of experience and can’t get it right.
— Failure of government to act soon enough.
— Enron Mk. II?

Consultation Process

1. I am gravely concerned about the nature of the consultation process. Especially the electronic forms which were required to be filled in immediately after the announcements. I spent several hours completing these. Every aspect of this “consultation” seems to have been aimed at excluding the average person—those directly affected, leaving the large corporations and political bodies—with their wider experience of such processes—to gain the lion’s share of attention. I consider this to be grossly unfair. An average citizen cannot possibly compete with multi-national companies. Annoyingly, even this last opportunity to have a say is constrained by limits on time, format, file type and the number of words permitted. On such a wide-ranging
matter with such profound adverse local effects this is totally unfair and unnecessary. There is no reason for the short time-scales either. People should be given adequate time to perform whatever research is necessary and be allowed to consider all the available evidence without being rushed into ill-considered judgements whilst missing potentially salient points.

2. The government should release all material on receipt, to make it immediately available to all, not release it all simultaneously—with the effect (intention?) of “burying” salient points.

3. After having completed the on-line forms I can find no reference to my electronic objections, or those of my wife, on the DECC website, although those from people such as Sellafield plc., RWE, Mr J Reed MP, etc are listed. I would interpret this as evidence of the bias demonstrated throughout this exercise. Hopefully, however, I have merely missed the relevant section and my comments have been noted somewhere. It would be nice to receive some reassurance, however.

4. Confusion has arisen with myself and several of my acquaintances over the apparent duplication of effort. I have copies of e-mails relating to an enquiry re “The Future of the Nuclear Industry in the North West”, with a deadline of the 5 January, 2010, and one to the Committee on Energy and Climate Change with a deadline of the 15. According to the submission guidelines I cannot use the same material for each. It seems a very silly way of dealing with it. The more so when there are so many meetings in the region to attend, too.

5. It would appear that the selection of Braystones as a potential site has been mooted since at least January, 2008, and possibly as far back as 2006. Yet, according to statements made at public meetings in Whitehaven and Beckermet, none of the local politicians were aware of the fact (—or so they said). The local MP, Mr J Reed, advised me that he had only become aware of the proposal “just after Christmas, 2009”. I have to say that I find this difficult to believe, especially when considering his background in the industry as a public relations manager, and I would welcome an investigation into just who knew what and when.

6. Even if the statements are true, I have to ask why the residents were given so little time in which to respond to the announcement. Residents were given only ten days to prepare a case to make at the Whitehaven meeting, when the other bodies had had months or years.

7. So far as I am aware, the only notification of the proposals and the meetings planned for consultation, was in the Whitehaven News. Despite the major effect of the proposals and regional communications difficulties, no effort seemed to have been made to ensure that everyone who would be affected was informed of the proposals and the consultation. I would also query why no minutes were taken at any of the events.

8. Throughout, we have heard council officers, councilors, and the local MP telling everyone that the vast majority of the public are in favour of the proposals. Mr. Reed told the House that he had to declare “several thousand interests” in a debate last June, the inference being that they were all in favour. At the Whitehaven and Beckermet meetings there were vociferous objections to the plans. A straw poll conducted at the latter event resulted in 100% voting against the plans. In this matter we consider Mr J Reed to have deliberately misled the House. After the Whitehaven meeting I approached Mr Reed and complained that the large display posters around the room gave no suggestion that development was optional. Every one of them began by saying this will happen, or that will happen—not might happen if you consent. There was also the suggestion of blackmail. There will be no new community building if the plans don’t go ahead. Mr Reed was unconcerned, merely arguing the pro-nuclear case again.

9. The chair of the West Cumbria Sites Stakeholders Group made a minuted comment to the group that the meetings mentioned had resulted in favourable support. This was blatantly untrue, as a report recently in the Whitehaven News confirms. Yet, so far as I am aware, this is the sole official record of the meetings. A complaint to the group resulted in a dismissive letter telling me that this was just his “personal opinion”. However, the record will continue to mislead anyone troubling to read it.

10. Why were these local meetings prefaced by an exclusion of matters relating to the effects of nuclear emissions on health, waste-disposal and the environment, when these are so obviously the basis of most objections, being the most directly injurious results of the industry? We were told that “nuclear is here, and is here to stay”.

11. The lack of independence is a key factor in the whole procedure. We have grave concerns about the Secretary of State, Mr E Miliband, having repeatedly declared his pro-nuclear stance. We understand that this person will be making the final decision. It has been suggested by informed sources that the decision has already been made, and this seems to be confirmed by the announcements made by the minister in favour of nuclear expansion.

12. I have sought information since last March, when I wrote to the Prime Minister pointing out the difficulties in trusting an MP with the background that Mr Reed has, especially when he is so blatantly biased. This inability for me to trust the local MP was the reason for writing directly to the Prime Minister. Out of courtesy I copied my letter to the MP, receiving an acknowledgement, but nothing further. I received no response from the Prime Minister’s office. I wrote again in July, and eventually received an acknowledgement and the information that my letter had been passed on to the relevant department—DECC. It would seem that the Prime Minister’s office felt this satisfactory, and there seems to be no system in place for the Prime Minister’s office checking that forwarded mail is actually responded by the relevant department. To date, almost a year later, I have received no response.
13. Two other pieces of correspondence has also been ignored. E-mails directly to Mr Miliband have not even received the courtesy of an acknowledgement. I wrote to him asking for information regarding the comparison prices of electricity generated by the various available means. I regard this as a pretty fundamental factor in the decision-making process and thus information which should have been readily to hand. It has not been forthcoming.

14. I enquired how I should go about making a formal complaint with regard to the lack of responses, but received no reply.

15. Worried about the role of the NDA and other bodies, I wrote to the Renaissance Group asking for details of their funding. I received only one response: an out of office auto-message. My question was never answered.

16. Being concerned about health matters and the environment, I wrote to the Redfern Enquiry, via their website. I received no response. I wrote again, but after several months, have still received no response. It is worrying, too, that the enquiry’s website has not been up-dated since 2007. I have been unable to discern whether the enquiry is still extant or, if not, why not, or when it might resume. Given the nature of the evidence which one might expect to be presented to that enquiry, I think we would be better able to give a considered opinion were we able to access it.

17. The Braystones community is comprised of two parts—the residents of the hamlet and those who reside in beach bungalows approximately half a mile away. The latter community is made up of around 17 permanently-occupied properties and 30 or so properties used discontinuously. My wife and I own two of the latter properties. When RWE was “consulting” the local community, only two of the beach residents received notification of the proposals. Yet the site being proposed comes within a few metres of the greater portion of beach occupied by the bungalows, including ours.

18. At the Beckermet meeting, a permanent beach resident asked the RWE manager, Mr. Stuart Dagnall, what he proposed with regard to the residents. He appeared genuinely shocked to learn that there were any properties, let alone permanently occupied ones. He then proposed some stupid methods to overcome having to remove the community—such as drilling under the beach to install the large-diameter pipes required for cooling. He did not make any suggestions as to how the proposed “marine off-loading facility” could be incorporated into the vista, nor did he seem to consider the noise and light pollution attendant on any large facility. Needless to say his response was met with incredulity and derision, together with outright scornful laughter.

19. I subsequently e-mailed RWE in June, enquiring what they proposed to do with regard to the bungalows, especially the permanently occupied ones. In it I asked why they had not informed all the residents of their intentions. I received no reply. In November, having still received no reply from the local RWE contact address, I wrote to their German headquarters’ PR Department. The following day I received an acknowledgement from both Germany and Cumbria. I was told by the latter that they had no record of my e-mail. Eventually I received a fuller response from RWE’s Mr Dagnall, in the form of an attachment to an e-mail, telling me that no decision had been made as to the fate of the bungalows and their owners, and no decision had yet been made as to whether the company would even proceed with the proposed development.

20. Attempts to refer to official evidence in respect of the nuclear industry using the internet reveal that such material is not available except via premium services, meaning that one has to pay for the documents before even being sure that what it contains is relevant or of interest. This has considerably hampered my ability to be certain of my facts.

21. I note that best practice requires certain procedures to be followed. I cannot see that any of the accepted procedures have been adopted in this case. The whole conception and basic implementation have been carried out by a conclave of very biased and interested parties without recourse to anyone outside their clique, least of all those directly affected by the proposals, who were kept in ignorance until the very last minute. It is a sad comment on a “democratic process”.

22. Again I must query the role of the Nuclear Decommissioning Authority in the scenario. It appears to me that this body has lost sight of the purpose of its remit and is using its largesse to unfairly and undemocratically buy resident’s good will. Some of the projects in which it has been involved seem to me to be little short of bribery. Its involvement with the local press is of further concern, with issues of the Energy Coast propaganda being printed by the Whitehaven News.

23. As part of my research into the proposals, I wrote to a variety of bodies, including English Heritage, enquiring as to whether they had formed any views, or had any opinion. I eventually received a copy of a document composed by them for the Department of Energy and Climate Change. This concluded that there were no reasons for objecting to the proposals; ignoring even the most basic points that should have been made.

24. However, there was a cover letter addressed to DECC, complaining that there had been insufficient time to deal with the matter properly, pointing out, too, staff shortages and the necessity for English Heritage to deal with several other large projects at the same time as answer the questions within the short deadlines set. I recorded my views on the document, suggesting that instead of complying with the unfair and unnecessary deadlines—set by the department for their own purposes, EH should have said that more time...
Braystones Specific Concerns

25. To conclude this section, I would suggest that the consultation process has been flawed and is illegal. The proposals fail to comply with the rules of best practice, except possibly in respect of making the host community better off. Presumably this takes account only of financial well-being and totally disregards any environmental or health costs. One rule that does stand out is “Work for geographic fairness”. Braystones has suffered the presence of Sellafield’s pollution for half a century and benefitted little. It is high time this beautiful area was allowed some peace, not be further afflicted by multiple 240’ high reactors spreading over hundreds of acres with their ancillary buildings and industries. In passing, I would point out that electricity supplies to the beach have reached capacity and several residents are still bereft of a mains supply.

26. There is a great irony in the proposal to build a nuclear power station in an area that until a few years ago didn’t even have mains water or electricity. It is obvious that the small amount of energy utilised by the residents does not require the installation of a power station of any size. There is no industry in the vicinity that requires vast amounts of power, either. With the exception of Sellafield and its associated complex requirements, there is only prime farmland in the area. The proposed development will destroy this asset and the area’s entire amenity, rendering it uninhabitable.

27. All previous assessments of nuclear developments have focused on existing civil nuclear sites in NDA or BE ownership (14 sites). In every case I have come across, the preference has been stated for re-use of existing developed land. The re-use of nuclear sites is followed by the five other sites licensed and in NDA ownership; then existing conventional power station sites (60); finally there are the greenfield sites as the least favoured. Braystones, along with some of the other proposed sites, is without doubt a greenfield site. It seems that there must be an ulterior motive for putting these greenfield sites on the list.

28. I have already mentioned the presence of the beach bungalows and their occupants. It is self-evident that the building of any nuclear facility in such close proximity to residents would result in severe risk to the latter, as well as loss of amenity and probable infringement of their rights under the Human Rights Act.

29. The proposals by RWE will dispense with the unclassified road linking Braystones with Nethertown to the north. During the recent severe flooding in the area, without this road (which itself was passable only by four-wheel drive vehicles for several days), residents would have been isolated and unable to get help in an emergency.

30. As a result of the announcements, estate agents have told residents (somewhat obviously) that there is no chance of selling their properties until such time as it becomes clear how much the area will be blighted, and how badly, by the proposed development. According to the information belatedly received from RWE, no decision has yet been made as to whether—let alone when—any plans will be moved on. Iberdrola’s chief executive has announced that no decision on development of land purchased by them at Sellafield will be made until 2015 at the earliest. It would thus appear that the residents are going to suffer greatly with no compensation or means of redress until these bullying corporations decide they need to do something. Property will be blighted for at least another five years. This is most unfair.

31. The area is host to such species as barn owls, natterjack toads, medicinal leeches, etc. At least three SSIs will be affected by the proposed development. There are also several cycle paths and walks which will be impossible to complete.

32. There is no infrastructure in place which would support any development on the scale proposed. Most of the freshwater capacity in the area is commandeered by Sellafield, and further extraction would adversely affect the whole region. I would expect the developers to be required to announce their plans to address these deficiencies at the same time as the main announcement. In line with government’s declared policy and local planning guidelines, the UK taxpayer should not have to foot the bill for any aspect of the developments, whether in the form of local services, connection to the national grid, or in the management of waste.

33. As noted above, recent flooding has caused two major routes to be closed—probably for many months after bridges were swept away. The presence of only one A class road in the area would render dealing with emergency evaucations from any of the sites almost impossible. The other roads serving the area are almost exclusively single lane with passing places and totally unsuitable for either construction traffic or emergency access.

34. In June, Network Rail advised me that they had received no requests for development of the single-tracked line serving Sellafield and Braystones. There is no possibility of the rail network being used to serve the construction of any large development until it is modified to suit. Yet there seems to be no suitable land at Braystones which would permit such modifications. Combined with the lack of road access and utility services, I am at a loss to understand how the site proposed could in any way be considered potentially suitable.
35. The presence of more than one nuclear facility would make it extremely difficult to differentiate between their warning systems in the event of an emergency.

36. The management of waste is another factor which has not yet been satisfactorily resolved. I would bring to the attention of the committee the 2007 decision by the high court which deemed that until announcements on the future waste disposal methods had been made available, the consultation process had not fulfilled its requirements. Currently the focus seems to be on locating a repository at Gosforth, but it is my understanding that the area as a whole is totally unsuitable for geological reasons. The main favourable argument for the consideration—a report on the Yucca Mountain repository in America—has been shown to be flawed. One of the points being that records show that less than 9% of rain fall per year at the American site, whilst Cumbria has, for the last few years received over 39”. The American government acknowledges that the enemy of material stored underground is rain.

37. There would be dire effects from the use of re-circulated water from the sea, or from the building of the proposed “marine off-loading facility”. A point mentioned by a previous chief executive.

38. The temperature of the sea in the area is already being raised by Sellafield’s output, and there would be concerns about disturbing the sea bed because of the toxic materials that have been deposited there by the Sellafield, Windscale, Calder Hall experiments and deliberate discharges over half a century. I believe that there are already studies showing that these materials are moving along the sea bed, eventually being washed ashore and then blown further afield. Such sediment circulating round a new reactor would be troublesome.

39. It is a criminal offence to maltreat children. Yet the high incidence of childhood leukemia in the area amounts to just such maltreatment/abuse. Will the developers be required to facilitate the removal of children and other susceptible parties from the area to one which is safer? Using the precautionary principle, even adults should be allowed the facility of removal—at the developer’s expense, if they so desire.

40. We note the comments made some time ago by Mr Dunster, at the time chief executive of BNFL, which seem to indicate that the discharges from Windscale were deliberate and part of an experiment to determine what effects such material has on the populace. Since his time, the discharges have continued, and, for the most part, increased to a peak in the 1970s and 1980s. This disregard for the environment and for people’s health may be what is expected and permissible in other countries, but I have higher expectations of the UK government. However, until the nuclear industry cleans up its operations and deals with its effluent, the experiment will continue and people will suffer unnecessarily.

41. Fishing (Braystones regularly hosts national competitions) and other recreational activities, such as boating, water skiing, parasurfing, windsurfing, hang-gliding, beach combing, rambling, etc, continue without constraint or warning—this is worrying.

42. The Cumbrian coastline is a delightful largely undeveloped asset which should be protected, not handed over to foreign companies who are prohibited from building such plant in their homelands, yet who will expect subsidies from the UK, with all profits going back to their headquarters in various parts of Europe.

43. Braystones and its hinterland are tranquil havens: if the area was to receive a small proportion of the amount proposed to be invested in these developments it would be even better. They don’t need the proposed developments, few of the residents on the beach rely on Sellafield for employment, nor do they have need of the power which will be generated. Let the areas which need the power suffer the risks and health concerns attendant on nuclear facilities and stop building them in someone else’s backyard. As noted in various reports, this is a sensible move with many practical benefits—including the utilization of excess heat to warm houses and easier connection to the national grid, with lower distribution losses being incurred in the process.

Nuclear—General

44. During the period when the Speaker of the House was Mr M Martin, a manipulation of the procedures of the House was used to force through a change in the rules affecting insurance of the nuclear industry. It is my understanding that Speaker Martin was to investigate whether the incident was permissible. Since my installation of the replacement Speaker, Mr Bercow, I have heard nothing further regarding the matter. This manipulation, if it were eventually demonstrated to be wrong, would add to what I regard as the evidence of corruption on behalf of the pro-nuclear lobby.

45. There appears to be a major problem with dissipating any electricity produced by the proposed reactors. Environmental constraints in respect of pylons would mean that the high cost of connecting to the national grid might be prohibitive without government intervention. There are strong arguments for locating the power stations near to where the power will be used. This patently excludes places like Braystones. There has been a suggestion that a submarine cable could be installed. Yet this has many disadvantages, not least of which is the further disturbance of the toxic sediments of the Irish Sea, which will adversely affect the Irish Sea coastline of England, Scotland, the Isle of Man, Wales and Ireland.

46. I note that the UK government is already in breach of the agreements signed in Rio de Janeiro in 1992. By permitting additional facilities to store long-lived and high-level radioactive wastes near the marine environment the breaches will be even greater. Noteworthy, too is the fact that carbon trading (as it has
47. Thus far the discussion locally has been over the development of just a few of the potential sites. This is highly misleading, and the consideration should be of the total development being proposed. I have been given to understand that the pro-nuclear lobby's plan is for an “Energy Coast”, with nuclear and conventional generating plants, wind farms, and anything else that they can fit in. If brought to fruition this would result in the destruction of the whole of the Cumbrian coast from east of Barrow-in-Furness to as far north as Maryport, potentially linking with the Robin Rigg windfarm across the Solway estuary and the recently-approved windfarm off Morecambe Bay. Such development would be grossly unfair and injurious to the environment. It would also make the area completely dependent on the technology for its commerce. The recent wild fluctuations in employment in the area demonstrate the unsustainable nature of dependency on one industry.

48. I have been disgusted with the perceived bias and failures to communicate—from the Prime Minister’s office down to local quangos, there has been a complete failure to be open and honest. There appears to have been no proper respect for, or consideration of, the effects the announcements would have on affected residents. When we learn of influential people having close relatives who are employed in the industry; see the way in which largesse from the proposers and the NDA has been used to buy favours; and we look at the high proportion of decision-makers in Copeland who have been directly or indirectly, or still are, beholden to Sellafield, it is almost impossible to accept that there is no collusion. When one reads of the COMARE submission to WCSSG, successfully challenged by Dr Fairlie, then suspicions inevitably grow.

49. My concerns over some aspects of the behaviour of the Copeland MP, Mr Reed, have already been mentioned. (Please be aware that I have no political affiliations.) He did inform the House that he would not benefit directly from any expansion of the industry in Copeland. Will he benefit indirectly? His family certainly will, in my opinion. An influx of several thousand people would provide considerable scope for his family’s house-building company. Will he be returning to the industry at any stage in the future, or will he be precluded from doing so? We note previous examples of MPs leaving to join companies to whom, in their official capacity, they have just granted very large contracts.

50. Mr Reed appeared on BBC Radio Cumbria and announced that there would be no development at either Kirksanton or Braystones. The only development would take place on the land sold by the NDA at Sellafield. The statement he made, repeated several times, was unequivocal. When it was highlighted and questioned by the interviewer, Mr Reed categorically stated that there would only be development at Sellafield. A link to my recording of the interview can be found on the www.toxiccoast.com website.

51. How could Mr Reed know what the outcome of the consultation would be? Once again, it points to the premise that the whole matter has been decided—long before the input from any “consultation” process has been received. Interestingly, in support of that idea, the committee should consider why the public meetings to consult the people from the Braystones area and Kirksanton will be held after the deadline for submission has passed. Presumably their comments will be ignored.

52. Although a year ago, I knew very little about these matters, I have spent much time researching and reading material relevant to the nuclear industry. Most of it demonstrates dishonesty, deviousness, and a deep disregard for the welfare of the environment—marine and terrestrial, and human and animal health. Some of the material is almost unbelievable in its disregard for the inevitable consequences. On the toxiccoast website I note that there is a substantial history of poor administration, premature deaths, the removal of body-parts without permission (which I understand is a criminal matter), data falsification and half a century of environmental pollution, not to mention other nefarious conduct.

53. I have read reports regarding the financial viability of new-build nuclear power stations, and the recurring theme is that they are not viable without considerable subsidisation by the government. I note that this is precluded by the government’s stated policy, although there have been reports that moves are being made to subvert this, allowing assistance to the companies to be forthcoming. I believe such moves may be contrary to EU legislation.

54. Perhaps seeming a little far-fetched, I have to query whether the nuclear industry is running a second Enron-style operation. By frightening the public with stories about “the lights going out” (something categorically denied by the chief executive of the National Grid, yet happily repeated to your inquiry by Mr Coakley [Q 64 response]) they will gain their expansion and, at the same time, have a readily justified reason for the inevitable price rises which will ensue. Yet if the money which is being considered for investment in nuclear expansion were to be spent on developing truly renewable sources there would be no requirement for the vastly expensive clean-up operations required by nuclear generation. I understand that the costs of this are currently £1½ billion each year. This can only rise and become more problematical over time, as sites fill up.

55. Current rules (national and local) mean that those wishing to build on any of the sites should bear the cost of infra-structure (including roads, rail, public services, connections to the national grid, and waste disposal) without any burden being carried by the UK taxpayer.
56. I find the, presumably government-sponsored advertising campaign, with its recurring theme that nuclear is clean, "green" and sustainable, offensive. I am aware of the processes involved and know that considerable quantities of CO₂ are emitted at all stages of the fuel’s production. From mining of the raw material to its encapsulation, as well as the stand-by power requirements to provide safety in the event a plant suffers a power cut, CO₂ is produced. There is nothing clean about the vast quantities of highly toxic waste produced at present—something which will dramatically increase should more stations be approved. With no central repository capable of dealing with the material I feel this proposal is akin to starting a car with no brakes. Besides which, there is no mention of the other chemicals produced by the industry—most of which are at least as injurious to the environment as CO₂, whilst some, like HFCs and N₂O are considerably more damaging (thousands of times more so in certain cases), but their generation surely gives the lie to any pretentions to green credentials. The recent increases in the discharges of these chemicals from Sellafield compound my concerns. There is also an unremitting pressure on the Environment Agency to permit ever-larger discharges to both the sea and the atmosphere. At what point will the agency determine that even their elastic levels would be exceeded?

57. Security of supply also appears to be deliberately misleading. I do not know of any uranium mines in this country, and all material transported across the world increases the CO₂ output, as well as making it vulnerable to attack and accident.

58. The security aspects of the storage should also require proper consideration. With so many differing proposed storage areas it will be even more difficult to ensure proper security of the effluent, making the prospect of a dirty explosion even more likely.

59. I would also be worried about how the back-up supply will be maintained to ensure the safety of stored material in future centuries, when the fossil fuels currently used run out. (I am aware of the high levels of gas currently consumed by the Fellside plant.)

60. I would point out that everything we have been led to believe by the Energy Minister, Mr. Miliband, in respect of nuclear new-build is either partially or wholly untrue. There is no possibility that a new-build site could be completed and commissioned by the timetable he has given. This is borne out by the statement of a chief executive for Iberdrola that he won’t even make a decision on whether to complete the purchase of land at Sellafield until 2015. After that, even if they decide to go ahead, it would take many years to develop the necessary services and infra-structure sufficiently to permit such a large development. Presumably by that time it will be far more expensive than present figures suggest.

61. Globally, I note, not one nuclear development has ever been completed on time or within budget; furthermore, not one nuclear country has the facility to deal with the waste produced.

62. The Weightman report shows there are difficulties in facilitating nuclear inspections and ensuring that submitted designs are safe. I deplore the idea contained in the report that inspectors should be recruited or seconded from the industry it is supposed to monitor. This system has been shown not to work. It seems to me to be a recipe for disaster.

63. Get rid of the quangos stuffed with pro-nuclear lobbyists who have gained so much undemocratic power that they seem to consider they own the whole coastline and can do with it as they wish. Most of all, stop telling lies about a dirty, badly-managed, sinister industry. Close down the existing sites and stop polluting the whole environment.

64. The government should abide by the treaties and agreements it has signed. The nuclear experiment has failed: there is no such thing as “electricity too cheap to meter”, the current proposals will result in electricity too expensive to use.

65. This generation has no right to leave the legacy of highly-toxic effluents for future generations to deal with. Sellafield and its precursors have half a century of experience, yet they still can’t get things right.

66. I would suggest that there needs to be closer consideration of whether the country is being stampeded into accepting nuclear power by those with a vested interest, following the precedent set by the likes of Enron. This rush ultimately leading to the nuclear industry being able to blackmail the country into paying for changes to the infra-structure and for waste management and disposal whilst all the profits go abroad. The government, having failed to act earlier to avert these problems, now finds itself “painted into a corner”, with nuclear power being the apparent easiest solution. Sadly, this is to ignore the better alternatives which are truly sustainable and green.

January 2010
Memorandum submitted by Britain’s Energy Coast West Cumbria

You have called for written evidence on whether DECC’s National Policy Statements on energy infrastructure provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications.

I am responding as Chairman of and on behalf of Britain’s Energy Coast West Cumbria Board. Our role is to help deliver the regeneration of West Cumbria, working closely with local, regional and national stakeholders. Our Board comprises the private and public sector, including our local authorities.

Our long term plan for the regeneration of West Cumbria is based on a low carbon economy, and in particular on the development of the nuclear sector, and diversification based on our nuclear strengths. As explained in more detail below, we have a very direct interest in energy policy and its delivery, and the related planning system.

The need for a New Framework

We support the concept of National Policy Statements, and the establishment of IPC. It is widely accepted that there needs to be significant investment in the UK energy infrastructure over the next 15 years—Ernst & Young have estimated it at £235 billion. The energy sector needs to be de-carbonised—at almost 40% of the UK total, it is the biggest carbon emitter. New energy capacity needs to replace old to protect energy security, as nuclear and coal fired power stations close. And, with North Sea oil and gas stocks rapidly dwindling, we need new UK infrastructure to enhance UK’s energy independence. The UK electricity network needs to be fit for the 21st century.

UK energy policy is clear, and largely uncontroversial. We now need delivery. And with the long lead times for construction of major energy infrastructure—even under a fast track process the first new nuclear power stations will not be available until 2017 or 2018—we believe the UK can ill afford some of the lengthy planning delays of the past (eg over 10 years to approve Sizewell B). So we need the IPC and NPS to pave the way for speedy IPC approval.

West Cumbria’s interest

As noted, West Cumbria has a clear, direct interest in a swifter planning process. West Cumbria has been the centre of the UK nuclear industry for the past 60 years, and comprises around 60% of the current UK industry. It is host to Sellafield—the UK’s biggest nuclear complex, to the UK’s only national nuclear waste disposal facility, the Astute nuclear submarine programme, the National Nuclear Laboratory, and to the National Skills Academy for Nuclear. New nuclear power stations are—along with the Nuclear Decommissioning Authority’s clean-up programme—likely to be the lifeblood for the local economy for several decades to come, both directly, indirectly, and in terms of the opportunity to grow out from a nuclear base.

Three Cumbrian nuclear power station sites have been selected by Government as potentially capable of deployment by 2025. Some of the biggest UK offshore wind farm developments are planned off our coastline. And, if economically viable and environmentally sensitive, we could also have up to three significant tidal energy schemes.

According to the NNB Consortium that plans to develop Sellafield, construction could start by 2015. We need the NPS and IPS to help deliver this, and the 21st century grid connections that will be needed to support the outflow of power to the country (Cumbria would be a huge net electricity exporter).

Our Experience of the Government’s Process

We have been closely involved in the process for the last year or so. In view of the circumstances at the time (the NDA had not then sold its development land adjacent to the current Sellafield site to a utility) we acted as agent for the NDA in drafting its nomination for the Sellafield development land, as part of DECC’s Strategic Siting Assessment (SSA) process. So we have understood what has been required to satisfy DECC’s exclusionary and discretionary criteria, and what issues DECC has considered to be best addressed at national and at local level. We believe the various criteria were properly established, since they were subject to full public consultation in draft before finalisation. They seem to us to a large degree to cover the ground expected of the IPC, and thus they appear to set a good precedent. Moreover, the answers that were provided in the SSA nomination against DECC’s criteria seem to have provided a good basis for public comment during the Government’s assessment of the nominations in 2009, and the current round of local and national consultations (those for Cumbria are taking place this week and next week).

Our Views on the NPS documents

We are obviously not a statutory planning authority, and are responding in a business development context. But against the background of our own experience and involvement, we consider that the draft NPS provide clear guidance to:

(a) potential development proposal applicants;

(b) the IPC; and
We believe that they set out clearly:

(a) Government policy on energy and climate change;
(b) The Government’s views on the need for early new energy infrastructure;
(c) The information the IPC needs to take decisions, and the principles on which it should base its assessments; and
(d) The impacts that new energy infrastructure could have (eg on the environment, ecology, biodiversity, landscapes, and historic sites), and possible options for mitigating such impacts.

Moreover, we note that the NPS include Appraisals of Sustainability and Habitats Regulations assessment reports.

Again it is a personal view, but we thought the ground covered in the NPS on nuclear power in its section on Sellafield—using broadly the criteria the IPC is being recommended to adopt—seemed right in its scope and in terms of the assessment itself, recognising both where the site ticks the boxes, and where further detailed work will need to be done by a developer in an IPC application.

We will be responding publicly in more detail to DECC’s consultation by the 22 February deadline, but I hope the above summary analysis is helpful to you and your Committee members. We have also responded to the NW Select Committee’s inquiry into the future of the nuclear industry in the NW, and would be happy for your Clerk to see that too if it is useful to you.

January 2010

Memorandum submitted by the British Wind Energy Association

BWEA—INTRODUCTION

1. BWEA exists to champion the generation, deployment and use of renewable power. Founded in 1978, we work to support our 550 corporate members to achieve the maximum deployment of wind, wave and tidal energy and realise maximum benefits to the UK. BWEA’s members include Centrica, EDF Energy, EON UK, RWE Npower, Scottish Power, Scottish and Southern Energy and Renewable Energy Systems.

2. During the passage of the Bill through Parliament and the development of its subsequent regulations and guidance, BWEA has worked closely with a range of other stakeholders, including the UKBCSE. The comments given below relate to the draft National Policy Statements (NPSs) on Overarching Energy (EN-1), Renewable Energy (EN-3) and Electricity Networks (EN-5). We would also be happy to share with you our forthcoming response to the Department’s formal consultation on EN-1-5, which we will contain more detailed views on the issues covered below, and is due to be submitting on 22 February.

EXECUTIVE SUMMARY

3. The Challenge of Climate Change: The Stern Review and other climate change studies have demonstrated the clear and urgent need to reduce green house gas emissions to avert climate change. The UK Government has accordingly adopted ambitious renewable energy targets and carbon emission reduction targets; 15% of all energy will need to come from renewable sources by 2020 and an 80% reduction in carbon emissions is required by 2050. To achieve these targets requires a sustained multi-billion pound investment programme to deliver a range of renewable energy technologies across all areas of the UK, both on- and offshore. BWEA’s members will be responsible for providing the vast majority of the UK’s renewable energy generation necessary to ensure the necessary de-carbonisation of the power sector.

4. The Need for Reform of the Planning Regime: In order to deliver this much needed step-change in investment and deployment, the renewables industry has long supported the reform of the planning regime. The Planning Act reforms deliver the measures necessary to develop the large scale renewable energy infrastructure needed to meet our energy and climate change obligations in a timely manner. BWEA therefore supports the Planning Act reforms as they should enable the timely deployment of essential renewable energy infrastructure through a fairer, more transparent and effective planning regime than we have at the present.

5. The Importance of National Policy Statements: We believe that NPSs are essential to enabling the very substantial infrastructure investment programme needed to address climate change and ensure continued security of supply of the UK’s energy supplies. NPSs need to be robust, relevant and clear to provide sufficient detail to all stakeholders, including communities, statutory consultees, local authorities and promoters. It is essential that NPSs contain clarity on the key planning issues—including the energy need, and the most likely impacts and mitigation measures—that will be of greatest relevance to the project in question. Clear direction on these issues will enable all parties involved to efficiently assess proposals’ compliance with national policy; enabling more time for detailed consideration of those local issues which could affect the surrounding community and how best to address them.
6. We therefore welcome the introduction of NPSs as the primary basis for decisions by the Infrastructure Planning Commission (IPC) on nationally significant infrastructure projects (NSIPs). We also support their use as material considerations for both local planning authorities on smaller-scale energy projects, and the Marine Management Organisation (MMO) when considering sub 100MW projects in the marine environment—as well as providing invaluable guidance to all stakeholders and developers.

7. **The urgent need for NPSs:** The NPS suite needs to be implemented quickly. Without the timely publication of robust NPSs, there is a real risk that this much needed renewable energy infrastructure will be delayed, potentially jeopardising delivery on the UK’s renewable energy obligations and carbon reduction obligations.

8. **The Statement of Need for Renewable Energy Infrastructure:** The national need for all forms of energy infrastructure is clear and well established. It is therefore essential that the needs case for renewable energy infrastructure, and the planning weight to be accorded to this need, is clearly stated within the NPS suite.

9. **The Non-Spatial Approach:** With the exception of the Nuclear NPS, the suite of energy NPSs are non-spatial in nature. This is important and should be supported.

10. **Flexibility:** We welcome the creation of a new single consenting regime. However, it is also important that the new regime retains flexibility around the submission of different elements of a project, with the option for each in their own right being submitted as a NSIP.

11. **Alternatives:** We welcome clarification within EN-1 that the IPC will not require applicants to assess possible alternative sites, other than as required by the Environmental Impact Assessment, Habitats or Water Framework Directives. This is a proportionate response to infrastructure delivery.

12. **Relationship with Existing Planning Regime:** There is a need for further guidance within the NPSs regarding the weight to be given to NPSs within the local planning regime. This would provide much needed assistance to local authorities in the preparation of local and regional development plans and in determining applications for energy infrastructure which fall below the thresholds of the Planning Act 2008.

13. **Relationship with the Marine Management Organisation:** The relationship between the IPC and the MMO will be important in ensuring that the need for marine renewable energy infrastructure is properly balanced against other concerns.

14. **Aviation:** We welcome wording in EN-1 which encourages a constructive dialogue and partnership approach between all relevant aviation stakeholders. This approach is necessary if the UK is to deliver the necessary level of onshore and offshore wind energy infrastructure.

15. **Consistency of approach:** There is a need for greater consistency regarding:

   (i) the equal treatment of technologies across the NPS suite;
   
   (ii) the equal treatment of different renewable energy technologies within EN-3; and
   
   (iii) the level of detail provided on specific impacts within EN-3.

**CONCLUSION**

16. The reforms enabled by the Planning Act 2008 are a welcome improvement in the planning approach to nationally strategic energy infrastructure. BWEA strongly support the creation of NPSs as the fundamental plank of this new planning system, which will bring the UK a significant step closer to achieving its key environmental goals of carbon reduction and renewable energy deployment.

17. The timely publication of clear, robust NPSs will be essential to the effective and efficient delivery of the UK’s renewable energy objectives, and we broadly support the integrated nature, style, level of detail and content of the energy NPSs, as currently drafted. However, in order to ensure that NPSs operate effectively, NPSs must set out the UK’s overarching energy needs and provide sufficient information on the types of technologies, their likely impacts and mitigation measures and the detailed criteria against which proposals will be determined. This level of detail will be necessary to enable all stakeholders to understand this new planning process.

**THE CHALLENGE OF CLIMATE CHANGE**

18. The scientific and economic rationales for addressing human impact on climate change is well established and widely accepted. The Stern Review calculated that the dangers of unabated climate change would be equivalent to at least 5% of GDP each year. However, when more recent scientific evidence is included in the models, the Review estimates that the dangers could be equivalent to 20% of GDP or more. In contrast, the costs of action to reduce greenhouse gas emissions now, to avoid the worst impacts of climate change in the future can be limited to around 1% of global GDP each year. The central message is that reducing emissions today will make us better off in the future: one model predicts benefits of up to $2.5 trillion each year if the world shifts to a low carbon path.

19. In order to ensure the timely decarbonisation of the UK’s energy infrastructure, radical reform of the planning regime is essential and long over-due. The UK requires a very substantial amount of new renewable energy infrastructure in order to move towards a low-carbon economy, and this imperative is recognised in the Government’s Renewable Energy Strategy.
20. The UK has clear objectives for carbon-reduction and renewable energy generation, which are both achievable and essential to the prevention of uncontrollable climate change. The Climate Change Act 2008, which sets a statutory target of reducing greenhouse gas emissions by 80% by 2050 and the EU Renewable Energy Directive, which establishes a legally binding target of achieving 15% of all UK energy from renewable sources by 2020, together necessitate a step-change in renewables development.

THE IMPORTANCE OF NATIONAL POLICY STATEMENTS

21. The NPSs are critical not only to the success of planning reform, but also to the successful delivery of the Government’s energy and climate policy. National Policy Statements will need to provide a stable, long-term and timely policy framework in order to enable the delivery of the UK’s renewable energy targets.

22. The need for expeditious implementation of the NPS suite is nowhere better demonstrated than in the case of Offshore Round 3 delivery. The recent Round 3 announcement on 8 January signalled the beginning of the development process for 32 GW of offshore wind energy generation. Developers have now committed to bring forward over 40 GW of projects, if built this would represent about a third of the UK’s electricity needs. Without the timely publication of robust NPSs, there is a real risk that this much needed renewable energy infrastructure will be delayed, potentially jeopardising delivery on the UK’s renewable energy obligations and carbon reduction obligations.

23. It is also vital that they give clarity on issues, which are raised time and time again at planning inquiry. Therefore, they need to be robust and sufficiently detailed to enable efficient and effective assessment of applications for compliance, thereby negating the need for further debate on national policy-related issues at inquiry. This will enable greater opportunity to review and address the impact on the local community and environment.

24. The Overarching NPS for Energy (EN-1) sets out the Government’s energy policy priorities; the need case for each electricity generation technology and the equal need for investment in the electricity networks. It also confirms that in order to address climate change and ensure continued secure and affordable energy supplies, the deployment of new low carbon generation will be necessary for the foreseeable future.

25. Therefore, when considering a prospective energy project, either the IPC, or in the case of smaller-scale energy proposals, the relevant local planning authority, or other relevant decision maker, can begin assessing proposals on the basis that the national need has been established, and not waste lengthy periods of time debating the national need. This will provide much greater time to assess the local impacts of a proposal and whether they can be satisfactorily resolved/mitigated.

26. Equally, the value of setting out national policy in a single place is that by including Government’s policy on particular issues within the relevant NPS, this will provide clarity for developers, the IPC, statutory consultees, local planning authorities and potentially affected communities, and again negate the need for lengthy and needless debate. A good example of this is electric and magnetic fields (EMFs), where planning inquiries considering overhead electricity line projects often spend much time debating the science surrounding EMFs. By setting out Government policy on EMFs and the compliance standards network operators will have to meet, everyone will know exactly what is required to make a prospective project compliant, and can therefore concentrate on the local issues such as the proposed route, the impacts, amenity issues and how to satisfactorily address them.

NPSs—STYLE, CONTENT AND APPROACH

Format and Style

27. BWEA welcome the format and style of the NPSs and in particular the cross-referencing between NPSs and the Planning Act 2008, which ensure consistency and provide information on:

- What applicants must include in the Environmental Statement and application.
- The most common impacts associated with each technology.
- The most likely mitigation measures that could be used to offset or eliminate impacts.
- What the IPC should expect from applicants and with whom it should consult.

28. The provision of information on impacts and mitigation will enable all stakeholders to know upfront what they can expect in terms of likely impacts arising from a project, including guidance to developers regarding the actions they will be expected to take in order to minimise that impact. Clear direction on these issues will enable all parties involved to efficiently assess a proposal’s compliance with national policy and provide more time for detailed consideration of specific local issues, including the Local Authority Impact Report, Consultation Report and other issues raised by the community.

The Statement of Need for Renewable Energy Infrastructure

29. The national need for all forms of energy infrastructure is clear and well established. As such, it is essential that the “need” case for renewable energy infrastructure is confirmed within Overarching Energy NPS (EN-1). Without explicit clarification of the weight that should be accorded to the need case, when determining an application, there is a significant risk of undermining a fundamental function of the NPSs; the provision of clear direction on national energy policy, and it’s interaction with the planning system.
Current wording within paragraph 4.1.1 of EN-1, which states that need should be “taken into account” is insufficient and should be revised in line with existing guidance on the planning weight to be given to other material considerations, for example regarding flooding and coastal erosion (paragraph 4.20.15), and the conservation of the natural beauty of the landscape and countryside (paragraph 4.24.6). We are concerned that without clear guidance on the great weight to be accorded to the need for electricity, the IPC will be required to place greater importance on other considerations which are currently accorded “great” or “significant” weight.

Non-Spatial Approach

30. With the exception of the Nuclear NPS, the suite of energy NPSs are non-spatial in nature. This is important for a number of reasons including:

— The importance of the market in determining where and when to develop nationally significant energy infrastructure projects.

— The range of technical, operational, commercial, ecological and other environmental considerations that determine where a developer might consider proposing a project eg the wind speed for wind energy developments or proximity to the grid network.

— The evolution of energy technologies and mitigation measures which could quickly affect the legitimacy of any assumptions leading to spatial “mapping” for differing technologies, thereby quickly rendering the NPSs out of date.

— The resource intensive nature of undertaking detailed spatial planning (be it centrally, regionally or locally) which would inevitably delay the introduction of NPSs.

Flexibility

31. Whilst the new regime very much improves the ability for the consenting authority and all stakeholders to consider the holistic implications of any nationally significant infrastructure project, through a new single consenting regime, it is also important that the new regime retains flexibility around the submission of different elements of a project, with the option for each in their own right being submitted as a NSIP, as currently put forward in section 4.9 of EN-1. This provision is likely to be important for much energy infrastructure, such as a proposed electricity generation project and any connection or indeed deeper reinforcement of the electricity network system.

32. For a range of technical, commercial or environmental reasons it may not be appropriate for a renewable energy developer to include within their consent application the connecting assets or any necessary reinforcement works. However, we support the requirement for the applicant who submits an application first to demonstrate that there are reasonable options available for connection to the electricity grid.

33. The proposed approach strikes the right balance enabling the IPC and other stakeholders to understand the likely full implications of a proposed development, whilst enabling the developers of the respective elements of an energy project, the opportunity to for one party to apply on behalf of all involved; to jointly apply or to apply separately.

Alternative Sites

34. BWEA welcomes the wording laid out in Section 4.4 (Alternatives) of EN—1 the Overarching NPS, which confirms that when there is a policy or legal requirement to consider alternatives (such as under the Environmental Impact Assessment, Habitats or Water Framework Directives) the IPC should frame any consideration of alternatives in the context of the scale and urgency of the UK’s need for energy infrastructure.

35. We also welcome confirmation that the IPC will not require applicants to assess possible alternative sites, other than as required by the Environmental Impact Assessment, Habitats or Water Framework Directives. Due to the magnitude of the investment in energy infrastructure required within the short to medium term, it is essential that the planning system enables the smooth and timely consent of acceptable proposals. The imposition of any burden for a proposal to meet a “best available” test would run counter to the Government’s objectives set out in the Renewable Energy Strategy and Low Carbon Transition Plan, for the timely and efficient delivery of necessary infrastructure.

36. Section 4.4 of EN-1 also allows the IPC to potentially exclude vague or inchoate alternatives or to potentially place the onus on third parties proposing an alternative to provide any necessary evidence. Whilst energy developers will themselves normally consider all reasonable expedient alternatives, taking into account suggestions from the local community and other relevant stakeholders; a range of technical, operational, commercial, geological, ecological and other environmental factors will often significantly constrain the number of practicable alternative.
37. The proposed approach will ensure that all genuinely viable alternatives are considered whilst making sure that the proposing of alternatives is not used to unnecessarily frustrate or delay valid applications which have already been through the established process of consultation with the affected community, local planning authority (ies) and statutory consultees to develop the best all-round proposal.

**Relationship with Existing Terrestrial Planning Regime**

38. BWEA supports wording within EN-1 confirming that NPSs may be a material consideration in decisions made under the Town and Country Planning Act and welcome the further guidance provided by the Department for Communities and Local Government. However, we would support further clarity within the NPSs themselves regarding the weight to be given to NPSs within the local planning regime. This guidance would provide much needed assistance to local authorities in the preparation of local and regional development plans and in determining applications for energy infrastructure which fall below the thresholds of the Planning Act 2008.

**Relationship with Marine Management Organisation**

39. We welcome wording within EN-1 concerning the importance of a close working relationship between the IPC and Marine Management Organisation (MMO). This will ensure consistency between the MMO and IPC processes and prevent the creation of a two track approach. It will also ensure that the Government’s Renewable Energy Targets, as communicated through EN-3, are considered by the MMO process. We would oppose a change to the relationship of the IPC and MMO.

**Aviation**

40. BWEA welcomes the wording, and the “tests” included within Section 4.19 of EN—1 the Overarching Energy NPS, which stresses the importance of protecting military and civil aviation interests whilst providing guidance to developers and the IPC on the issues that need to be considered and how potential impacts might be mitigated/avoided.

41. In particular, Paragraph 4.19.15 is helpful in stressing that “where there are conflicts between Government’s energy and transport policies, the IPC should expect the relevant parties to have made appropriate efforts to work together to identify realistic and pragmatic solutions to the conflicts” and “in so doing, the parties should seek to protect the aims and interests of the other parties as far as possible.” This encourages a constructive dialogue and partnership approach between all parties which is necessary if the UK is to deliver the level of onshore and offshore wind energy infrastructure necessary to meet the twin challenges of carbon reduction and renewable energy generation.

42. We urge the Committee to resist any proposals to streamline the content or reduce the level of detail of the suite of energy NPSs, which as currently drafted, provide both the stable policy framework energy developers need to invest, and the right level of detail to enable effective assessment of compliance with national policy, thereby providing more opportunity by the IPC and all stakeholders during IPC consideration or planning inquiries to consider and satisfactorily deal with the real issues that could affect a local community.

**Balanced Approach**

43. As stated, BWEA strongly support the general level of detail provided in the NPS suite. We support the generally constructive way in which issues of environmental and landscape protection are balanced with the need for new sustainable energy infrastructure and the reasonable approach taken to accommodate the introduction of new renewable energy schemes, in balance with existing interests, for example aviation.

44. However, we are aware of a number of minor inconsistencies in the current drafting of advice on potential impacts and mitigation measures throughout EN-3. In light of the fact that the IPC Commissioners and secretariat will not have had previous experience of many of the issues covered in EN-3 (including marine specific issues), and the ways in which these issues interact with the different technologies, we recommend that further care be taken to provide a necessary level of detailed advice to the IPC, across technologies.

45. These issues can be addressed with minor changes. In some cases this will require the addition of more detail and in others less detail. Our written submission to the Government will give details of the changes required.

**Recommendations**

46. In particular, we urge the Committee to:

— Acknowledge the importance of the Statements of Need within the energy NPSs, as invaluable in stating beyond all doubt the need for the range of included technologies, thereby negating the need for lengthy debates on the need at each individual planning inquiry.
— Support the need for NPSs to be robust and sufficiently detailed to enable assessment of applications for compliance, thereby again negating the need for further debate on national policy-related issues at planning inquiry.

— Support the importance of flexibility around submission of different elements of a project, with the option for each in their own right being submitted as a NSIP, whilst endorsing the proposed approach, which requires developers to ensure that an appropriate level of detail is included to enable the IPC and stakeholders to understand any likely associated implications.

— Support existing wording around the assessment of alternative sites as a proportionate approach.

— Support the existing non-spatial approach taken in the NPSs.

— Support the need for greater consistency in the treatment of different technologies and impacts within the suite of NPSs.

— Acknowledge the need for further guidance as to the weight to be accorded to NPSs by local authorities when preparing plans and determining renewable energy applications below 50 MW.

— Acknowledge that 2020 is not the end of the journey in terms of energy infrastructure investment, with significant amounts required well beyond, and suggest to DECC that they include further emphasis of investment requirements from 2030 to 2050, including reference to the Renewable Energy Strategy and the Climate Change Committee Report.

January 2010

Memorandum submitted by John Busby

SUMMARY

EN6 2.3.1 claims that “nuclear power is low carbon, economic, dependable and safe”. The written evidence examines the four properties with the following conclusions:

During the build-up phase of new build, the construction and mining activities will add considerably to carbon emissions. Only after 40 to 60 years in retrospect can a nuclear power plant be considered to be low carbon.
The delays in the construction of the Olkiluoto EPR have shown new build to be uneconomic, especially highlighting the lack of skilled manufacturing resources.

The decline of primary mining production in Canada and Australia and the failure to open new mines of a significant size shows that uranium supplies are not dependable. The diluted ex-weapons fuel needs considerable tails enrichment facilities predominantly owned by the Russians and likely to be offered more widely to its nuclear hegemony.

From the moment the fission initiates, the metal enclosures are subject to irradiation attack and the ageing process begins. Safety depends on adequate monitoring of the ageing process over the 60 years operational life of the new build reactors and experience shows that this cannot be guaranteed.

MY EXPERIENCE

Chemical works electrical engineer, mechanical and process engineer. Project manager. Construction manager CHP power station and nitric acid plant. (ICI)

Director, Centre for Industrial Innovation (University of Strathclyde).

Site manager, Toni Molkerei City Dairy, Zurich, heat exchanger sales, Frankfurt, major project export sales, Management Information Systems sales manager, East European business development manager (APV).

Leader Kiev, Kamenka, Nishni Novgorod and Yesk Milk Sector studies (UK Know-How Fund for the former Soviet Union).

Diary consultant, Orekova Zueva, Russia, EU Technical Assistance to the CIS (TACIS).

Visual Basic Programming for export documentation Russian baby food projects (APV).

Project manager, spray dryer for RWE Condea Brunsbttel (Drytec). 

Currently energy analyst, Sanders Research Associates.
Facts

The low carbon nature of nuclear power depends on the duration of the life cycle without intervening problems.

Construction and commissioning of plants is usually delayed and overspent.

Only 60% of global uranium demand is met from primary mining. The secondary supplies which provide the balance are uncertain.

Around 200 major components, such as reactor vessel heads and steam generators have failed and been replaced. Sizewell B has a replaced reactor vessel head.

Recommendation

No taxpayers money should be devoted to nuclear new build, neither as a direct capital grant, nor as carbon price guarantees.

John Busby

Annex

EN6

Part 2: Government policy on new nuclear stations and energy infrastructure development

2.3 The need for nuclear power

2.3.1 begins “Nuclear power is low carbon, economic, dependable, safe …” Neither of these properties can be fully substantiated.

Low Carbon

Nuclear’s low carbon property depends on the completion of the entire life cycle, with the possible exception of the “back-end” (assuming the spent fuel remains in dry casks on station sites rather than being placed in an underground repository).

This is because the initial carbon emissions result from the “front-end”, which includes the construction of the reactor and the manufacture of the nuclear fuel. An increasingly significant emission results from the removal of the overburden at the start of an open pit uranium mine.

An Areva EPR weighs around 200,000 tonnes of which 180,000 tonnes is concrete and reinforcing. The alloy steels in the fabrication of the major components and the non-ferrous metals in the controls and instrumentation are all associated with carbon emissions in their manufacture. See EN6—Figure 1 (Areva)

There is also the emissions related to the removal of the waste rock associated with low grade ores. For instance, an EPR has a requirement of 730 tonnes of natural uranium for the manufacture of its initial core charge of fuel. The actual material that has to be removed to extract this uranium, with for instance an ore grade of 0.045% U3O8 (as is the average in Australia), with a characteristic open pit waste rock to ore ratio of 4:1 and a 70% chemical extraction yield, amounts to 730/0.848/0.00045/0.7*5 = 13.7 million tonnes. The removal of the overburden and the subsequent waste rock will require diesel or electrical powered machinery. See EN6—Figure 2 (Caterpillar)

If a series of new nuclear power plants are built over say the ten years following the licensing by HSE/NII, the successive emissions from the construction of the fleet and the mining of the uranium for the initial core charges will only be compensated by the subsequent low carbon operation if it endures for the remainder of the life-cycle. The average operational life of NPPs now shut down is 22 years, so as the life cycle calculations are calculated against the 40 to 60 years claimed life, the full benefits may ever be realised. Also towards the end of the century, the remaining uranium ore grades will decline, increasing dramatically the input energy to the cycle.

See EN6—Figure 3 for a five year construction period and 40 year operational life (Storm van Leeuwen).

The claimed low carbon property of nuclear power is dependent on too many imponderable factors to be assured.

Economic

The first EPR is proving to be far from economic, mainly because of delays in its construction. The Olkiluoto contract was signed in 2003 and the EPR may not be commissioned until 2013. In a fixed price contract it is normal for a down-payment to be made, followed by progress payments to be made at certain achieved stages in the programme. A construction period of double the assumed time means that the preceding cash flow calculations are invalid and a return on the increased capital expenditure may be delayed or never achieved.

The price of the next EPR will depend on the outcome of Olkiluoto, which may take several years to establish as both parties, Areva and TVO, are engaged in litigation and counter claims.
The other factor is the ageing of the major components of which so far around 200 reactor vessel heads and steam generators have had to be exchanged, the life of them has up until now been 15 to 20 years. Alternative alloys are now utilised, but the duration of these is uncertain as with ageing only time can tell. The exchange of the major components has been masked by naming it “upgrading” instead of “maintenance”.

As the construction of the plant and the manufacture of the fuel is associated with carbon emissions, the levying of a carbon tax on the suppliers will also lead to increased costs. The alloy components, such as nickel, chromium and steel are all dependent on the mining of ores of a decreasing grade. Also copper and other metals in the control and instrumentation are subject to price rises. It is inevitable that the next contracts, if negotiated at a fixed price, will be subject to variations based on component prices. It would be a brave trader offering fixed future commodity prices over a perhaps 10 years contractual period.

The economic analysis in the successive White Papers is therefore out of date and a revision may prove impossible to conduct. The level of subsidy required by the generator will therefore be equally impossible to assess.

British Energy is currently around 70% owned by the French state, but half of the French fleet has to be replaced or upgraded in the next ten years, so unless the UK government passes some funds to the French government, the as yet undefined costs of the UK EPR fleet will not be found, especially as both EdF and Areva have huge debts. The regulators on both sides of the Channel are reluctant to allow tariffs to rise to generate the capital needed.

Without a generous subsidy from the British government to the generators, such as British Energy, RWE or E.On or in the case of EdF an undisclosed payment to the French state there will be no new build in the UK.

**Dependable**

The security of supply depends entirely on a 100% imported fuel manufactured from natural uranium. Primary mining provides only round 60% to 70% of the demand, the remainder coming from uncertain secondary sources, due to come into a state of flux after 2013. The Megatons to Megawatts US/Russian deal will be replaced by an ability to market uranium in the US and some supply deals have been forged.

Russian mining and demand is in parity, but much is promised to China, India, Korea and Japan, so as Canadian uranium mining is in severe decline, the end of the ex-weapons deal means that the US and France will be in competition for limited supplies.

See EN6—Figure 4 which plots individual Canadian uranium mines’ production showing its progressive decline.

France supplies Sizewell B with its fuel and with its own needs and that of its nuclear hegemony imports 13,000 tonnes a year from around 43,000 tonnes of primary mining, so that the withdrawal of the equivalent of 10,000 tonnes from the fuel market, will perhaps lead to some of the lights going out in France, which is over dependent on nuclear (76%) and where its indigenous mines are exhausted.

Areva will have to find 730 tonnes of uranium for the manufacture of the initial core charge for Olkiluoto and Flamanville.

Australian mining is in a less rapid decline but is also promising supplies of uranium to China, which in turn is becoming increasingly nervous as to its supplies for its burgeoning fleet. The Areva supply contract for two EPRs for China is tied to the successful opening of Areva’s Trekkopje mine in Namibia, 35% of which is promised to China. Kazakhstan was due to rapidly expand, but the Kazakh government has now announced that this is to be restricted. In any case its output has been forward sold to China, Russia, Korea and Japan.

The problem is that individual mines, like oil wells, follow a Hubbert curve of build-up, plateau and decline of output, so that to maintain national production a series of new mines needs to be opened. If nuclear power is to be doubled or tripled, then a succession of even more mines are needed. In Canada the Cigar Lake mine is flooded and may never open, while in Australia the Olympic Dam expansion will not open until 2018, if ever, after 2 billion tonnes of overburden are removed to reach the first ores below 300 metres of rock.

The huge building programme in China alone will mop up any surplus uranium and with the demands of new build in Russia, Korea and Japan a lack of supplies to the West can be anticipated. The optimistic forecast of the OECD/NEA “Red book” can be set aside when the experience in France is analysed. As the French mines approached their closure, the predicted “resources” were progressively reduced to zero.

See EN6—Figure 5 for the plots (EWG)

Nuclear power in the UK cannot depend on its fuel supplies.
SAFE

In 1971 a hole appeared in the Swiss Beznau-1 reactor vessel head after just two years of operation. A leak in a weld allowed boric acid, added to the cooling water as a neutron absorber, to attack the ferritic outer shell. This incident did not emerge until a much bigger hole appeared in the Ohio Davis-Besse reactor vessel head in 2002, some 30 years later.

At Davis-Besse the acid ate away at the thick outer shell, the pressure being held by the thin stainless steel liner. Although the liner was subject to cracking, the initial leak came from a crack in a “penetration” tube of Inconel 600 alloy steel into which a control rod is dropped. When major components are replaced, such as reactor vessel heads and steam generators, Inconel 690 is substituted, which has a higher chromium content and is considered to be more crack resistant, though some samples have exhibited cracking. The management of Davis-Besse were fined because of lax procedures, which could have led to a loss of cooling catastrophe, had the cracks in the liner led to a rupture of the vessel.

See EN6—Figure 6a and EN6—Figure 6b (NIRS Wise)

See also EN6—Figure 7a, EN6—Figure 7b and EN6—Figure 7c for details of the hole in the Davis-Besse reactor vessel head and the cracks in the stainless steel liner. (US Nuclear Regulatory Commission)

Tritium is produced by the neutron bombardment of boron, which then enters the grain structure of the vessel liners and generator tubes, resulting in intergranular stress corrosion cracking. This also leads to leaks in spent fuel pond liners, as boric acid is also added to the pond water as a neutron absorber. Also the irradiation of the enclosures leads to metal embrittlement.

The industry has introduced an ageing management practice, with internal monitoring specimens and in the case of the EPR reactor vessel a heavy stainless steel reflector surrounds the core. Its claims of a 60 year operational life are subject to regular 10 year inspections and component exchange when shown to be necessary.

MY CONCLUSIONS

During the build-up phase of new build, the construction and mining activities will add considerably to carbon emissions. Only after 40 to 60 years in retrospect can a nuclear power plant be considered to be low carbon.

The delays in the construction of the Olkiluoto EPR have shown new build to be uneconomic, especially highlighting the lack of skilled manufacturing resources.

The decline of primary mining production in Canada and Australia and the failure to open new mines of a significant size shows that uranium supplies are not dependable. The diluted ex-weapons fuel needs considerable tails enrichment facilities predominantly owned by the Russians and likely to be offered more widely to its nuclear hegemony.

From the moment the fission initiates, the metal enclosures are subject to irradiation attack and the ageing process begins. Safety depends on adequate monitoring of the ageing process over the 60 years operational life of the new build reactors and experience shows that this cannot be guaranteed.

The so-called nuclear “renaissance” has been instigated by a successful PR campaign and adopted by governments based on false claims of its low carbon nature, economic generation, dependability and safety.

December 2009

Memorandum submitted by Calor Gas Ltd

EXECUTIVE SUMMARY

— The current energy policy is identified as a driver of fuel poverty with fuel poverty to rise in the UK by 50% to 6 million.

— Wind and biomass are unlikely to deliver the 30% renewables target by 2020.

— The projection of peak demand by 2020 which the NPS is to work to looks unreasonably low; even at that level, and even if wind and biomass do deliver, we are looking at unserved demand from 2017.

— Wind is intermittent, was notable by its absence in the January 2010 freeze-up, and will have to be backed up by substantial new conventional capacity.

— The IPC is mandated to regard biomass as not detrimental to human health despite the Government.’s own calculations to the contrary

— The contribution to global warming of future emissions of black carbon from the big shift to biomass in the UK has not been calculated.

— Not all biomass is sustainable or carbon neutral: neither the EU nor UK have developed sustainability criteria.
We suggest that a greater emphasis on fuel cell mCHP would avoid the issues of crippling cost and danger to human health, would reduce the need for new conventional generating capacity, and help fill the looming “energy gap”.

1.1 We begin by challenging a fundamental tenet of the current energy and climate change strategy upon which the National Policy Statements (NPS) are built. We do this using the Government’s own calculations. With an official forecast of fuel poverty rising by 50% to 6 million we question whether the deliberately engineered price rises for fossil fuels to sustain the renewable energy strategy are morally or politically acceptable.

1.2 We proceed to challenge and call for testing of a number of other assumptions on which the NPS rest. Then, we propose a positive contribution that will provide a significant part of the solution to carbon reduction while not causing the unacceptable cost, dislocation, pollution, extra mortality, unintended environmental damage, and possible unserved demand implicit in the current policy mix.

**Eliminating Fuel Poverty?**

2.1 The Draft Overarching National Policy Statement for Energy (EN-1) states that the energy and climate change strategy has as one of its aims: “To support the elimination of fuel poverty and protect the vulnerable” (para. 2.1).

2.2 HMG is committed to ending fuel poverty in vulnerable households in England by 2010 and ending all fuel poverty by 2016 (there are similar targets in Scotland and Wales). The figures have been going in the wrong direction since 2005. *The Sixth Annual Report on Fuel Poverty* (October 2008) read: “In 2006, there were approximately 3.5 million households in fuel poverty, an increase of around one million households since 2005. Around 2.75 million of these were vulnerable households, an increase of around 0.75 million... Projections of fuel poverty in England for 2007... show that prices are likely to have pushed a further 0.7 million households into fuel poverty. Projections for 2008 show a further increase in fuel poverty for England, of around 0.5 million households.” On 16 December 2009, an OFGEM presentation admitted to four million households in fuel poverty and forecast it to rise to cover six million. It is hard to believe that fuel poverty targets can be hit in either 2010 or 2016.

2.3 The Impact Assessment of the UK Renewables Strategy published by HMG on 13 July 2009 puts the annual cost of the policies at £4.3 billion: this delivers an annual average benefit of £0.3 billion (monetised carbon benefits). Over a 20 year period the net benefit of the policy is minus £56 billion. The total value of carbon saved over the same period is put at £5 billion. Thus, the a combination of the consumer, the taxpayer and the economy is going to have to pay 12 times as much as the computed disbenefit of the carbon to remove it. This does not make sense, particularly at a time of recession and when the taxpayer is probably going to face rises in taxation and cuts in public services.

2.4 Turning to the future burden on the consumer, the same Impact Assessment makes clear the impact on consumers’ bills as a result of adopting the Renewable Energy Strategy: “By 2020, we estimate that the measures set out in this consultation document, taken together, could result in increases in electricity bills of 10% to 13% for domestic and 11% to 15% for industrial customers; increases in gas bills of 18 to 37% for domestic and 24% to 49% for industrial customers” (para 74). Paragraph 54 admits, “Poorer households are likely to spend a higher proportion of their income on energy and so increases in bills will impact more on them”. We do not think it alarmist then to predict a big rise in fuel poverty contrary to all policy statements. The current climate change and energy strategy is a driver of fuel poverty, not an antidote to it.

**The Assumptions behind NPS**

3.1 The NPS is based on a number of assumptions:

— Around 30% of electricity generation will be from renewable sources by 2020. This will come primarily in the form of large amounts of onshore and offshore wind generation (EN-1, para. 3.1).

— The demand for electricity in generation in 2020 is likely to be at levels similar to now (around 60GW)—(EN-1, ibid.); and, that peak electricity demand will be between some 50GW and 70GW by 2022/23 (figure 3.1) with a central planning assumption of 60GW.

— That biomass is considered to be a renewable fuel (ibid., para.3.4.3).

— “The combustion of biomass for electricity generation is likely to play an increasingly important role in meeting the UK’s renewable energy targets” (EN3-3, para 2.5.1)

— Where operators of biomass plants are seeking to gain ROCs for the combustion of biomass as a renewable fuel, they must undertake annual reporting to Ofgem on sustainability issues relating to the sourcing of the biomass sourced including the volume and type of biomass used, country of origin and previous land use (ibid. para. 2.5.10)

— “Where a proposed modern biomass combustion plant meets the requirements of LCPD and will not exceed the local air quality standards, the IPC should not regard the proposed biomass infrastructure as being detrimental to health” (para. 2.5.40).

Each of these deserves careful note, challenging for robustness, and possibly challenging in principle.
Will 30% of Electricity Generation Come From Renewables by 2020?

4.1 We have repeatedly submitted that the wind energy targets—the ascribed primary source for renewables—are “heroic”. We have no reason to resile from that opinion. The 2008 Fells Associates Report, “A Pragmatic Energy Policy for the UK” said that the UK Renewables Strategy would, “Require a monumental shift in investment and build rate for renewables”. It still does. The total installed capacity of windfarms in the UK according to the British Wind Energy Association (BWEA) as of January 2010 is 4,070MW—13% towards the target of 31,000MW (RAB). In BWEA’s, “England’s Regional Renewable Energy Targets: Progress Report” (2009) they admitted that onshore wind targets will be missed by 45%: “England’s regions are set to comprehensively miss their targets on generating electricity from renewables”. The UK Renewables Strategy saw a need for 25GW offshore wind capacity by 2020: the Prime Minister is now talking of a potential of 32GW. Fells (op cit) regarded even the former target as “bizarre”. It “Would mean installing 10 turbines a day from now to 2020 (utilising the average 60 possible working days a year). This is 10 times the best installation rate achieved anywhere for offshore installation, yet the UK has just one suitable heavy-lifting barge available at the current time . . . (MPI Resolution) capable of installing these huge machines in the seabed, and that cost £75 million”. The purpose of our doubt is not to attack wind as a power source but to point out that our already tight capacity margins prior to 2020 need especial attention—of which, more later.

4.2 As for the potential contribution from biomass the Government acknowledged “constraints to the provision of such infrastructure” (“The UK Renewable Energy Strategy 2008) including “public hostility to combustion plant, particularly those burning waste” (ibid) Professor David MacKay, Special Adviser in DECC unrepentantly called for “industrialising really large tranches of the countryside” (11 September 2009—Times Online) to supply biomass. The renewable strategy depends on doubling the land devoted to energy cropping in every year from 2010–17. The expectations of biomass look as heroic as for wind: “To date there has been a failure to achieve significant planting of woody energy crops in the UK” (Combating Climate Change, Forestry Commission, 25 November 2009, para 14.2).

Are We Right to Rely on 60GW Peak Demand by 2020?

5.1 As admitted, there is a very significant range in forecast peak demand by 2022–23—between 50GW and 70GW. This argues for an approach that allows maximum flexibility and less prescription. If the NPS bowls for 60GW and 70GW is needed, what then?

5.2 Besides, is Government right to assume no growth in electricity demand by 2020? The Renewable Energy Foundation found this assumption, “Very unlikely, since population was expected to increase, to around 64M, and the UK government is also predicting a return to economic growth” (4 Briefing Note and Comment on the UK Government’s Renewable Energy Strategy 27 July 2009). Dr John Constable, Director of Policy and Research for REF commented earlier: “We are deeply concerned that such flawed calculations will lead to counterproductive policy and uncontrolled cost at a time of economic vulnerability and rising levels of fuel poverty” (15 July 2009). On 18 July 2009, he went further: “The Government’s Renewable Energy Strategy is wildly and irresponsibly optimistic about the scale of the targets and so underestimates the risks, the difficulties and the costs facing the UK” (Daily Telegraph).

5.3 The UK Renewables Strategy 2008 is worth noting in regard to wind: “3.9.4 Analysis of wind patterns suggests that, at high penetration levels in the UK, wind generation offers a capacity credit of about 10–20%... This is an indicator as to how much of the capacity can be statistically relied on to be available to meet peak demand and compares to about 86% for conventional generation. This means that controllable capacity (for example fossil fuel and other thermal or hydro power) still has to be available for back-up at times of high demand and low wind output, if security of supply is to be maintained. New conventional capacity will, therefore, still be needed to replace the conventional and nuclear plant which is expected to close over the next decade or so, even if large amounts of renewable capacity are deployed.” The Renewable Energy Foundation Response to DECC Consultation on Secure Low Carbon Electricity clarifies just how little conventional capacity wind can expect to replace: “For the GB system the total onshore wind capacity credit has been determined theoretically to a first approximation to be the square root of the GW of wind capacity installed with variations above and below this value depending on the geographical dispositions of wind plant Thus, for 25 GW of installed wind capacity only 5 GW of conventional plant can be replaced leaving 20 GW in the role of standby capacity (also known as “Spare” or “Shadow Capacity”)” (28 October 2009).

5.4 Having cast doubt on the 2020 wind target and on the low estimate of total demand by then how high is the risk of unserved demand? Even with the full complement of wind things are going to be very tight between 2015 and 2027. Professor Fells forecast on 18 July 2009: “we face the possibility of rolling blackouts as soon as 2013” (Daily Telegraph).
5.5 Chart 24 of the “Analytical Annex” “Low Carbon Transition Plan” (15 July 2009) shows how the capacity margin in the grid system becomes uncomfortably close from 2015 onwards.

Chart 25 shows the expected energy unserved by the electricity system: 2017 will be the beginning of crunch time for electricity blackouts with 3GWh of electricity demand going unsupplied rising to 7GWh in 2027.

5.6 Of course, it is helpful if the wind blows in the first place. The Executive Summary of the “Analytical Annex” (ibid) recognised this problem but did not solve it: “In 2020, a larger proportion of renewable generation, particularly wind generation, will create challenges from increased intermittency. Analysis suggests that these risks to electricity security of supply are manageable before 2020, but that after 2020 they could potentially become a problem due to the closure of old gas and coal plants and additional renewable deployment”. The Daily Telegraph reported on 11 January 2010 that out of a UK capacity of 5% wind was delivering 0.2% during the January cold spell. The wind was not blowing when most needed. Andrew Horstead, a risk analyst for energy consultant Utilyx, commented: “This week’s surge in demand for energy in response to the cold weather raises serious concerns about the UK’s increased reliance on wind power… Failure to address these concerns could mean further rationing of energy in future years and could even lead to black-outs, so it is vital that the UK Government takes action now to avoid the lights going off,” (ibid)

Is Biomass to be Regarded as “Not Detrimental to Health”, Renewable and Sustainable?

6.1 The problems of biomass are discussed in the 2008 UK Renewable Energy Strategy in (paras 4.6.14–4.6.25). Biomass boilers without stringent controls will cause significant pollution in urban areas. The resulting pollution is being directed to rural areas because of lower existing levels of pollution in the countryside. We do “not yet well” understand the effect of particulates and NOx from biomass boilers—and, as the boilers age they will pollute more. Government admits that if biomass displaces gas there will be, “Increases in emissions of all major pollutants” (UK Biomass Strategy DTI, DIT, DEFRA, May 2007). An AEA study on biomass boilers (Technical Guidance: Screening Assessment for Biomass Boilers AEA, July 2008, table 4.1) tells us that a typical domestic wood burning boiler emit over 30kg of particulates per year per household. The emission of particulates causes 8,100 early deaths a year in Great Britain and an additional 10,500 respiratory admissions to hospital (Quantification of the Effects of Air Pollution on Health in the United Kingdom, DoH, 1998). Government also admits that the biomass policy would carry an extra health burden of £557M (Written Answer, 26 March 2009, column 695/6W). “The mortality health impacts of these scenarios were estimated to be between 340,000 and 1,750,000 measured as the number of life years lost in 2020 from the impact on air quality of increased biomass combustion” (Written Answer, 10 November 2009, column 219W); “the impacts on morbidity resulting from the uptake of biomass as a renewable energy source were not assessed” (ibid) and need to be considered in addition. Thus, current policies will damage air quality, lungs and hearts—despite the direction to the IPC to regard biomass as “not detrimental to health.

6.2 In 2009 the Government admitted, “The use of biomass for heat and power can pose a significant air quality problem. (Written Answer 2 November 2009, column 671W). It also admitted that it had not undertaken any evaluation of the climate change effects of the black carbon (BC) emitted through biomass combustion. BC is the second largest contributor to global warming after CO2. The UN’s Economic Commission for Europe found that, “Urgent action to decrease (black carbon) concentrations in the
atmosphere would provide opportunities, not only for significant air pollution benefits (eg health and crop-yield benefits), but also for rapid climate benefits, by helping to slow global warming and avoiding critical temperature and environmental thresholds.” (UNEP’s Executive Body for the Convention on long-range transboundary air pollution, meeting in Geneva. 15-18 December 2008: Item 13 of provisional agenda. Air pollution and climate change: developing a framework for integrated co-benefits strategies). “Available research suggests that adapting future regulation and policy with a view to limiting BC emissions could significantly slow global warming. It would also yield benefits in terms of human health, reducing the social and economic burden associated with illness and reduced life expectancy as well as the associated costs” (“Black Carbon and Global Warming: Impacts of Common Fuels”, Atlantic Consulting, 2009). So, biomass is not only detrimental to human health, but the black carbon it emits also contributes to global warming—by how much the Government has made no calculation.

6.3 Government wants biomass to “play an increasingly important role” but Governments do not have a good record of picking winning technologies. It is now generally accepted that the emphasis on “first generation” biofuels was misguided—misspent subsidies encouraged the cultivation of non-sustainable biofuels, drove deforestation, and caused rises in food prices and starvation. The danger is that biomass will follow biofuels’ walk of shame.

6.4 The Environment Agency’s “Biomass—carbon sink or carbon sinner?”(April 2009) finds that using biomass for generating electricity and heat could help meet the UK’s renewable targets but “only if good practice is followed… worst practice can result in more greenhouse gas emissions overall than using gas.” Tony Grayling, Head of Climate Change and Sustainable Development, at the Agency said: “We want to ensure that the sector’s growth is environmentally sustainable and that the mistakes made with biofuels are avoided, where unsustainable growth has had to be curbed (Press Release, Environment Agency, 16 April, 2009.). Biomass operators have a responsibility to ensure that biomass comes from sustainable sources, and is used efficiently to deliver the greatest greenhouse gas savings and the most renewable energy. The Government should ensure that good practice is rewarded and that biomass production and use that does more harm than good to the environment does not benefit from public support.”

6.5 The UK Biomass Strategy (op cit p.41) made a convenient—but dangerous—assumption: “For all biomass resources no net emissions during production assumed”. All the emissions produced during planting, harvesting, sawing up and delivery of these bulky and heavy items are ignored. The Environment Agency points out, “How a fuel is produced has a major impact on emissions: transporting fuels over long distances and excessive use of nitrogen fertilisers can reduce the emissions savings made by the same fuel by between 15 and 50% compared to best practice”. There is thus a risk with biomass of significant and continuing depletion of carbon stocks. The climate change impact of preserving a forest is not the same as burning the same forest. It is a point that the American scientist Timothy Searchinger has made: “Take an acre of forest. “You cut it down, you burn it. You lose all the carbon that is stored in the trunks. You also lose the carbon in the roots. You lose on the order of 25% of the carbon in the soil is also lost to the atmosphere,” (Daily Princetonian, 6 February, 2009). Atlantic Consulting (op cit) makes it quite clear that there is good and bad biomass: “Most carbon footprints assume carbon neutrality of wood or other biomass used as fuel, ie biogenic CO2 is assigned a GWP of zero. In recent years, however, this method has come into question. First came the issue of land-use change, which is no longer accepted as automatically carbon neutral. Losses of carbon stock due to land-use change (for instance, deforestation to create cropland) should now be included in most footprints. More recently, researchers such as Rabi (2007), Johnson (2009) and Searchinger et al (2009) have proposed that carbon-stock changes in general should be tracked in biofuels accounting. As Searchinger et al (2009) put it: “Under any crediting system, credits must reflect net changes in carbon stocks, emissions of non-CO2 greenhouse gases, and leakage emissions resulting from changes in land-use activities to replace crops of timber diverted to bioenergy.” HMG have yet to apply the carbon stock methodology to biomass.

6.6 What then are the sustainability criteria for biomass? The European Commission failed to report on the need for a sustainability scheme for biomass used as energy by the end of 2009 under the EU’s new Renewable Energy Directive because of internal dissension. The biomass operators maintain—as well they might—that there is no need for binding sustainability criteria. The Government are awaiting the resolution of the EU sustainability criteria before implementing their own [WA, 7.1.10, col. 628W]. It is unsatisfactory.

**AN ALTERNATIVE APPROACH**

7.1 *The real solution lies in reducing household electricity consumption while encouraging citizens to produce their own energy.* “ Philip Selwood, Chief Executive, Energy Saving Trust, “Total Politics”, October 2009.

7.2 The solution we advance has the potential to deliver 50% reductions in carbon emissions in existing homes. It does not require great subsidies and will not place a burden on the economy. It will reduce rather than increase fuel bills, placing downward pressure on fuel poverty. The technology is practical and commercially viable—it does not carry the risks of Government picking winners. It is based on clean technology—cleaner than oil, coal, and biomass—and it will not worsen air quality or harm human health. It will also provide greater stability to the power supply, providing protection against power cuts. In both urban and rural areas, gas or LPG powered micro-CHP fuel cell boilers allow us to reach the carbon output targets by low-cost, close to market solutions without the need for punitive levies. mCHP fuel cell boilers are simple to operate, easy to install in a majority of UK homes, retrofit in existing homes and maintain,
7.3 LPG is the lowest carbon-emitting fossil fuel available in rural areas and LPG technology continues to develop quickly in response to the UK’s low carbon requirements. Calor is investing with the UK company, Ceres Power to bring the next generation of boilers to market by 2012. This high efficiency condensing boiler will heat the property and also generate up to 80% of the electricity required in the property. Generating electricity locally avoids the wasted energy associated with power stations and transmission systems. It will provide a measure of black-out protection since the system can keep the power running during the predicted power cuts. This fuel cell boiler will cut carbon emissions on an average property using oil by up to 50% through an investment of only approximately £2,000 more than a modern condensing boiler. Combined with solar technology and insulation measures a fuel cell boiler should be able to achieve the 80% emission targets that government is seeking by 2050. These boilers will be able to be serviced by engineers with existing skills. Micro-CHP units can reduce total household energy bills by 25%. It will be very cost-effective per tonne of carbon saved. For urban areas on the gas mains, an equivalent technology is being developed by British Gas/Ceres that carries the same advantages as the LPG fuel cell boiler and will be available in 2011.

7.4 The CO₂ savings from mCHP are determined by the generating plant it displaces; the displacement is in turn determined by the “merit order”. So, mCHP will reduce demand for central fossil fuelled generation, without displacing renewables or nuclear. Relative to a high efficiency condensing boiler and grid supplied electricity each mCHP home can save 1–1.5 tonnes of CO₂ per annum. Since mCHP if adopted en masse reduces peak demand, it will also reduce generation investment requirements, lessening the cost of the climate change strategy.

7.5 The projections of take up and electricity generation potential by BERR (The Growth Potential for microgeneration in England Wales and Scotland—June 2008) are very impressive, especially if mCHP benefits from FIT:

![Example scenarios for UK fuel cell mCHP adoption](image-url)

<table>
<thead>
<tr>
<th>Numbers of Installed Fuel Cell Micro-CHP</th>
<th>Scenario</th>
<th>2015</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
</tr>
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<tbody>
<tr>
<td>Baseline</td>
<td>6,400</td>
<td>395,000</td>
<td>1,910,000</td>
<td>3,580,000</td>
<td></td>
</tr>
<tr>
<td>Soft Loan</td>
<td>6,400</td>
<td>4,190,000</td>
<td>13,700,000</td>
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<tr>
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<td>16,000,000</td>
<td>26,600,000</td>
<td></td>
</tr>
<tr>
<td>Electricity FIT</td>
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<td>6,690,000</td>
<td>21,500,000</td>
<td>31,200,000</td>
<td></td>
</tr>
</tbody>
</table>
7.6 The NPS is, in contrast, exceedingly disappointing:

“3.3.18 Decentralised and community energy systems could also lead to some reduction in demand on the main generation and transmission system. They can offer significant economic and efficiency benefits, particularly where heat as well as electricity can be put to commercial use, and reduce pressure for expansion of the national transmission system. However, decentralised and community energy systems are unlikely to lead to significant replacement of larger-scale infrastructure. This is because interconnection of large-scale, centralised electricity generating facilities via a high voltage transmission system enables the pooling of both generation and demand, which in turn offers a number of economic and other benefits, such as more efficient bulk transfer of power and enabling surplus generation capacity in one area to be used to cover shortfalls elsewhere. The lead scenario in the UK’s Renewable Energy Strategy contains around 4 GW of small scale electricity generation”.

7.7 As can be seen, the NPS sees mCHP contributing 4GW, whilst the potential, as assessed by HMG is for it to be in the great majority of UK households, contributing nearly a quarter of electricity generation. Given the immense cost and damage to human health involved in the current strategy we would suggest that the Government compares the overall costs of moving down the mCHP route with the trajectory implicit in NPS.

January 2010

Memorandum submitted by the Campaign for National Parks

CNP considers that there are some fundamental issues to be addressed before the NPSs can be designated and considered sound. This submission focuses on EN-1 (overarching energy), EN-5 (electricity networks infrastructure) and EN-6 (nuclear).

1. National Policy Statement for Overarching Energy (EN-1)

Assessing nationally significant infrastructure projects in National Parks

1.1 The guidance in the draft NPS for assessing projects in National Parks must be altered so that it reflects properly the rigorous examination required for such projects and the test that must be satisfied before such projects can be considered to be acceptable (exceptional circumstances and public interest must be demonstrated).
1.2 We are concerned that the guidance within para 4.24.7 is at odds with current Government policy for assessing major development proposals within National Parks, as set out in para 22 of Planning Policy Statement 7. The draft NPS attempts to define exceptional circumstances as those where development can be demonstrated to be in the public interest. This is in contrast to existing Government policy which is that both exceptional circumstances and public interest must be demonstrated (the two are not always necessarily equivalent) in order for a major development proposal to be considered acceptable. Footnote 68 also changes existing Government policy as it attempts to redefine national considerations as including the contribution of the infrastructure to the regional economy. Nor is there any reference to the requirement for such proposals to be subject to the most rigorous examination. When taken together, the changes constitute a significant perversion of a key Government policy, the principles of which have remained unsullied throughout several governments. We therefore suggest the following rewording:

*Nationally significant infrastructure projects should not take place in these nationally designated areas, except in exceptional circumstances. Because of the serious impact that nationally significant infrastructure projects may have on these areas of natural beauty, and taking account of the recreational opportunities that they provide, applications for all such developments should be subject to the most rigorous examination. Nationally significant infrastructure projects should be demonstrated to be in the public interest before being allowed to proceed.*

1.3 The reference to the regional economy in footnote 68 should be deleted. National Parks are designated for the nation’s benefit and because of their national significance—the suggestion that a contribution to a regional economy is a national consideration is not only prima facie wrong; it must also be regarded as an attempt to undermine the national significance of nationally designated areas.

1.4 The wording of this test also needs to be corrected in the gas and oil pipelines NPS (EN-4).

**The weight attached to development plans**

1.5 CNP considers that the suite of draft NPSs do not, either individually or collectively, give sufficient weight to the relevance of the development plan (currently comprised of the Regional Spatial Strategy and the Local Development Framework) to the Infrastructure Planning Commission.

**Need and the absence of a locational strategy**

1.6 The draft NPS is based on a premise that there is a considerable need for new investment over the coming years and that any new provision is needed. As part of this approach, the market is left to decide where proposals for new electricity generating infrastructure will come forward—for example, the proposed list of sites for nuclear power stations within EN-6 have been identified by promoters on the basis of market considerations, rather than through a rigorous site selection process based on sustainability criteria.

1.7 While we accept that the Government should not prescribe what development will be provided where, the absence of any priorities or steer for where infrastructure might be most desirable, acceptable or necessary is unhelpful. In our view, this is unlikely to result in the more strategic approach the Government aspires to—instead, objectors will continue to resist developments on a case by case basis. The need case will not be accepted by the public, as the draft NPS appears to be saying that whatever promoters say is necessary is necessary, regardless of the impacts that this might generate.

**Cumulative impact of development**

1.8 EN-6 highlights the importance of considering the cumulative effects of nuclear development but EN-1 does not provide any guidance on how the cumulative effects of all energy infrastructure, including nuclear and transmission infrastructure, will be identified and assessed.

1.9 Significant cumulative impacts would arise if a number of different installations came forward in the same general area—for example, Cumbria is endeavouring to establish itself as Britain’s Energy Coast with proposals and possibilities of nuclear, wind (onshore and offshore), tidal developments and their associated infrastructure. At which point will the potential cumulative impacts of these separate developments be considered, including on the special qualities and statutory purposes of the Lake District National Park? CNP suggests that the Committee’s questioning of promoters and the Minister ought to include some potential scenarios such as this in order to probe them on how cumulative impacts will be assessed in practice.

2. **NATIONAL POLICY STATEMENT FOR ELECTRICITY NETWORKS INFRASTRUCTURE (EN-5)**

**A strategic approach to transmission is needed**

2.1 A strategic vision is needed for the UK’s transmission network but unlike the scenarios presented by the Electricity Networks Steering Group this must have sustainability considerations at its heart. At present, National Grid is required to provide connection agreements for each new site of generating capacity before any assessment is made of the appropriateness of either the location of the generating capacity or the grid connection that it would require. A strategic vision of the electricity transmission network (onshore and offshore) is called for and this must factor in environmental considerations—such as the location of National Parks and other nationally designated areas—if it is to win public acceptance.
Mitigating measures

2.2 The draft NPS does not take a positive enough view of mitigating measures such as undergrounding. This should be de rigueur in nationally designated areas such as National Parks.

2.3 Research by Ofgem demonstrates that the public is willing to contribute financially towards the undergrounding of lines in sensitive landscapes. Much progress has been made on undergrounding visually intrusive distribution lines through a special funding allowance to Distribution Network Operators set up by the price control review process. Where a new transmission line is proven necessary in a National Park following the rigorous process outlined in paras 1.2 and 1.3 of this submission, its entire length must be undergrounded within that landscape (subject to consideration of possible local impacts on interests such as archaeology) and funds must be available for this. The process for offering connection agreements to generators is not transparent and should not be divorced from the consenting process for nationally significant infrastructure projects—the two must be linked.

Joined-up approach to applications for generation and associated development

2.4 The Infrastructure Planning Commission should be given the strongest possible encouragement to consider applications for power stations and associated development such as grid connections at the same time. This is especially pertinent to the proposed greenfield sites at Kirksanton and Braystones where is currently no grid infrastructure. This would enable the Government’s vision of a single integrated consent regime to be achieved in practice and the overall acceptability of a project to be considered before development consent is issued for individual elements.

3. National Policy Statement for Nuclear (EN-6)

Legality in respect of the Habitats Directive

3.1 We are concerned at the legality of the draft NPS in respect of the Habitats Directive and its test of Imperative Reasons of Overriding Public Interest (IROPI). The draft NPS relates the grounds for IROPI to the protection of human health and public safety and to beneficial consequences of primary importance for the environment (ie tackling climate change). Given this, the Government is not seeking an opinion from the European Commission, despite the presence of priority habitat types within sites which may be affected. We think that this argument is flawed and agree with the many other submissions to the inquiry that the legality of this element of the draft NPS should be tested.

Site specific considerations

3.2 We have serious concerns about the suitability of the proposals for Kirksanton and Braystones because of their impact on the setting, tranquillity and special qualities of the Lake District National Park. The ecological impacts at Kirksanton would be extreme, and both sites would have impacts on internationally and nationally designated sites of ecological importance. Coupled with the adverse impact on the Lake District National Park and other factors such as the impacts on the marine environment, we consider that there is a compelling case to remove both sites from the NPS.

3.3 We are concerned about the cumulative impact of up to three nuclear power stations in this remote, rural part of Cumbria—scrutiny is needed of how will this assessed by the Infrastructure Planning Commission and the process by which the public will be able to make its views known on cumulative impacts.

3.4 Three nuclear power stations, two of which would be greenfield sites, would expand significantly the character of the area dominated by nuclear power station infrastructure. Scrutiny is needed of whether this would be publicly acceptable before these sites can be included within the final NPS, especially given the impact on the character of the nationally designated Lake District National Park.

3.5 Given the small size of the Braystones site, we question whether it would be feasible for the intermediate level waste that it would generate to be stored there and whether there may be plans in the longer term to coalesce the site with Sellafield. While this may appear to offer operational efficiencies, this would further extend the area of countryside dominated by nuclear power station infrastructure and increase the impact on the Lake District National Park.

3.6 We do not accept the validity of the site selection process through which the ten listed sites have emerged. They have come forward simply because developers have nominated them and in our view there has not been a rigorous assessment of whether there are any viable alternatives.

3.7 As mention in para 2.3 of this submission, the proposals for new nuclear power stations cannot be considered in isolation from the implications of strengthened or new electricity transmission infrastructure, especially as the latter would intensify as the number of power stations consented in West Cumbria increased. The least impactful options ought to be given the highest priority (undergrounding and using offshore connections), and grid capacity needs to be considered in the light of other non-nuclear major
energy generation schemes such as offshore wind and potential tidal barrages. These points are also relevant in respect of the new nuclear power station at Wylfa in North Wales, as this would have implications for the electricity transmission line that runs through the Snowdonia National Park.

January 2010

Memorandum submitted by the Campaign to Protect Rural England

INTRODUCTION

1. We welcome the opportunity to submit evidence to the Energy and Climate Change Committee on the proposals for energy National Policy Statements (NPSs). As a leading environmental charity, the Campaign to Protect Rural England (CPRE) has worked to promote and protect the beauty, tranquillity and diversity of rural England by encouraging the sustainable use of land and other natural resources since our formation in 1926.

2. We see the planning system as an essential tool for protecting and enhancing the countryside. We are one of the leading voluntary organisations engaged in both shaping and operating the land use planning system at all levels. Through our network of local branches, which operate in every county, and our regional groups, we engage in the planning process on a daily basis.

3. A prominent part of our recent engagement in planning has been in the debate on planning for nationally significant infrastructure projects (NSIPs), both in relation to national policy, and in responding to specific applications. Although CPRE raised significant concerns about the reforms recommended by the Planning White Paper (2007) and implemented by the Planning Act 2008, we have long supported the principle of national policy statements. NPSs will play a critical role in our national planning framework and will shape key decisions on long-lived infrastructure and patterns of development. In this context, getting them right, both in terms of content and process, is essential.

EXECUTIVE SUMMARY

4. CPRE recognises the urgent need for low carbon energy infrastructure and the challenge climate change poses, but we believe that the energy NPSs need to be further developed before they can be designated. While we support the development of NPSs in principle we believe that it is essential that we do not rush to meet an artificial political deadline in developing these documents. To be effective NPSs will need public legitimacy; allowing adequate scrutiny and time to amend the NPSs in light of public concerns is vital.

5. In making recommendations to Government about the draft NPSs we propose that the Committee consider the following key points:

— The NPSs should set out a spatial vision for the future development of energy infrastructure and should be effectively integrated with existing PPSs. If the documents provide a stronger steer to decision-makers about the optimum locations for new energy infrastructure, it is more likely that future energy infrastructure will be developed in a coherent manner which integrates environmental, social and economic concerns. The documents do not need to be site specific, but more detailed criteria should be included in the documents to ensure applications come forward for projects in the most appropriate locations. Providing more spatial criteria is likely to reduce uncertainty for developers and the public, which should allow for more rapid development of necessary infrastructure.

— The NPSs should not assert an unlimited need for new energy generation. The case has not been made for unlimited, “one-dimensional” need for all forms of energy infrastructure. Requiring the IPC to assess applications on this basis undermines the ability of planning to integrate and balance competing uses of land, and to ensure that the infrastructure that is built matches emissions targets and community aspirations. The Government should redraft EN-1 to establish broadly how much of each technology they believe is needed in relation to security of supply and emissions targets, and this should guide both the IPC and applicants.

— Getting the right balance between national need and local adverse impacts will be one of the IPC’s biggest challenges. The guidance in the draft NPSs on how the IPC should consider local impacts, whether raised in Local Impact Reports by local authorities or by third parties, is totally insufficient. At present, it is difficult to imagine how negative local impacts could outweigh national need as currently expressed in the NPSs.

— The aim of the NPSs is to establish medium-to-long term national positions which will largely determine the shape of the future energy system. It is intended that these positions will not be reconsidered when individual applications are being determined by the IPC. Before curtailing further debate on these contentious, strategic issues it is essential that there is a full national public consultation which includes provisions for iterative debate. We are not calling for unnecessary delay and do not envisage that this should take an undue amount of time. We believe, however, that the Government is currently taking a “tick box” approach to consultation, rather than encouraging genuine input.
The objectives of the NPSs have been drawn so narrowly in relation to the Appraisal of Sustainability that all reasonable alternatives have been excluded. This applies both at the strategic level and at the level of eventual IPC scrutiny of individual projects. Empowering the IPC to consider reasonable alternatives and requiring applicants to provide evidence on these alternatives is not incompatible with a swift and effective decision-making structure and not doing so is likely to be unlawful.

A Coherent and Practical Planning Framework

NPSs as planning policy documents

6. As Planning Policy Statement (PPS) 1: Delivering Sustainable Development highlights, sustainable development is the core principle underpinning planning. When planning is undertaken well, it should be a positive process, which operates to promote the public interest by preparing plans of, and control over, the development and use of land. In order to fulfil this function in an integrated fashion, planning policies at local, regional and national level must operate to deliver the four aims of sustainable development set out in the Government’s Strategy for Sustainable Development (1999). These are:

— social progress which recognises the needs of everyone;
— effective protection of the environment;
— the prudent use of natural resources; and
— the maintenance of high and stable levels of economic growth and employment.

7. Moreover, clause 10 of the Planning Act 2008 requires the Secretary of State, when designating a NPS, to do so “with the objective of contributing to the achievement of sustainable development”.

8. We do not believe that environmental, social and economic issues have been considered in a sufficiently integrated way in the draft energy NPSs to reflect sustainable development principles. It is clear that there is an urgent need to reduce carbon emissions and to ensure an energy supply that meets the country’s needs. But this urgency is not so acute as to justify a planning process which fails properly to consider the long term potential impacts, especially environmental impacts, of the most significant programme of energy-related development in decades. The value of planning lies substantially in aligning, integrating, and ultimately reconciling competing interests within the framework of the long term public interest. The NPSs place too much emphasis on a one-dimensional conception of need and fail to provide adequate guidance on, and show sufficient regard to, sustainability criteria. The draft documents also include too little information on how infrastructure should be located to minimise environmental impact and therefore should not be designated in their current form.

9. CPRE has supported the creation of NPSs in principle as a means to clarify national policy on major infrastructure projects in the past, but we do not believe that NPSs should override established planning policy as set out in Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs). EN-1 has not been drafted in the context of PPS1 which sets an overarching framework of sustainable development for the planning system as a whole. If EN-1 is intended to operate within the existing framework, we believe explicit reference should be made to PPS1, and the principles of sustainable development should be evident throughout the document. If, on the other hand, the intention is to change the overarching framework for energy infrastructure away from sustainable development the public should be consulted on this significant change to the planning system.

10. Although the NPSs were developed to guide the decisions of the IPC, they will also become material considerations for local authorities determining applications for energy infrastructure through the town and country planning system (paragraph 1.2.1). We believe in order to provide a planning framework for energy, the aim of EN-1 should be to provide an overview of the Government’s energy policy, including in relation to renewable energy infrastructure, such as wave and tidal power, which the Government does not believe would currently deliver schemes that meet the IPC’s thresholds. At the moment EN-1 is entitled Draft Overarching National Policy Statement for Energy but paragraph 1.3.1 explains that the document only “sets out the Government’s policy for delivery of major energy infrastructure“, rather than a coherent statement of energy policy. Making EN-1 a more coherent overview would help direct local decision makers when they consider applications that fall below the IPC’s thresholds and would contribute to a more coherent planning framework. The technology specific NPSs (EN-2 to EN-6) should provide guidance to the decision-makers in the IPC and for applicants in developing their applications for schemes above the IPC’s thresholds.

11. If the NPSs are to fit more coherently into the existing planning framework, a more explicit link needs to be established between work at the regional and local level to plan for new energy infrastructure. We believe that there needs to be a clear link, for example, with the “bottom-up” processes which aim to identify capacity for, and constraints to, the delivery of renewable energy infrastructure, such as those promoted by the Renewable Energy Strategy (UK RES) which states that the “Office for Renewable Energy Deployment will provide up to £1.2 million of support to help all regions put in place a robust evidence-based assessment of their capacity for energy projects”. It is essential that the IPC’s decisions do not override and contradict this important work.
12. Overall, we are concerned that the purpose of NPSs is not sufficiently defined. At present, the NPSs seem to be trying to achieve four aims: a minimal statement of Government energy policy sufficient only for IPC-level development control; partial justification for Government energy policy; guidance to the IPC on how to determine applications; and guidance to applicants on preparing applications. Planning reform at the local and regional level has tried to make the distinction between policy and guidance clearer, for example in Regional Spatial Strategies, and we feel the NPSs represent a backward step in this regard.

Spatial planning for energy infrastructure

13. CPRE has long advocated the benefits of a plan-led system. Compared with a simple development-control approach, developing long term plans within which decision-makers operate allows places to be shaped in a way which makes development coherent, and enables consideration of longer term benefits and drawbacks to different development options, with the result that development can be more beneficial to the wider environment. Development Plans are shaped by the views of communities who feed in through consultation exercises, but are also based on national policy and reasonable assessments of need and demand. Because draft EN-1 is clear that the NPS will prevail whenever conflict arises between a NPS and a development plan (paragraph 4.1.2), and because the NPSs do not promote an effective spatial planning approach, we are concerned that the NPSs in their current form will undermine a plan-led approach to energy development.

14. If the NPSs are to become effective strategic spatial planning documents, we believe they need to give a stronger steer to decision-makers about the optimum locations for new energy infrastructure. They do not need to be site specific, but more detailed criteria should be included in the documents to ensure applications come forward for projects located in the most appropriate locations. One way in which this might be achieved would be explicitly to expand and draw on the process for considering opportunities and constraints to renewables development at regional and local levels, as proposed in the UK RES and outlined above. This process aims to identify relevant spatial considerations for development and to develop energy targets which incorporate these considerations at a strategic level. Where schemes are proposed for locations that do not meet such criteria, a more spatially-literate suite of NPSs could require applicants to explain why this is the case.

15. In fact, there is already a precedent in draft EN-1 which draws on more spatially explicit strategic work done by the Electricity Networks Strategy Group (ENSG) (paragraph 3.8.5 onward). The government directs the IPC to have regard to this report when deciding on electricity transmission projects, but rather than seeking to build on the work of the ENSG, to assess this work strategically and from the perspective of sustainable development, and to create a set of criteria which could provide effective spatial guidance to the IPC, the NPSs direct the IPC to disregard the ENSG report when considering projects not covered by it—effectively directing the IPC to disregard spatial considerations when these conflict with a proposal.

16. A similar presumption in favour of development where spatial considerations might suggest that development is inappropriate can be found in section 4.24.7. This directs the IPC to consider consenting major development in nationally designated areas where it will contribute to the national and regional economy—a new and potentially damaging consideration; contribute to meeting the essentially unlimited national need for energy infrastructure; and cost less than the significantly limited alternatives that the IPC is empowered to consider in section 4.4. This very substantially weakens the long-established approach to assessing major development proposals in nationally designated areas as set out in paragraph 22 of PPS7. The implication is that spatial planning is largely a barrier to development, and that spatial policies should be disregarded where they might restrict NSIPs. CPRE fears this could have hugely damaging consequences for our most valued landscapes, including National Parks and AONBs.

17. In developing the criteria proposed there also needs to be more cross referencing between the NPSs. In EN-2,Draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure., for example, there should be a clear statement that when considering locations for fossil fuel generating stations applicants should be required to consider the routes the associated transmission lines and potential Carbon Capture and Storage-related pipelines will take. Paragraph 4.9.2 of draft EN-1 states that the “Planning Act aims to create a holistic planning regime” but it goes on to acknowledge that applications for generating stations may not always be submitted at the same time as applications for their associated infrastructure. Where an application does not cover the associated infrastructure, or they are not submitted in tandem, the IPC should still be required to take into consideration the likely impacts of it in determining the application for the generating station. Allowing separate bids for transmission lines and generation plants risks predetermining the later project, and recent examples of proposals for transmission lines—especially the Bramford to Twinstead overhead line, which is referred to as the “Sizewell C Connector” by the IPC—do not suggest that the NPS will deliver an integrated planning regime.

18. If they are to be effective strategic planning documents, CPRE also believes that the NPSs should give the IPC a steer on the broad national energy mix the Government is trying to achieve. This should be legitimately within the scope of the NPSs as the Planning Act 2008 states that they may “set out . . . the amount, type or size of development . . . which is appropriate nationally or for a specified area” (section 5(5)(a)).

19. Although there are projections of demand for different infrastructure types in the NPSs there is no indication, other than in draft EN-6, of how much of each technology is needed, or where different types of infrastructure should be located. Draft EN-1 actually adopts the opposite approach in stating that the IPC should start its assessment of applications on the basis that there is a significant need for all of the infrastructure covered by the energy NPSs except for nuclear (paragraphs, 3.7.1, 3.8.10, 3.9.8 and 3.10.8). Once the IPC has approved a number of schemes for a certain type of infrastructure it may be the case that approving further applications for new infrastructure of that type would not be appropriate for a range of technical and environmental reasons which do not relate to carbon emissions.

20. Guidance on cumulative impacts contained in the draft NPSs is also of concern to CPRE. We are particularly concerned that it fails adequately to address landscape impacts. This is because they focus narrowly on cumulative impacts of individual projects rather than taking an overview of the potential impacts of all of the new infrastructure the Government believes we need, has the potential to result in “death by a thousand cuts”. A more strategic analysis of the whole programme could seek to avoid this and we are not confident that the market will deliver the strategic approach that is needed.

Balance between national need and local impacts

21. Planning for nationally significant infrastructure projects will always be relatively controversial. As the 2007 Planning White Paper recognised the benefits of infrastructure are often widely dispersed and enjoyed by society generally, while the impacts of the projects are felt mainly by those in the immediate vicinity of the installation. Getting the balance between national need and local adverse impacts right will be one of the IPC’s biggest challenges. CPRE is disturbed at the relative lack of attention given to local impacts in the draft NPSs.

22. Local Impact Reports (LIRs) should play an important role in enabling the IPC to understand the local impacts a local authority believes a proposed scheme will have. In light of this role, it is disappointing that the guidance for local authorities on developing them has still not been published. Paragraph 4.1.1 in draft EN-1 sets out the key principles that the IPC should consider when determining applications and reference is made to these reports. CPRE is very concerned, however, that in some cases local authorities may not have sufficient resources to develop a LIR, or where they do they may not assess the full environmental, social and economic impacts on their area. In some cases it might be possible that a local authority would welcome the economic growth a proposed development would bring, so to encourage the IPC to approve the scheme may choose not to cover the full extent of the adverse impacts of a development or assess these fairly.

23. In such cases, evidence submitted by a third party may be crucial in ensuring the IPC is aware of all possible adverse affects so they can make an informed decision. Equally, third parties may bring forward evidence of further benefits of a scheme. Reference to the need for the IPC to consider carefully evidence from third parties when examining and determining applications for energy infrastructure should be referred to more explicitly in the draft NPSs.

24. Paragraph 4.1.1 also requires the IPC to consider local, regional and national environmental, social and economic benefits and adverse impacts of the applications. No guidance is given, however, on how such benefits and impacts should be considered against each other. This is an essential part of EN-1 that needs to be strengthened.

25. It is also important to note that the requirements above are preceded by the following:

“Given the level of need for energy infrastructure as set out in Part 3 of this NPS, if the development proposal is in accordance with this NPS and any relevant technology-specific NPS, then the IPC should operate on the basis that consent should be given, except to the extent that any of the exceptions set out in the Planning Act apply.”

26. Draft EN-1 generally lacks guidance on how the IPC should take forward their difficult role of balancing local adverse impacts with national benefits in their decision-making. Instead, the guidance repeatedly comes back to the conclusion that as the document has demonstrated a significant and urgent need for new major energy infrastructure limited weight should be placed on most other considerations.

27. Section 4.4 of draft EN1 on alternatives also needs to be redrafted to ensure that the IPC is required to try to establish whether the proposed project represents the best option. The energy infrastructure the IPC will be granting permission for is likely to be in place for decades; while there is a need for urgency in reducing our carbon emissions there is also a need for the IPC to ensure that development is of a high quality and in the most appropriate location. The third bullet point in paragraph 4.4.3, for example, should be deleted. If a site is proposed for development the IPC should judge it against suitable alternatives to ensure it is the most appropriate. It should not be for the IPC to speculate on whether an application may be submitted,
in the future, on other vacant sites and therefore whether or not it should remain vacant. In determining an application, the IPC should be expected to be able to judge a proposal against alternative sites that are available at that time.

28. Moreover, CPRE does not support the suggestion in paragraph 4.4.3 (final bullet point) in relation to alternatives put forward by a third party. Our concerns about this are set out in more detail below.

PUBLIC CONSULTATION AND PARLIAMENTARY SCRUTINY

National debate on energy policy

29. In the existing planning system, major proposals are usually subject to public inquiries, which consider local factors alongside questions of national need and energy policy. This process subjects plans and policy to rigorous and independent scrutiny, which plays a key role in addressing legitimate concerns about new development, and also in demonstrating to the more sceptical sections of the public that the major issues have been aired and decisions to proceed are legitimate. Indeed, the Government has regularly cited the example of Sizewell B, which spent only 30 of the 340 days of hearings on local issues, as justification for the new planning system for nationally significant infrastructure on the basis that it is inefficient to repeatedly establish national policy. CPRE believes that the fact that previous public engagement in national infrastructure planning has focused on national issues is a demonstration of the deep public concern and interest in national energy policy. This merits equally deep commitment from government to enable effective public engagement and scrutiny in the development of national energy policy.

30. Unfortunately, the energy National Policy Statements consultation and scrutiny process seems to be proceeding at a pace dictated by the desire to deliver economic growth rather than by a desire to engage the public and secure a degree of public consent over the policy. This is evidenced by the very short notice given for public meetings on the proposed nuclear sites which resulted in only 34 people attending the consultation meeting in Hartlepool and low turnout in other meetings, the fact that the public consultation period has coincided with both the Christmas holidays and Copenhagen climate negotiations, and the accelerated timetable set for parliamentary scrutiny. Worse, although there is now a public consultation on the aspects of government energy policy set out in draft EN-1, the energy policy is incomplete and there is no established forum in which to cross-examine the Government’s proposals. This represents a significant step backwards for public participation compared with the existing system.

31. CPRE does not want to slow the process of designating the NPSs down unnecessarily. Indeed, we believe taking more time to fully consult the public on the draft documents could reduce future delays due to opposition to specific applications at a later stage. In a recent project funded by the Economic and Social Research Council, researchers considered the factors underlying public support and opposition to renewable energy technologies. The final report, Beyond Nimbyism: a multidisciplinary investigation of public engagement with renewable energy technologies, found that the perception that a developer was listening to local concerns and could be trusted was an important part of the decision-making process. The research concluded that rather than trying to dismiss and undermine legitimate questioning and criticism of particular renewable projects, industry and policy makers should instead focus on protecting and nurturing social consent for what is a key part of a low carbon future.

32. The wider implications of this research are worth serious consideration. CPRE’s interpretation is that because the NPSs exclude many of the contentious issues for major developments from later consideration at an IPC inquiry, very substantial public engagement on the NPSs is required. The fact that the NPSs will be subject to consultation rather than independent scrutiny and that this consultation will take place at an abstract, seemingly remote, national level well before any public engagement is sought in relation to actual on-the-ground infrastructure poses a serious challenge. Because most people engage with national debates through the prism of local applications, there is a real danger that the public will only become aware of key debates over energy infrastructure after the decisions have already been taken. This risks creating public discontent without a legitimate process to deal with this discontent, and raises the spectre of judicial review and even direct action protests against particular infrastructure schemes, which would benefit nobody.

33. A starting point for achieving effective public involvement in the development of NPSs might be to articulate, in simple terms, the importance of the energy NPSs in relation to the existing planning system, and using examples of schemes that will be considered by the IPC to encourage people to engage in this debate.

Narrow focus

34. Throughout the suite of energy NPSs, a number of limits on what the IPC should and should not consider when taking decisions are set out. This is a legitimate aim for a national policy statement, but CPRE contends that the national framework, in line with aspirations to ensure effective public engagement in environmental decision-making, should seek to allow swift but fair consideration of all relevant factors. Taken cumulatively, we believe that the issues which are excluded or compromised by the NPSs prevent fair

16 See, for example, Lord Hunt of Kings Heath’s statement on the National Policy Statements, HL Deb, 9 November 2009, c646.
17 See, for example, the response to Mark Williams’ question on the attendance figures for the nuclear consultation events, HC Deb, 13 January 2010, c1049W.
18 Further information about the report can be found at http://geography.exeter.ac.uk/beyond_nimbyism/
consideration of many of the most important and environmentally-relevant elements of nationally
significant infrastructure projects. Our initial analysis of issues excluded from consideration in the NPSs has
focused on the overarching energy NPS.

(a) Need

35. The issue of need is discussed above, but is relevant to the consultation and scrutiny process because
of the implications of “blanket” need on the extent to which the public will feel that they can affect the
outcomes of development. Put simply, because the relative weight of national need is not defined in relation
to local impacts, and could reasonably be interpreted to be very significant, the identification of need
explicitly as a benefit to be weighed against negative impacts of proposals seems to imply that the benefit of
delivering infrastructure which helps to meet national need is as limitless as the claimed need for new energy
infrastructure itself. The benefit of delivering infrastructure is explicitly set against more readily defined (and
presumably limited) negative impacts on SSSIs (paragraph 4.18.11), ancient woodland (paragraph 4.18.14),
protection of habitats (paragraph 4.18.17), dynamic coastlines and coastal processes (paragraph 4.20.10),
flood risk (paragraph 4.22.13), landscape (paragraph 4.23.12), and open land (paragraph 4.25.17). Taken
together, this explicit invocation of national need seems to trump most of the non-climate related
environmental concerns, including landscape protection, which might motivate local engagement in the
planning process for NSIPs.

(b) Carbon implications of development

36. At the same time, although much of the justification for the creation of the IPC and NPS process
relates to the urgent need to reduce carbon emissions, it does not seem that the IPC will be able to consider
how the carbon impacts of new development might affect carbon budgets. CPRE is not advocating that the
IPC take charge of delivery of emissions targets, but as the IPC is the ultimate decision maker on the
infrastructure that is likely to deliver the bulk of these targets, it seems paradoxical that they should have
no regard to delivering emissions targets, and no guidance on the types of energy mix that would deliver our
targets. We support the Environmental Audit Committee’s suggestion that a link be established between the
Committee on Climate Change’s (CCC) carbon budgets and the IPC’s guidance19 and we suggest that the
most effective way of doing so is to be much clearer on the types of energy mix required to meet our carbon
budgets within EN-1, and have this scrutinised by the CCC following the development of the carbon
budgets. At the application level, emissions are a key environmental consideration which the IPC should be
empowered to take evidence on and assess impartially, and which members of the public should have the
right to scrutinise.

(c) Alternatives

37. Draft EN-1 explicitly states that it does not establish a “general policy requirement to consider
alternatives or to establish whether the proposed project represents the best option” (paragraph 4.4.1). Instead,
it notes that there are legal requirements for an assessment of alternatives in some cases, and seeks
to limit the IPC’s consideration of these, both with reference to the urgency of national need, but also as
regards the role of third parties in proposing alternatives.

38. While we agree that the IPC should not encourage delay by assessing frivolous or unreasonable
alternatives, we believe that the general presumption should be, in keeping with the spirit of the Habitats
and EIA directives, for the IPC to be satisfied that all reasonable alternatives have been considered.
Furthermore, we believe that where a reasonable alternative is proposed by a third party, it is unrealistic to
place the onus for providing evidence for alternatives on this third party, especially for NSIPs, which by
definition are large, complicated projects requiring substantial resources to provide adequate evidence for.

39. It is worth noting that the process for considering alternatives contrasts with the Government’s
approach on proposals for generating energy from the Severn Estuary, a potential energy NSIP. Concerns
about the Government’s SEA for the project have led to alternatives to a barrage being proposed by third
parties. Where these have the possibility of providing power at a lower cost to the environment, the
Government has undertaken to consider these third party alternatives. Similarly, in order to satisfy public
demand for investigation of more inchoate alternatives, the Severn Embryonic Technologies Scheme is
providing funding for the exploration of these. Although the Severn Estuary could provide around 4% of
UK electricity, and might therefore host a particularly large project, it is not clear that this makes it a special
case. A proposal for a twin reactor nuclear power station or a large coal-fired power station would produce
similar amounts of power, and we believe that the generally more positive approach to third-party
alternatives should prevail in the energy NPSs.

(d) Assessment of the relative merits of different technologies

40. The summary of national need (paragraph 3.1) states that the “IPC does not need to consider the relative advantages of one technology over another”. CPRE is concerned that this guidance, which is not expanded upon further in the document, is overly restrictive. While we recognise that Government energy policy is to allow the market to determine the overall energy mix, the NPS should be redrafted to explicitly clarify that the IPC should consider the relative advantages of technologies within a proposed project.

Appraisal of Sustainability (AoS)

41. CPRE’s analysis of the NPSs has not focused on the AoS in detail. However, we have reviewed the evidence submitted by the RSPB and WWF and support the analysis that reasonable alternatives for the NPSs were rejected inappropriately; that the opportunity to engage the public in national debate on existing policy on energy has been missed; and that the SEA focuses on the impact of the NPSs on the consenting process rather than the impact of the NPSs on the environment.

January 2010

Memorandum submitted by the CBI

1. The CBI is the UK’s leading business organisation, speaking for some 240,000 businesses that together employ around a third of the private sector workforce. Member companies include 80 of the FTSE 100 index, some 200,000 small and medium-sized firms, more than 20,000 manufacturers, and over 150 sectoral associations. The vast majority of our members are energy users, however we also have in our membership electricity generation and distribution companies, energy technology companies and upstream oil and gas businesses.

2. The CBI welcomes the opportunity to comment on the Department for Energy and Climate Change’s (DECC’s) draft Energy National Policy Statements (NPSs). This submission represents our initial views on the NPSs and focuses on the overarching Energy National Policy Statement (EN-1) which sets out the government’s energy strategy and explains the need for new energy infrastructure. We are continuing to consult members as we prepare a more detailed response to the DECC consultation.

3. This paper highlights that the CBI believes:
   — The designation of the energy NPSs will be a major step forward in getting the UK’s energy infrastructure fit for purpose.
   — The overall “assessment of need” in EN-1 is broadly correct.
   — The sections of EN-1 on gas storage and renewables should be amended.
   — The guidance on assessing alternative proposals and sites could be improved.
   — Greater clarity is necessary on the weight given to designated and draft NPSs in other development consent regimes.
   — Clarity is required on which decision-makers are able to determine amendments to extant development consent orders for nationally significant infrastructure projects.

The Designation of the Energy NPSs will be a Major Step Forward in getting the UK’s Energy Infrastructure Fit for Purpose

4. Given the scale of major infrastructure renewal needed, planning reform is essential to instil private sector confidence in order to attract the necessary investment and ensure timely project delivery.

5. The CBI’s 2009 energy report, Decision Time, stated that we need to invest up to £170bn in energy alone by 2030. However, project delays can unsettle the economics of major energy investments, and if investors think that the planning system is unpredictable and will lead to delays, then the business case for investment is reduced. This can be demonstrated in the case of Canvey Island, where a CBI member, as part of a consortium, submitted an application in 2006 to develop a Liquid Natural Gas (LNG) Terminal. The member had hoped that the new facility would operational by 2010. However following difficulties in the planning process it felt the facility would be not operational until 2012, causing the company to terminate its interest in the project.

6. The CBI therefore strongly supported the Government’s 2008 Planning Act which intends to streamline the planning system by separating policy-making from decision taking for nationally significant infrastructure projects, with the latter delegated to a newly established independent Infrastructure Planning Commission (IPC). The National Policy Statements (NPSs) shall therefore provide the policy justification for shaping the development of our strategic energy infrastructure.

20 Decision Time: Driving the UK towards a sustainable energy future, July 2009
Ev 248   Energy & Climate Change Committee: Evidence

THE OVERALL “ASSESSMENT OF NEED” IN EN-1 IS BROADLY CORRECT

There is significant need for new major energy infrastructure

7. The CBI believes that the overarching NPS provides a compelling case for new major energy infrastructure to be delivered by the private sector in order to meet the UK’s decarbonisation and energy security policy objectives.

8. We agree with the Committee on Climate Change’s (CCC’s) view that to achieve our legally binding carbon reduction targets, UK electricity generation must be largely decarbonised by 2030, with substantial progress by 2020. As the CCC stated, this implies carbon intensity in power generation falling from 500g/KWh to 100g/KWh which means that the share of low-carbon generation in the energy mix must rise from 26% today to 78% by 2030. This clearly requires a major deployment of new low carbon generation infrastructure.

9. Of equal importance is retaining our security of supply during the transition to low-carbon generation. As our ageing infrastructure comes offline during this decade, we must start building new generation capacity and upgrading our transmission and distribution grid at twice the rate we are used to in order to secure supply. Further to this, appropriate infrastructure will be required to manage the transition to becoming a major gas importer as North Sea oil and gas extraction declines.

The impact of alternatives to large new energy infrastructure will be limited

10. The CBI agrees with the government’s assessment that alternative measures will have a limited impact upon the need for large new energy infrastructure. While decentralised generation has a role to play and should be encouraged where cost-effective, the scale and speed with which we need to renew our energy system means that a relying mainly on small scale generation to replace retiring assets would be too risky. The section of EN-1 which covers this point could be expanded to justify this argument in more detail.

Diversity of generation and fuel supply is crucial in order to guarantee energy security

11. The CBI believes that no one technology will be able to meet both our decarbonisation and energy security policy objectives. Security is best guaranteed through a diverse range of generation technologies and fuels. The CBI therefore agrees with the argument in EN-1 that advocates a mix of renewables, nuclear and low-carbon fossil fuels in order to provide secure and flexible supply whilst achieving our extremely challenging carbon reduction targets.

Significant new nuclear build is required in the move to low carbon generation

12. We support the analysis in EN-1 demonstrating the need for new nuclear generation. We believe it would be extremely difficult to reach the CBI’s goal of making 80% of electricity generation “zero-carbon” by 2030 without the use of new nuclear power. Indeed, as a proven low-carbon technology, nuclear could make up a significant proportion of this 80%. Nuclear also contributes to energy security as the uranium fuel for nuclear plants can be easily stockpiled in the UK and can be sourced from a range of stable exporting countries.

13. Given that the UK’s existing nuclear capacity is nearing retirement, we believe that around 16GW of new nuclear would be a desired and plausible outcome by 2030, and we welcome the fact that this figure is broadly reflected in the nuclear NPS.

Low-carbon fossil fuel generation will be important in the long-term

14. The CBI also supports the contention in EN-1 that fossil-fuelled electricity generation will remain an important part of the energy mix in the long-term. Unlike nuclear and wind, it is able to operate flexibly, therefore aiding energy security by providing critical back-up for the more intermittent low-carbon generation sources such as wind, and load-following to meet in-day demand fluctuations.

15. However, to enable continued use of fossil fuel, and in particular coal, compatible with our carbon targets, the demonstration and commercialisation of Carbon Capture and Storage (CCS) is very important. To this end, the CBI accepts the government’s decision to prohibit the development of new unabated coal plants that do not demonstrate CCS and also supports the provision within the NPS that requires the IPC evaluates whether applicants for new fossil-fuelled power stations are Carbon Capture Ready.

Networks and supporting infrastructure are necessary

16. The CBI agrees with the government’s assessment of the need to significantly expand the UK transmission and distribution network. This will be required to manage a future generation mix which includes significant intermittent and some distributed generation.

17. The CBI also believes that this statement of need should be extended to account for future shared low-carbon infrastructure. For example, the IPC should be encouraged to consider favourable applications for oversized CO2 pipes for CCS demonstration plants to enable subsequent development of CCS clusters.
The risk of not meeting energy efficiency measures must be recognised

18. In our Decision Time report the CBI strongly supported the acceleration and extension of existing energy efficiency measures in order to reduce and better manage energy demand. However, we accept that such measures which rely on collective behavioural change are difficult to deliver, therefore the planning system must allow for the flexibility to deliver greater generating capacity to address potential short-falls in policy delivery.

The Sections of EN-1 on Gas Storage and Renewables should be amended

EN 1 underestimates likely scale of gas imports

19. Paras 3.9.4 to 3.9.7 of EN-1 rightly emphasise the urgent need for more investment in gas storage and possibly import capacity. Para 3.9.7, which explains why investors may seek to construct what appears to be “spare” storage and import capacity, is also significant and we strongly support it.

20. However, we have real concerns about the government’s assumptions about future gas imports, as set out in the overarching NPS, which suggest imports will be unchanged between now and 2020. This seems to be an optimistic assessment when compared to that made by Ofgem in their Project Discovery report which indicates that, even in the most optimistic scenario, gas imports are projected to rise to over 50bcm/year in 2020.

Renewables expansion must be cost-effective

21. The CBI agrees with the need for a large expansion of renewable energy as part of a diverse electricity generation mix. EN-1 takes its estimate for likely renewable deployment from the lead scenario in the Low Carbon Transition Plan (LCTP), which estimates about one third of electricity being from renewable sources. The CBI is on record (in our Decision Time report) as arguing that a target of 25% renewables by 2020 was both more feasible and overall more cost-effective. EN-1 should acknowledge the “stretch” that the current target involves and the risks that it may not be met.

22. In planning terms what matters is that the market has some flexibility to invest at different levels across the energy technologies, depending on cost and other factors. If progress in deploying one technology is slower than anticipated, then the NPS and the planning system must not hinder investors seeking to increase investment in another technology to ensure the overall carbon and energy security goals are met. This point, although acknowledged in the government’s “conclusion of need”, para 3.1, should be emphasised.

The Guidance on Assessing Alternative Proposals and Sites could be improved

23. The consideration of alternative design and locations of major development proposals is an important aspect of the planning system. Assessing alternatives is an important process to ensure developments are designed to take advantage of reasonable opportunities to limit the impacts of development on the environment, and local people and businesses. The need to consider alternatives arises across various consent regimes, however, is most stringent where an application is required to undertake an appropriate assessment under the Habitats Directive.

24. The process for identifying and assessing alternatives is resource intensive and has placed disproportionate burdens on applicants promoting infrastructure projects in the UK. The CBI therefore welcomes the Government’s decision to introduce new guidance to decision-makers (and applicants) through the draft NPSs—for Ports and Energy—to provide more certainty to applicants, and remove the scope for unnecessary burdens being placed on them.

25. The guidance in the draft NPSs for Ports (see section 2.3) and Energy (see Overarching Energy NPS [EN-1] section 4.4) on this issue are, however, different. Both approaches appear to have been developed to provide more clarity, but have different styles and in places different wording. The CBI would question the appropriateness of adopting separate approaches for guiding decision-makers on how to consider alternatives: it would undermine the need to provide applicants with more certainty about their responsibilities; and may expose future applications and the activities of decision-makers to legal challenge.

26. The CBI would therefore support the development of a coherent body of text on how alternatives are identified and assessed across all sectors, based upon the following considerations (which are broadly identified in both the Ports and Energy NPSs, albeit in different styles):

   — Alternatives need not be assessed where a project is not assessed to have any significant local adverse effects;
   — Alternatives should only be considered that have a realistic prospect of delivering an identified compelling need for infrastructure, in terms of them being physically and/or commercially viable;
   — Alternatives must be in accordance with the policies of relevant NPSs;
   — Alternatives presented by third parties should not be “vague or inchoate”, with an onus on third parties to present evidence for why it should be considered a realistic alternative.


**Greater Clarity is Necessary on the Weight Given to Designated and Draft NPSs in Other Development Consent Regimes**

27. NPS policies are a consideration for other development consent regimes which may determine infrastructure schemes that fall below the thresholds established in the 2008 Planning Act. Most notable among these are the town and country planning regime and the marine licensing regime, which was established in the 2009 Marine and Coastal Access Act.

28. The department for Communities and Local Government (CLG) published a letter in the name of the Chief Planner that it sent to all local authority chief planning officers on the 9 November. This outlined the government’s view that local authorities should take account of policies included in NPSs when determining planning applications for infrastructure projects that do not exceed the qualifying thresholds in the 2008 Planning Act. The weight to be given to draft policies is, however, less clear, and the letter does not have any statutory weight in the planning process. (The CBI understands that this letter constitutes the “further information” to be published by CLG on this issue, referred to in section 1.3.3 of the overarching Energy NPS).

29. The CBI would support the inclusion of a coherent body of text for NPSs across each sector clarifying the weight of policies in both draft and designated NPSs for developments, such as smaller renewable energy projects, that fall below the thresholds including in the 2008 Planning Act. This would provide statutory weight to the government’s view that NPS policies are a material consideration for other development consent regimes, and provide more certainty for applicants.

**Clarity is Required on Which Decision-makers are Able to Determine Amendments to Extant Development Consent Orders for Nationally Significant Infrastructure Projects**

30. It is possible that in some circumstances aspects of nationally significant infrastructure schemes may need changing after they have gained a development consent order under the 2008 Planning Act.

31. The CBI is currently unclear whether such alterations are possible, and whether they would necessarily have to be determined by the IPC (or by a local planning authority or another decision-making body). This may require legislative change, or the use of the powers under section 14 (3)(b) of the 2008 Planning Act, which grants the Secretary of State power to make further provision about the types of projects to be determined by the IPC.

32. The CBI would support clarity about the process, and application of NPSs policies for determining applications to amend extant development consent orders for nationally significant infrastructure projects. Such clarity could be provided through the redrafting of the draft Ports and Energy NPSs.

*January 2010*

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**Memorandum submitted by Centrica**

**Introduction**

Centrica welcomes the opportunity to give evidence to the Energy and Climate Change Select Committee on National Policy Statements (NPSs).

We have been supportive of the planning reforms introduced in the Planning Act 2008. Our support has been driven by the urgency to bring forward the construction in new energy infrastructure to secure UK security of supply. Last year, Centrica acquired a 20% stake in British Energy and is committed, given the correct economic circumstances, to build a new fleet of nuclear power stations required to deliver low carbon electricity in the future. Applications for these new power stations could be some of the first to be considered under the new planning reforms and the National Policy Statement for nuclear will be an important factor in this. Windfarms and associated infrastructures also need to be built to meet the UK renewable targets. Timely delivery of this new power generation is essential if security of supply is to be ensured and carbon emission reductions met.

We believe that it is essential that the planning reforms take effect as soon as possible and consequently want to see minimum disruption to the plans agreed under the Planning Act. We also recognise there is a delicate balance between offering sufficient opportunity to the public to express their views and ensuring timely but fair planning decisions. Sizewell B took six years to secure Section 36 consent following a public inquiry that cost £300 million and during which only 30 of the 340 inquiry days were devoted to local issues. To avoid a recurrence of such a prolonged planning process, it is essential that public views on national issues such as strategic need and safety should be addressed in the National Policy Statements and in the case of nuclear, the Generic Design Assessment. We also believe it is important to the effectiveness of the new planning regime that alongside the introduction of the NPSs, central Government or the IPC should embark on an awareness-raising campaign amongst key stakeholders, particularly Local Authorities, about the workings of the new planning regime and context that NPSs provide, so that projects are considered in the most effective manner possible.
Whilst the planning reforms are vital, they will not be sufficient alone to bring forward new low carbon investment in renewables, carbon capture and storage and nuclear. A robust, long term carbon price is required as a minimum to provide the right incentives to investors. Centrica is supporting an amendment to the Energy Bill which would enable the Secretary of State to introduce a mechanism to produce a floor in the price of carbon. We believe such a measure has the potential to offer confidence in the carbon price, improving the viability of low carbon investments in the UK.

Our views on the technology specific National Policy Statements are outlined below:

**OVERARCHING (EN-1) AND GAS INFRASTRUCTURE AND OIL & GAS PIPELINES (EN-4)**

Centrica fully supports the planning reforms and the need for a clear policy framework on consenting nationally significant infrastructure, which is generally provided by the National Policy Statements. Designation of the National Policy Statements is vital to deliver the energy infrastructure the country needs and avoid unnecessary planning delays. If the National Policy Statements are not designated, the questions of national need could be re-opened at each individual planning application introducing unnecessary delays.

The National Policy Statements clearly set out the need for significant new infrastructure but could be strengthened to express the criticality of this need in the following areas:

- A diverse mix of energy supply sources, of all sizes, is needed for the UK to ensure supply security and to make the transition to a low-carbon economy.
- With existing power generating plant due to be decommissioned within the next 10 years, conventional generating plant will continue to be needed to ensure supply security whilst low carbon infrastructure is developed; this will include building new gas-fired power generating plant to meet energy demand in the transition period and provide flexibility in the longer term.
- The forecast mix of annual gas production and imports in 2020—Figure 3.3 needs to be clarified to show a breakdown of the supply sources, ie interconnector imports and LNG.
- The role of the various gas supply sources in meeting peak daily winter demand in 2010 and 2020, expressed in graphical form.
- The reliance on imported gas in the future and the role of gas storage infrastructure in meeting daily and seasonal swing demand, and helping to reduce associated price shocks.

We believe the role of gas infrastructure in meeting other Government energy objectives and their other benefits to the economy could be better emphasised. Gas will still have an important role in future security of supply.

We fully support the need for thorough environmental assessment, but more emphasis on a cradle-to-grave approach is needed for any project in the consideration of environmental impacts.

We consider that carbon emissions and climate change are reasonably well considered in the NPSs.

Industry understands the benefits of holistic consideration of any project, but needs the flexibility to submit more than one application to the IPC where commercial or practical reasons dictate (eg generating plant and overhead power lines) although the detailed submission should provide an understanding of the totality of the project.

We fully support the non-spatial approach for gas infrastructure to allow the market to determine the best site from a commercial, environmental and strategic perspective.

**NUCLEAR (EN-6) AND ASSOCIATED DOCUMENTS**

Centrica fully supports the arguments in the nuclear NPSs setting out the clear need for nuclear power in the UK.

New nuclear power stations will play a vitally important role in the decarbonisation of electricity. It is important that new nuclear power stations are constructed and start generating from 2018 with increasing numbers over the following years. Nuclear power needs to be part of the UK’s energy mix alongside renewable energy and coal with CCS.

Nuclear power should be free to contribute as much as possible to the 25GW capacity gap left following 60GW of planned closures and a target 35GW new wind by 2025.

In the case of nuclear, we agree that it is necessary to identify specific sites which are suitable for nuclear deployment. Due to the unique siting requirements and the problems inherent with deploying nuclear technology at sites that have not previously hosted nuclear facilities, the number of potential nuclear sites in the UK is limited. It is therefore appropriate to identify these sites and to clarify that all these sites are required in order to avoid the issue of alternatives being re-opened at each individual planning application.

We believe Dungeness should have been included in the list of suitable sites. Of the 11 sites nominated, 10 have been included in the draft NPS. We believed that the only site to be excluded, Dungeness, should also have been included on the grounds of imperative reasons of overwhelming public interest. We believe all 11 sites are required to meet the 25GW capacity set out in the statement of need.
Centrica agrees with the government’s conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced by new nuclear power station in the UK. The government has a clear policy on waste management and disposal. Furthermore, waste has been safely handled and stored on licensed nuclear sites in the UK for well over 50 years. The Committee for Radioactive Waste Management (CoRWM) process to decide the disposal method for higher level legacy waste was extremely thorough and the geological method chosen is in line with international best practice.

FOSSIL FUELS (EN-2)

Centrica supports the fossil fuel NPS. We believe the NPS sufficiently supports the development of CCS in line with previous legislation and guidance on the application of CCS to new, and later existing, coal-fired power stations. It is right that development of CCS is aimed at coal-fired stations given their high level of emissions in comparison to cleaner gas-fired stations. With regards to Carbon Capture Readiness (CCR) at all new power generation stations, the NPS is generally consistent with previous guidance and this is welcome. However one area where there appears to be a slight difference in emphasis is with respect to demonstrating the economic feasibility of CCS technology during the lifetime of any new proposed station. Section 4.7.1 of EN-1 states:

“... In order to assure the Infrastructure Planning Commission that a proposed development is CCR, applicants will need to demonstrate:
— that sufficient space is available on or near the site to accommodate carbon capture equipment in the future;
— the technical feasibility of retrofitting their chosen carbon capture technology;
— that a suitable area of deep geological storage offshore exists for the storage of captured CO2 from the proposed combustion station;
— the technical feasibility of transporting the captured CO2 to the proposed storage area; and
— the economic feasibility within the combustion station’s lifetime of the full CCS chain, covering retrofitting, transport and storage.

We believe the final bullet point may need clarification as to how applicants are expected to demonstrate future economic feasibility, in line with the previous guidance on CCR, which includes the following:

65. Applicants should provide evidence of reasonable scenarios, taking into account the cost of the capture technology and transport option chosen for the technical CCR assessments and the estimated costs of CO2 storage, which make operational CCS economically feasible for the proposed development. As mentioned previously, Government will not consent any power station whose developers cannot envisage any reasonable scenarios under which operational CCS would be economically feasible.

66. The preparation of such economic assessments will involve a wide range of assumptions on each of a number of factors, and Government recognises the inherent uncertainties about each of these factors. There can be no guarantee that an assessment which is carried out now will predict with complete accuracy either in what circumstances it will be feasible to fit CCS to a proposed power station nor when those circumstances will arise, but it can indicate the circumstances which would need to be the case to allow operational CCS to be economically feasible during the lifetime of the proposed new station.

We also support the general concept that CHP should be properly considered for proposed developments, however there is some concern in the industry that without some accompanying qualification recognising the wide range of circumstances where CHP is not necessarily appropriate, the emphasis on the requirement for CHP may be overstated. It should be made clear that discounting CHP where it is technically or economically infeasible is a legitimate course for applicants to pursue.

It has been raised by some interested parties that perhaps the NPS with regards fossil fuels could or should be more specific with regards to locations for new developments as the nuclear NPS is. We do not agree with this and believe the non-spatial nature of the remaining NPS is the correct position. There are a great many factors involved in determining potentially suitable locations for fossil fuel development, and these cannot be assessed in the same way at the outset that they can for potential new nuclear developments.

RENEWABLES (EN-3)

Overall, Centrica supports the Renewables National Policy Statement and believes it is generally of good standard, but notes that it lacks key opening statements on why new offshore wind infrastructure is required, and has inconsistencies in the level of detail given throughout the document.

The new reforms under the Planning Act should drive better consultation with local communities and the NPS consultation allows everyone to comment on the IPC framework for decision-making, which Centrica welcomes.

21 Guidance on Carbon Capture Readiness and Applications under Section 36 of the Electricity Act 1989 is available on the DECC website via http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/consents_planning/guidance.aspx
The Renewables NPS lacks a clear opening statement on why the UK needs renewable technology and Offshore Wind in particular. This is evident in some of the other Policy Statements but not Renewables.

For example, the Nuclear NPS starts with a clear statement of the need for that technology; background on the Government’s policy in this area and key reasons why the named nuclear sites are important (page 6, from Nuclear NPS):

“The Government believes that, it is in the public interest for sites that can have new nuclear power stations constructed on them significantly earlier than 2025 to make a contribution in displacing CO₂ as soon as possible.”

All 10 sites in this NPS are needed.

The IPC should start its examination of development consent applications for new nuclear power stations on the basis that need has been demonstrated and should give this need, and the benefits of meeting it, substantial weight in determining the applications.”

Renewables NPS needs supporting statements such as the above to help promote investment and outline the key reasons why Round 3 and other future renewable projects are required, ie CO₂ emissions, security of supply, EU Renewable targets.

The Renewables NPS is loosely worded in certain areas, and then too prescriptive in other areas. For example, statements such as the below can leave wind farm developers too exposed to unlimited surveys for the entire lifetime of the site, at considerable cost to developers:

“2.6.51—Owing to the relatively new and complex nature of offshore wind development, the IPC should consider requiring the applicant to undertake monitoring prior to and during construction and during its operation in order to measure and document the effects of the development. This enables an assessment of the accuracy of the original predictions and may inform the scope of future EIAs.”

Whereas in other sections, the NPS goes into specific detail so far as to describe minimum cable burial depths, something which would be site-specific and following detailed surveys. In both cases, Centrica suggests the wording should be revisited and emphasise the site-specific nature of offshore wind farm development.

January 2010

Memorandum submitted by the Chartered Institute of Environmental Health

I refer to the Committee’s invitation dated 11 November and write on behalf of the allied organisations below. Though some may already have had contact with you on their own part and each expects to respond to the Department of Energy and Climate Change’s consultation in due course, we wanted to take the opportunity of your Inquiry to register some common concerns about the draft National Policy Statements (NPSs) for energy (but which may arise in connection with the other NPSs to come).

Like, we suspect, most other interested parties we are struggling with the sheer volume of material (including the Ports NPS) published together (which was far from ideal) and the concerns we express here are restricted to matters of some principles we believe they should reflect. It may be worth emphasising at the beginning that we are not ideologically opposed to the planning regime of which NPSs are a part, nevertheless because of (without exaggeration) the enormous influence which NPSs will have in that regime it is important that they are comprehensive, take account of everything they should do, and direct the Infrastructure Planning Commission (IPC) wisely.

That said, in no particular order, our concerns are:

1. Different infrastructure projects may be, to an extent, interdependent, eg where a power generation station will be dependent on developments in the supply grid, but it is important that consent for one does not make consent for another a fait accompli and the NPSs need to provide for applications to be considered in any necessary wider context.

2. Related to that, serial proposals for related projects eg for a generating station followed by a road or rail link (or, perhaps, a series of applications in respect of a single, large project eg for building A followed by building B) raise concerns about cumulative impacts and again, NPSs need to provide for each to be considered in their full context.

3. The active participation of Local Planning Authorities (LPAs) is an important part of the decision-making process in particular in the production of Local Impact Reports. Such Reports are likely to require considerable effort on the part of planners, supported by their environmental health colleagues and while both local authority manpower generally is under increasing pressure and the government has said it will not provide additional funding for LPAs for this purpose, the IPC needs guidance on how to proceed where a LPA is unable to take part appropriately. The consequence of such a failure is not just a technical matter, of course, but would concern our national obligation to facilitate adequate public participation in the process too.
4. While health will be a material consideration in applications, Health Impact Assessments should be expressly required in appropriate cases alongside Environmental Impact Assessments, using the WHO’s wide definition of “health”. We would also like to suggest that the IPC should contain Commissioners with suitable expertise in environment and health.

5. The NPSs should generally be more directory in their language, ie the purpose of policy being more than mere guidance, there should be more “must”s than “should”s in their texts, directing the IPC more in what (if not how) to consider rather than, apparently, leaving so much to its discretion or to what might be suggested to it by participants in a particular application. That is necessary in our view both to ensure thoroughness and so that its decisions reflect a truly strategic view; it would help too if the various NPSs took a more similar form (the draft for Ports differing from those for energy).

6. In particular in the absence of a national spatial plan which integrates plans for jobs, housing and tackling climate change with those for energy, transport and water, NPSs need to reflect spatial planning principles and to take more overt account of other planning guidance if the nation is to be certain that it will get the right infrastructure in the right place and address national needs in locally sensitive ways.

7. There needs to be some mapping of existing pollution controls to identify potential “residual pollution”, ie not covered by predictive pollution control regimes and which therefore needs to be controlled through planning conditions.

8. Clearer guidance needs to be given on the legitimate limits to “associated developments”.

9. The scope of Environmental Impact Assessments should not be limited by NPSs but should be a matter for the applicant in agreement with LPAs and the IPC while their influence should be left to the IPC; it would help if the guidance on general impacts, currently part of the NPSs, were removed and issued as associated guidance.

10. The Appraisal of Sustainability process is considered to carry risk related to compliance with the SEA Directive (2001/42/EC); of particular concern is the approach taken to the consideration of “reasonable alternatives”, with the Assessment of Sustainability Reports focussing on alternative approaches to the format of the NPS documents rather than appraising substantive issues related to energy policy.

We hope these comments will assist the Inquiry.

Also on behalf of:

The Royal Town Planning Institute
The Planning Officers’ Society
Environmental Protection UK
The Institute of Environmental Management and Assessment
The Environmental Law Foundation

January 2010

Memorandum submitted by the Committee on Climate Change

The Committee has set out analysis of the path to meeting the UK’s legislated 2050 target to reduce emissions by 80% relative to 1990. This includes a very important role for early decarbonisation of the power sector and extension of low carbon power to other sectors. In order therefore that the 2050 target is achieved, the decisions of the IPC should be consistent with the need for early power sector decarbonisation.

Whilst the key lever in driving low carbon investment will in our view be development of new market arrangements, it will be important that investment decision under these arrangements are closely monitored.
At the request of the Government, the Committee would be well placed to advise periodically on consistency of decisions with the required path for power sector decarbonisation. This would relate very closely to our ongoing work assessing progress reducing emissions on the basis of leading indicators including planning decisions for major infrastructure projects.

Memorandum submitted by the Communities against Nuclear Expansion

We represent a body of local people in the vicinity of Sizewell, Suffolk, who are opposed to further nuclear expansion.

Our aims and objectives can be found at www.suffolkcane.org.uk

The organisation includes a number of teachers, doctors, former civil servants, campaigners and former councillors with experience of the impacts of two nuclear power stations and the plans for further reactors at Sizewell. The organisation has substantial experience of planning issues and social and health issues. Whilst CANE is opposed to further new build at Sizewell it is also opposed to nuclear new build throughout the UK and supports renewable energy, distributed energy and storage and reduction of demand by comprehensive energy efficiency measures and demand management. Our views on this subject are based on considerable experience of local and associated issues.

STATEMENT

CANE understands that the National Policy Statements are to be the Planning policy guidance for the Energy Infrastructure for future years. The Infrastructure Planning Committee will be using these documents when they are finally published. In this context we believe there is a discrepancy between the policy EN6 and the policies EN2 and EN3. It appears that far less consideration has been given to sustainability and the environment in EN6 leaving the policy guidance extremely weak when any planning application is being determined by the IPC. With the consideration that many nominated sites are in areas of high ecological value, which would be disrupted for many decades and could be irreparably damaged. We would expect that the policy EN6 when adopted should protect the designated high value of the environment.

As written the document does not give the IPC sufficient grounds to refuse, restrict or put conditions on any planning approval.

Further EN6 conflicts with Government Policy and Strategy at 2.1 in EN1.

At bullet point 5:

“To contribute to sustainable development by seeking energy infrastructure development that helps reduce climate change whilst also minimising negative impacts on the local environment”

COMMENTS ON THE OVERARCHING POLICY EN1 EN6 AND JUSTIFICATION

1. We believe the policy EN6 for Nuclear Power to be misguided and dangerously flawed. Any shortfall of energy supply could be made up by more local schemes and combined heat and power schemes and by a concentrated effort for a reduction of use, both by residential and business use, all of which would be far more cost effective and empower local communities to achieve the best solutions for their own environment.

2. We do not believe that the case has been made or proven for Nuclear Power, we would wish to see many more policies on reduction of energy use. Nuclear has a very poor history on cost and timescale and will serve as a distraction from achieving a sustainable, low cost, robust and resilient energy infrastructure in a reasonable time scale.

3. We firmly believe that Nuclear power should not be part of the mix because of:

(a) Long term waste management, unresolved issues with legacy waste which are not fully and adequately addressed. In future, stations using the much hotter fuel to be used in the EPRs which will have to be stored on sites to cool down for up to 160 years. This does not appear to be addressed in the documents.

(b) Climate change risks from sea and fluvial flooding over the full lifetime including decommissioning.

(c) Security risks imposed by the close grouping of sites over many decades and the consequences for emergency planning, and the additional Policing needed for the security of both the plant and the storage of waste. The nominated sites predominantly include ones where there are existing nuclear facilities. We consider this is wrong. Historically Magnox power stations including Sizewell are remote sites miles from point of need. They were sited so as to minimise risk. If risk from these new reactors is considered to be significantly less, new sites should have been considered as being better suited to the available infrastructure.

(d) Unknown costs of all of the above to future generations.

(e) We do not believe that the health risks particularly from low level radiation are fully understood.
In this context we reject entirely the “Justification under the Ionising regulations” for particularly the Areva EPR on the grounds that there is insufficient factual data on health and too many unknown costs. Much of the justification is not based on sound science.

**Comments on the Site Nominations Particularly Sizewell**

**Description of Site. Reference 5.14**

The statement is factually inaccurate and fails to mention the many environmental designated sites.

1. Even if we agree that nuclear is an option (Which as an organisation we do not) Sizewell should not be accepted as a nomination for the following reasons:

   - The Sizewell site at present comprises Sizewell A in decommission phase which may take up to 100 years to complete and Sizewell B PWR operational until 2035–45.
   - Radio active waste storage until a deep geological repository is available.
   - We submit that this site situated as it is in the Suffolk Coast and Heaths AONB and bounded by a SSSI and many other designations, so many miles away from the point of energy need, on an eroding coast is totally unsuitable for further development.
   - It will also mean an increase in the Grid Wires in the Suffolk/ Essex Dedham Vale AONB.
   - Thus despoiling both of the Suffolk AONBs for future generations.

2. Sizewell A site in 1958–59 was chosen for its remoteness and low population, recognising there were risks to the population, we are now told that the risk is much diminished, surely then it stands to reason that there are other less environmentally damaging sites nearer to the need for energy than that of the Sizewell site.

**Mitigation Measures for the Sizewell Site**

Mitigation is mentioned for many of the identified environmental problems at this site.

1. Coastal Flooding and Sea defences. It is claimed that this can be managed by hard sea defences, it does not recognise the problems this may cause both north and south on the coast leading to problems for Dunwich, Thorpeness and Aldeburgh. The impact and visual intrusion on the Heritage coast will be intolerable. As will the disruption to the vegetative shingle on the shingle beach and dunes.

2. The Access Road of one and a half kilometres, a bridge and all the associated works will be situated across the AONB, and the road bridge will cross the SSSI, also the batching plant, machinery lay up area and car park will be sited somewhere along the access road.

   This would be the worst kind of environmental vandalism we could imagine.
   - It will introduce noise, light, dust and petrochemicals into an unspoilt area of peace and tranquillity.
   - We submit over the seven years of construction there are no measures that can mitigate the damage and despoliation this will cause.

   This was recognised at the Layfield inquiry into Sizewell B.

   * DoE Summary of Conclusions and Recommendations Sizewell B public enquiry.
   - Chapter 108 General Conclusions Page 9 minute 108.38.

   It was also stated by Sir Frank Layfield in his conclusions to the Sizewell B Inquiry when giving his recommendation that Sizewell B be given permission, was as follows:

   “except that deemed planning permission should be refused for the proposed second access road”

   Another fact is as follows:

   * Local Community Liaison Committee 15-04-1992
   - Page 8 and 9 from minute 359 to minute 364.

   States when Nuclear Electric bought the area to the west of the existing stations local people were assured that the land would NOT be used for the building of Sizewell C but that it would be used as an environmental buffer to the existing stations.

   We firmly believe by concentrating on mitigation measures EN6 totally flies in the face of true environmental sustainability, and is contrary to the European Habitats Directives.

   Sizewell is the only nominated site in an AONB.
Where we would have two further reactors of an entirely different design adding to the destruction of our Heritage coast and AONB. Major engineering and infrastructure improvements would be needed before construction could commence. A bridge and Road as suggested would effectively cut the AONB in half and would cross a SSSI which is also adjacent to a Ramsar site and Special Area of Conservation and is in close proximity to the internationally renowned RSPB Minsmere.

Visual intrusion of this magnitude is inconceivable, and there can be nothing which will mitigate this damage.

**DEPLOYABILITY AND GRID CONNECTIONS. REFERENCE 5.14.5**

Existing reactors are monitored 24/7 by the civil nuclear police now. Building two reactors over a number of years would we believe cause major security concerns to the security of operation of Sizewell B.

We submit the production of so much power at one site would risk massive disruption if grid lines were targeted or suffered accidental damage. Roughly 5000 megawatts of supply could be lost from the Sizewell grid alone. We submit the grid cannot be monitored adequately or securely over its entire length. In addition there is much controversy surrounding further power lines which will need to cross another AONB in the Stour valley.

**FLOODING AND FLOOD RISK D1**

By allowing industry to nominate sites the risk from flooding due to sea level rise and coastal erosion is not entirely addressed and is not objective. PPS 25 which is supposed to address flood risk and particularly at the affect on neighbouring locations is ignored. The Environment Agency responsible for shoreline management have been left in the invidious position of trying to engineer defences and are left to make a number of assumptions. Mitigation measures are unlikely to be compatible with the AONB and Heritage coast status.

Locally EA engineers do not believe hard defences are sustainable. Professor Hugh Pethick, a British Energy consultant, and acknowledged world expert on sea defences, said that “sea defence was a natural process and best left without intervention”. The Institute of Mechanical Engineers in their report on “Climate change Adapting to the Inevitable” point specifically to Sizewell as an area where the site may have to be abandoned. Our view on the unsuitability of the site for this reason alone indicates the need for a far stricter interpretation of PPS 25 than is currently given in the National policy Statement. The statement in the nomination that “no other site is available at less risk of flooding” should indicate that the use of existing sites at flood risk now should not be pursued. After all giving a private company authority to proceed on a project which could have disastrous consequences for coastal process, flood risk and consequential loss of life and property in neighbouring communities is not an option which should be taken lightly, particularly as the lifetime of a new reactor could be at least 160 years including its radioactive waste stores. We submit that all the special environmental qualities of the area would be compromised for ever.

**COOLING WATER REFERENCE. D10**

Marine cooling for these new reactors requires huge volumes of sea water, grouping of a number of reactors will not only decimate fish stocks and all sea life but will increase sea temperatures. We understand this temperature rise causes loss of efficiency. If desalination plants for the pure water system are used, the chemicals will cause further damage to sea life and the vegetation on the coastal strip and further reduce plant efficiency. If town water is used each reactor will consume the equivalent of water for 5,000 people, a not inconsiderable amount considering we will need to conserve water in future years.

The policy does not acknowledge that substantial volumes of pure water are required, nor does it mention the environmental consequences of that need.

**ECONOMY SIZEWELL/LEISTON**

Much emphasis is placed on the economy and jobs for the local area that will ensue from new nuclear build. The build programme for Sizewell C/D may last for seven to eight years. From the experience of the building of Sizewell B there was an itinerate workforce of 7,000 at the peak of the build programme (Leiston’s voting population is around 4,500 ) this led to many problems and conflicts.

It did bring some temporary benefits but the down side has to be lived through to be understood.

It has taken many years for Leiston to recover, taking an inordinate amount of time effort and money.

This quiet area of East Suffolk is a haven for the Tourist industry, something which many people have been working toward, we are fearful that if Sizewell C/D goes ahead the economy that is generated for and by the tourist industry will be lost, many people come for the quiet county walks for birding and for the relaxed laid back area. This will change during the build programme and will take many years to recover if ever.

There will certainly be a downturn in the tourist economy and this should be a material consideration within EN6.
SUMMARY

Making a policy to fit the sites rather than the sites fit the policy, is not helpful to any good planner. Mitigation measures should not be considered when alternative sites may be far less damaging.

Choosing Sites because they are easy to obtain not because they are the best sites does not make for a good sustainable planning outcome and allows maximum disturbance to the Area of Outstanding Natural Beauty and other areas of high landscape value. Causing the potential for massive Environmental damage.

In our opinion in making the Nuclear policy fit nominated sites so many risks are introduced as to make the planning policy completely unsustainable. It is simply not acceptable that deployability is used as a reason to undermine environmental criteria.

If it is to have any credibility on this policy Government must be prepared to site these reactors close to point of need and fulfil without question criteria such as flood risk well into the future.

In this context it may be that sites are more suited to industrial areas. In any case the many issues surrounding waste and health would have to be satisfied first.

CONCLUSIONS
1. We reiterate our stance that the case for more Nuclear power stations has not been made.
2. That the situation for legacy waste which is not solved, is dire, and should be resolved before permission is given for new build which will create hotter RA waste leaving a deplorable problem for future generations.
3. Environmental damage that can not be erased leaving the environment in a worse state for the future is totally immoral for the well being of the natural world.
4. That we should be ensuring the state of the planet is better when we leave it than it was when we found it, by using good stewardship as signed up to at the Rio conference.
5. We firmly believe the Governments aim of reducing CO2 emissions can be achieved without Nuclear Power.

But in the event that Government continues to go ahead with its proposed policy we believe the AONB Designation and policy should protect Sizewell from further development.

We submit that whilst the Government may have established a need for new nuclear stations, believing there is a national need, it has also accepted 9 other nominated sites. Sequential testing tells us that with its AONB designation Sizewell should be considered last not first or second in the round of new build.

January 2010

Memorandum submitted by Copeland Borough Council

EXECUTIVE SUMMARY

Energy related industries and in particular nuclear power is key to the future development and wealth generation of the Borough of Copeland and West Cumbria. Through the sub-regional regeneration plan “Britain’s Energy Coast” local partners have identified a range of proposals which build on the areas history and expertise in the energy sector to rejuvenate economic activity and enhance the sector’s supply chain.

— The Nuclear industry is embarking on a worldwide renaissance creating massive business opportunities for the NW Region. The region as a whole provides the UK’s concentration of nuclear expertise and capacity with more than 25,000 skilled professionals being employed in the sector in more than 300 enterprises across the region with a combined turnover in excess of £3 billion per annum.

— Proposals within the Energy National Policy Statements provide an opportunity for West Cumbria to build on existing expertise and establish a Centre of Excellence for Nuclear Power in UK amongst a suite of other energy related activities.

— This will support the creation of new job opportunities directly and via supply chain activities and partly offset the decline in energy related jobs in the locality following the decommissioning of current nuclear power generation facilities locally.

— Proposals to establish three new nuclear power plants in Copeland could result in £3.5 billion investment in each facility. This would create 5,000 construction jobs per power station and between 300 and 500 permanent jobs during the 60 year lifetime of the power stations. The investment in new reactor sites will drive a general upturn in the sector as a whole as increased requirements are generated in related areas including fuel manufacture, processing and packaging and recycling and disposal.

— Demand from international and national inward investors to locate in the area to supply the business needs of the utility providers will increase.
— The National Policy Statements will indirectly support the continuing development of the university research innovation and skills agenda across West Cumbria and the provision of career development opportunities for local school leavers and undergraduates boosting local colleges and universities to deliver the skills that the industry and its supply chain require.

— The NPS documents provide the basis of a “coherent and practical framework within which the IPC can assess future planning applications”. However there are matters which should be considered to enhance the practical application of the framework form a local planning authority perspective.

— The Borough Council are generally satisfied with the IPC process so long as additional resources are made available to enable local authorities to fully and actively participate.

— However, we have some concerns about how the cumulative impacts of major infrastructure proposals will be considered eg three nuclear new build sites over a timescale which could be 20 years or more, particularly in relation to planning gain and the potential unfair burden on the first utility to come forward. It should be emphasized that the relationship between Copeland and the Nuclear Industry is unique based on both history and future proposals. We want this mutually beneficial relationship to continue but the process has to be transparent with a collective recognition of the community leadership role undertaken by local authorities.

— In addition, the framework underplays the role of the local authority in terms of pre-planning application discussions with applicants, assessing the impact of proposals, identifying supporting infrastructure requirements and local community leadership and stakeholder engagement/consultation, all of which have resource implications.

— Infrastructure provided as part of the investment in energy will support wider economic development. However, further work will be required to identify the full extent of infrastructure requirements and those elements of infrastructure which require early implementation. The inadequacy of local transport infrastructure in West Cumbria has been highlighted again in the recent flooding emergency.

— Private sector funding arising from the nuclear industry expansion may fund part of the necessary grid infrastructure improvements which will in turn create the capacity on the grid to allow the development of the renewable energy sector in the North West in parallel with new nuclear power.

— The Local Planning response must be effective and requires proper resourcing. This is especially in the case in Copeland where significant investment is proposed for three new nuclear power generation sites with corresponding investment in grid, highways and other infrastructure.

— The assessment of the impact of energy infrastructure investments through the local response to the Infrastructure Planning Commission (IPC) requirements will require significant resource to ensure economic gain balances with environmental matters.

— Partnership arrangements, consultation/communication, and clear recognition of roles will be important in ensuring a successful process and the benefits to national energy targets are maximised.

INTRODUCTION/BACKGROUND—WHY THE ENERGY SECTOR IS IMPORTANT FOR CEPALAND AND WEST CUMBRIA

1. West Cumbria has been host to the nuclear industry for 60 years, although much has changed in recent years, with growing private sector management and investment, and increasing “reachback” into world-class international engineering skills, technology, and research and development.

2. The nuclear sector provides 40% of West Cumbria’s gross value added, and around 12,000 direct jobs (25% of the total UK nuclear industry). Approximately half of all jobs in Copeland are in the Nuclear Industry. Copeland has 60–70% of the UK’s nuclear facilities, the main ones being:

   Sellafiel—the biggest nuclear complex in Europe, with site operations covering decommissioning, nuclear reactor spent fuel reprocessing, nuclear waste management and mixed oxide fuel manufacturing. The site is owned by the Nuclear Decommissioning Authority (NDA) and is now managed by a world class international consortium, Nuclear Management Partners Ltd, comprising URS Washington Group (US), Areva (France) and AMEC (UK). It has the largest concentration of nuclear skills and expertise in Europe. The Sellafiel operation also supports significant numbers of high level staff in their facilities at Warrington and Cheshire;

   Low Level Waste Repository near Drigg—the UK’s national low level radioactive waste disposal facility, now managed for the NDA by another world-class consortium, UK Nuclear Waste Management Ltd, comprising URS Washington Group and Areva, together with Serco (UK) AND Studsvik (Sweden);

   National Nuclear Laboratory—located at Sellafiel, and the UK’s principal establishment for nuclear technology research and development. Government owned, and now operated by a UK/US consortium comprising Battelle (US), the University of Manchester, and Serco;
Dalton Nuclear Institute—another brand new facility, owned and operated by Manchester University, with state of the art equipment for research in radiation sciences and decommissioning engineering (eg the study of radiation damage of materials). It will also facilitate access for academics into the NNL;

UCLAN (University of Central Lancashire)/Westlakes Research Institute—specialist epidemiology research and development; foundation degrees in health, nuclear-related technology management, and National Technology Education Consortium (NTEC) modules;

The NDA—located on Westlakes Science Park and responsible for managing the UK’s 20 sites, £3 billion a year “nuclear legacy” decommissioning, clean-up and waste management programme, including also Capenhurst and Springfields in the North West;

The Westlakes Science and Technology Park a geographical focus for nuclear related companies and expertise.

Energus training facility at Lillyhall providing vocational training skills alongside Lakes College.

ENERGY POLICY STATEMENTS—A CLEAR AND PRACTICAL FRAMEWORK FOR THE IPC?

3. Copeland Borough Council recognises that there needs to be significant investment in the UK energy infrastructure over the next 15 years to create new energy capacity, to replace old and inefficient facilities and processes and to protect energy security, and in this respect the NPSs for Energy are to be welcomed. Copeland is in a unique position to deliver a significant proportion of the Governments objectives for energy generation from nuclear sources having three of the 10 proposed sites for new build.

4. We consider that the draft National Policy Statements provide the basis of a framework for:
   (a) Potential development proposal applicants;
   (b) The IPC;
   (c) Local authorities; and
   (d) Other interested parties, including local communities.

5. We believe that they set out clearly:
   (a) Government policy on energy and climate change;
   (b) The Government’s views on the need for early new energy infrastructure;
   (c) The information the IPC needs to take decisions, and the principles on which it should base its assessments; and
   (c) The impacts that new energy infrastructure could have (eg on the environment, ecology, biodiversity, landscapes, and historic sites), and possible options for mitigating such impacts.

6. Moreover, we note that the NPS’s include Appraisals of Sustainability and Habitats Regulations assessment reports.

7. Three nuclear power station sites in Copeland have been selected by Government as potentially capable of deployment by 2025. Some of the biggest UK offshore wind farm developments are planned off our coastline. And, if economically viable and environmentally sensitive, we could also have up to three significant tidal energy schemes.

PLANNING FOR INVESTMENT IN ENERGY—POTENTIAL ENHANCEMENTS TO THE FRAMEWORK

8. Plans for investment from the private sector in the provision of up to three new nuclear power stations will necessitate a range of responses to ensure that the region maximises the potential benefits.

9. Investment in infrastructure specifically in the national grid, road and rail links will be essential. Significant components of such new infrastructure will need to be in place before construction starts to allow for the movement of construction vehicles and materials, whilst other components will need to be provided before the power stations become operational eg new/upgraded rail provision. However it is recognised that considerable further work is required to identify the infrastructure required to facilitate the developments and ensure the balance with environmental considerations is maintained. Elements of infrastructure essential for the development will need to be delivered by way of planning gain from the applicant but this will of course provide wider benefits to the region. However the infrastructure provisions are so considerable, and some longstanding, that it would be unreasonable to expect them to all be achieved through planning gain against new development applications. Likewise where three potential sites in close proximity are being considered and coming on stream at differing timescales it would be unreasonable to insist on the first site to be developed picking up the full costs of the supporting and required infrastructure provision. It is important that the right impact studies and Local Development Framework are in place to inform decisions by the new Infrastructure Planning Commission on what will be necessary but discussions around planning gain are unlikely to be meaningful until the IPC is engaged in the process. There is a case therefore for Government and Government agencies to work with local West Cumbrian partners to identify early infrastructure requirements and arrangements for funding, including appropriate contributions form the private sector applicants.
10. Copeland Borough Council is currently preparing its Local Development Framework. The current timescale predicts the Core Spatial Strategy Development Plan Document will be adopted in June 2011. The LDF will provide the spatial policy framework for growth and change within the Borough and will enable the power station developments and associated spin-off impact for residential/infrastructure/education/business/health developments and will be fundamental to the delivery of new build in West Cumbria. Further work and resources will be required to ensure that current good progress is maintained and that the LDF adequately reflects the aspirations for power station developments within the Borough. It may be the case that some of the documents currently identified for production in later years require acceleration and that more regular review of the Core Strategy is required given the uncertainty around some of the sites.

11. New power stations will have significant planning impacts on Copeland Borough within which all three are situated. The grid connection will also pass though Copeland meaning that the Local Planning Authority could be actively involved in four IPC applications in the coming years. The local planning authorities will need to be properly resourced as early as possible in the process to ensure that all of these impacts are fully understood and subsequently managed in order to achieve successful local development and respond appropriately to the pre-planning application processes and expectations of the Infrastructure Planning Commission (IPC). We are concerned that no such financial provision has been made. This creates a risk of local detailed considerations not been fully taken into account potentially unnecessarily discrediting the process and the developments and making it more susceptible to challenge. There is concern about the current proposal to utilise Planning Performance Agreements, and the risk of challenge to this approach, but equally that as there is no formal requirement for Developers to enter into such agreements, in particular where the perception may be that such agreements are to fund statutory processes, that this source of funding may not necessarily be available to the authority. Similarly Local Authorities will need to be resourced to deal with a potentially large number of “associated” Planning applications and the subsequent discharge of conditions. This is particularly critical where the cumulative effects of three sites in one area need to be managed. (A copy of a letter to Rt Hon John Healey, Minister for Housing and Planning is attached as Annex 1)

12. The proposed development of three power station sites within the local area will create a focus of attention from a variety of interest groups and stakeholders both at local, regional, national and international levels. The Councils and the development sponsor have clear roles in relation to public engagement and consultation under the Planning Act in the new formal planning process. However, the national and local interest in such development will mean that significant resource will be required to effectively manage public and stakeholder involvement. Joined up consultation at the local level will be essential to ensure that the local community receives a clear and consistent message and is provided with the opportunity to respond. Such a strategy should be prepared and agreed by national Government Departments, regional bodies, local authorities and utility developers. In this way communication and consultation can be delivered effectively and efficiently and will help to ensure that the process and therefore the proposals are not discredited.

13. As indicated earlier there is still much work to be done to assess the infrastructure required to accommodate the proposed new development of three power stations sites. Local strategic stakeholders including the Borough and County Councils are already working to develop a response to this issue in relation to housing, schools, healthcare, roads, rail links, and ports. The key requirement will be for a timely new electricity transmission network to connect the new nuclear power stations to the existing national grid system, to the north near Carlisle and to the south at Heysham in Lancashire. This so-called “Cumbria ring” is already being discussed with National Grid and local planners. Grid connectivity is identified as being crucial to the successful and efficient implementation of Government Energy policy. Decisions on grid investment and environmental proposals such as the Morecambe Bay Special Marine Conservation Area need to be considered as part of the overall strategy and not in isolation.

14. The National Policy Statement for Nuclear New Build sets out the arguments for the development of the three sites in Copeland. All are close to the existing Sellafield operation and have access to a qualified workforce and appropriate technical support—albeit additional capacity will be required during construction and possibly operation. All three will benefit from close proximity to the largest concentration of nuclear facilities in the UK and the growing support from the research, innovation, education and skills providers. New nuclear build is the initial focal point of our sub-regional regeneration plan—"Britain’s Energy Coast”, and there is strong support for it and the economic benefits it could provide for the local community. The Council supports in principle the development of new nuclear reactor sites in the Borough. However, it important to be sure that development takes place on appropriate sites in an appropriate way. Without detailed local impact assessments looking at a broad range of local considerations, at this time the Council does not feel enabled to determine the suitability or the priority that should be given to each of the individual sites. Such impact assessments will need to consider the full range of health matters including noise and air quality that might be generated both through the construction process and through the operation of the sites. It is further recognised that the consideration of such issues both as part of the impact analysis and post-development from a monitoring perspective will place additional pressure on local authority resources.
15. The economic benefits will need to be weighed-up against environmental considerations specifically where the infrastructure requirements may impact on the landscape in and around the Lake District National Park. All three sites lie outside of the National Park boundary. Within the context of the Energy Coast Masterplan which supports West Cumbria as a location for energy generation and related facilities, the Council has a preference for the concentration of facilities rather than dispersal. Concentration of energy generation in nuclear reactors sites will have great benefits in relation to the protection of our sensitive environments. For example, a new nuclear power station site with two reactors each producing 1,600 megawatts each would be environmentally preferable to 3,200 x 1 megawatts wind turbine units spread around the area adjoining the Lake District National Park. Infrastructure designed to support new investments must also be designed to deliver our sustainability objectives.

16. In summary, whilst the NPS documents provide a substantial basis for the framework from which the IPC will be able to consider applications for major infrastructure proposals, they underplay the role of the local authority in terms of:

(i) The expectations for local planning authorities to lead pre-application discussions with applicants prior to submission to the IPC.

(ii) The role of local authorities in determining the potential impact of large-scale infrastructure schemes and contributing to the identification of workable and locally acceptable solutions and outcomes.

(iii) Local authorities’ statutory responsibilities and community leadership functions including consultation with the local community and stakeholders as well as national/international interest groups.

This all serves to emphasise that local authorities have an important role to play in delivering the national agenda for energy.

January 2010

Annex 1

The Rt Hon John Healey MP
Minister for Housing and Planning
Department for Communities and Local Government
Eland House
Bressenden Place
London SW1E 5DU
5 January 2010
Dear Mr Healey

BURDEN ON LOCAL AUTHORITIES FROM THE PLANNING ACT 2008

I am writing further to the invitation you gave at the Infrastructure Planning Commission launch event on 22 October in London, where you said that you would be willing to hear arguments that the Planning Act 2008 places a new burden on local authorities, which should therefore be compensated by virtue of the “new burdens doctrine”. In fact, the new burden does not arise purely from the Planning Act (although that does introduce several new responsibilities) but also from government policy—recently embodied in the first draft National Policy Statements—on the urgent need for new infrastructure.

Local authorities are sympathetic to the new regime in general, and want to contribute to its success. Lack of resources may mean that they are unable to fulfil the roles allotted to them and as a result slow down the application process, be unable to give meaningful support or at worst, stand outside the process altogether. This will reduce community engagement and increase the potential for opposition, through the inadequate knowledge about the project and lack of assessment and mitigation of impacts. Where the National Policy Statements set out the benefits of a project, it is for local authorities to provide an objective assessment the adverse impacts and how they could be mitigated, the other side of the key test faced by the Infrastructure Planning Commission.

New burden

I quote the new burdens doctrine in full, as given on the CLG website:

“A new burden is defined as any new policy or initiative which increases the cost of providing local authority services. The new burden need not necessarily arise as a result of a proposed statutory duty. For example, guidance to act can result in additional costs falling on local authorities, putting pressure on council tax.

Government as a whole are committed to ensuring new burdens falling on local authorities are fully funded. This commitment is called the New Burdens Doctrine”
The argument that local authorities have a considerable new burden placed on them is fourfold:

(a) local authorities have several new responsibilities in the Planning Act 2008;
(b) responsibilities for a particular project extend to a wider group of local authorities;
(c) local authorities will lose funding; and
(d) the responsibilities caused by government policy on infrastructure do not apply uniformly, with low-density rural authorities more likely to have to deal with one or more applications, which are much larger than average.

Each of these issues is dealt with in turn.

**New Responsibilities under the Planning Act**

Local authorities have responsibilities at four stages: at the stage of setting policy, the pre-application stage, during the consideration of applications and after applications have been granted. The first two of these are new, and the other two are increased.

**National Policy Statements**

All local authorities are consulted on the contents of each National Policy Statement when it is issued in draft, as seven were on 9 November. Although local authorities are presently free to respond to policy consultations in general, they have not hitherto been named as statutory consultees on energy, transport, water, waste water or waste policy.

Additionally, the government must consult local authorities on how to publicise a draft National Policy Statement that identifies locations as suitable or potentially suitable for nationally significant infrastructure projects. This places the responsibility squarely on local authorities of ensuring that local people are able to participate in the development of NPSs, one of the much-touted three opportunities that people will have to participate in the new process. One of the NPSs that were published on 9 November does indeed identify ten locations and so this responsibility has been engaged.

**Before applications are made**

The Planning Act introduces a statutory pre-application consultation regime for the first time. Local authorities are central to this. This is reflected in CLG guidance to applicants, which states “To achieve [effective consultation], it is essential that promoters understand the local communities who will be affected by their planned application. Promoters should therefore work closely with the relevant local authority to gain this understanding, as the local authority will have a detailed knowledge of the community, including consulting local people on planning matters”.

Local authorities at or near the site of an application are consulted directly as part of this pre-application consultation. As with NPSs, local authorities also have role in proposing how the local community should be consulted, through being consulted on the applicant’s draft “statement of community consultation”. The guidance emphasises the importance of the local authority’s view: “Where they have not followed the local authority’s advice, promoters will need to present their reasons to the IPC”.

Local authorities have a third role in the pre-application process in that they are entitled to submit a report on the adequacy of the applicant’s pre-application consultation to the IPC, which the IPC must take into account when deciding to accept an application, the only third-party document with this status.

None of the steps set out above can be characterised as “formalising current best practice”, which is the current DCLG line rebutting the suggestion of a new burden. Applicants do not need to carry out any pre-application consultation at present, and so often the first that the local authority knows about an application at present is when it is made, either to them or to the Secretary of State.

**After applications are made and before they are decided**

The principal role given to local authorities during the consideration of an application is that of preparing a “Local Impact Report”. This will be the opportunity for the local authority to present an analysis of the impact of the application on its area to the IPC and in particular its consistency with local and regional planning policies. The disproportionate amount of work that this will require is considered further below under “disproportionate application of Planning Act regime”.

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22 Regulation 3(3)(e), Infrastructure Planning (National Policy Statement Consultation) Regulations 2009
23 Section 8(1), Planning Act 2008
24 Paragraph 17, Planning Act guidance on pre-application consultation
25 Section 42(b), Planning Act 2008
26 Section 47(2), Planning Act 2008
27 Paragraph 45, Planning Act guidance on pre-application consultation
28 Section 55(4)(b), Planning Act 2008
29 Section 60(2)(a), Planning Act 2008
Local authorities also have minor roles when their own land is to be acquired by a public authority applicant or Green Belt land is to be acquired, and can enter into planning obligations (s106 agreements) as they can with conventional planning applications.

After applications have been decided

Finally, local authorities have a role in policing the implementation of development consent orders (DCOs) and development in the absence of a DCO. There are rights to enter land, require information from landowners, serve notices of unauthorised development, carry out restoration works not carried out by the developer, and apply for injunctions. Local authorities have not had to enforce the equivalent of conditions of a DCO before.

Greater Number of Local Authorities Involved

Where previously a planning application would normally be dealt with solely by the district-level or unitary authorities whose areas contained the land in question, the Planning Act places the more significant of the above duties on neighbouring and higher-tier local authorities as well.

These additional local authorities are much greater in number than might be at first realised, when one considers that both district and county level authorities are involved and each of their immediate neighbours at district or county level.

For example, Sellafield, one of the ten nominated nuclear sites, is in the areas of Copeland Borough and Cumbria County Councils. These have as neighbours the councils of Allerdale, Carlisle, Barrow-in-Furness, County Durham, Craven, Dumfries and Galloway, Eden, Lancashire, Lancaster, North Yorkshire, Northumberland, Richmondshire, Scottish Borders and South Lakeland.

All 16 of these councils, rather than just the single local planning authority, will have responsibilities to advise on local publicity for the NPS, respond to consultation on the application before it is made, make “adequacy of consultation representations”, and submit local impact reports. It is difficult to see how an increased number of responsibilities, applied to sixteen times as many local authorities can be characterised as a neutral effect of the new regime.

Loss of Funding

On the negative side of the balance sheet, the Planning Act removes the need for planning permission for nationally significant infrastructure projects, and thereby deprives the local planning authority of the application fee. Almost all of the 16 types of nationally significant infrastructure project that the Planning Act is concerned with would currently require a planning application to be made to the local planning authority.

The amount lost in this way will be a very small proportion of the financial burden on local authorities loss for larger projects, but nevertheless it adds weight to the new burden argument.

Disproportionate Application of the Planning Act Regime

Government policy on the urgent need for new infrastructure will hasten the development of large projects that will fall under the new Planning Act regime, particularly energy projects. The current estimate of the IPC is that it will receive 45–50 applications in its first year of operation. This compares with about 350 local planning authorities in England and Wales, and so at most only 15% of local authorities will be affected directly, although many more will have responsibilities as neighbouring authorities, as outlined above.

Some authorities will have to deal with multiple applications—linked projects such as power stations and their grid connections, or port development and associated road and rail links, or have simply been identified as suitable for several projects, such as Copeland with its three nominated nuclear sites. The Act will therefore apply disproportionately and infrequently to a relatively small number of local authorities.

By their nature, too, major infrastructure projects tend to be sited away from large centres of population because of their impacts. The impact of the Act will therefore tend to be felt by smaller rural authorities that have lower staffing levels and less exposure to major applications than average.

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30 Section 128, Planning Act 2008
31 Section 147(2), Planning Act 2008
32 Section 174(2)(c), Planning Act 2008
33 Sections 163 and 164, Planning Act 2008
34 Section 167, Planning Act 2008
35 Section 169, Planning Act 2008
36 Section 170, Planning Act 2008
37 Section 171, Planning Act 2008
38 Section 33(1)(a), Planning Act 2008
Those authorities that find themselves dealing with a nationally significant infrastructure project will have an unusually large workload to deal with compared with other planning applications. In order to assess the impacts of the project and the steps needed to mitigate them for the purposes of the Local Impact Report, a variety of specialist commissions, by their nature costly, will be needed over a sustained period starting well before an application is made.

Mitigation will take the form of changes to the project, the addition of requirements (conditions) to the development consent order, and through the development of s.106 agreements. The absence of properly developed proposals for mitigation (from a party other than the promoter of the project) could prove critical in the approval or rejection of the application.

These major projects will also have a knock-on effect on the remainder of the host authority’s area. There will be shifts in population and changes to the need for housing, transport, education, health and other infrastructure. This will necessitate changes to the policies in the authority’s local development framework that would not have been required otherwise.

**Counter-argument**

The counter-argument is that the Planning Act merely formalises existing best practice, and that any financial burden can be met by seeking a Planning Performance Agreement (PPA) or other funding from a developer by using section 93 of the Local Government Act 2003. This is an insufficient response.

For a start, applicants are less likely to pay a body that is not the decision-maker to ensure that the application is dealt with according to an agreed timetable. Indeed, negotiating a timetable after the pre-application stage is unnecessary, as there are statutory time limits in the Planning Act. Much of the work that local authorities will need to carry out will take place well before an application is made and before a PPA is likely to be able to be negotiated.

There is therefore no guarantee that PPAs will be able to be negotiated with local authorities at all or if they are, that they will cover the full financial burden. In any event a PPA would only be likely to be negotiated with the authority in which the development lay, and not any of the neighbouring authorities.

There is also the perception that being funded by a voluntary payment from an applicant may be seen to reduce the objectivity of local authorities, however unjustified.

Finally, the Planning Act needs to be seen in the context of government policy on energy, transport, water, waste water and waste. An urgent need for infrastructure is identified, particularly for the first of these, and the burdens on local authorities should be seen as deriving from a combination of the Planning Act and policies on need, rather than the Act alone.

**Conclusion**

The Planning Act 2008 places a new burden on local authorities by increasing both the number of responsibilities and the number of authorities affected, while removing the fees available to them. Government policy on the need for infrastructure will accelerate the visitation of some of the largest applications for development in the country on a low number of smaller than average authorities.

The government should recognise that there is a new burden on those local authorities where NSIPs are situated, as well as their neighbours, and fund such authorities appropriately to enable the new Planning Act regime to work as it was designed.

A proper assessment should be undertaken of the actual cost of carrying out all the responsibilities outlined above, taking into account the number of authorities involved. The cost could then be made up by developers (compulsorily rather than voluntarily to eliminate suggestions of bias), the IPC, the government or a combination of all three. It is likely that the overall increase will only amount to a small proportion of the estimated £300 million annual saving as a result of the introduction of the new regime, and a small proportion of the cost of a project, but it will make a significant difference to the authorities involved and the success of the new regime.

I trust that you will reflect on the arguments above and reconsider your position.

*January 2010*
Memorandum submitted by the Country Land & Business Association

1. INTRODUCTION

The Country Land and Business Association is the membership organisation for owners of land, property and businesses in rural England and Wales.

We speak for everyone who believes in a living and working countryside. Through the experience and expertise of members and staff, we promote our members’ interests and influence decision makers to ensure the positive development of the rural economy. CLA professionals lobby continuously at EU, national and regional level in the interests of our members ensuring a visible presence and influence in the media and with Government.

2. THE NATIONAL POLICY STATEMENTS PROCESS

The CLA has two overarching concerns regarding the process of making and delivering NPS.

First, we are concerned that there is a democratic deficit. We acknowledge that Parliament has an oversight of NPS, but we do not regard this as adequate.

NPS, when made, will fundamentally affect the property rights and lives of those facing the designated developments.

This has implications for our second point.

Second, we do not agree that the NPS process gives proper consideration to the separate but linked powers that the IPC will exercise in respect of compulsory purchase.

Under the Act, a developer seeking consent from IPC will be granted not only planning consent but also approval to compulsory purchase proposals.

We do not agree that the well established checks and balances that exists to protect property rights are addressed in the IPC process.

3. OVERARCHING QUESTIONS

1. Do you think that the Government should formally approve (“designate”) the draft Overarching Energy National Policy Statement?

No, we do not believe that overarching energy national policy statement is acceptable in its current form.

2. Does the draft Overarching Energy National Policy Statement provide the infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

Yes, broadly the NPS provides IPC with the information it requires for planning consent, but we note with deep concern that the “development consent” process for IPC also includes the grant of compulsory acquisition powers.

We do not regard the NPS as adequate for the justification of a compulsory purchase order that may deprive a home or business owner of his property.

Previously, infrastructure proposals involving compulsory acquisition have been adequately dealt with under hybrid bills or the relevant enabling Acts.

We would wish to see the same safeguards included here.

We regard it as fundamentally important that the NPS set out clearly guidance to the IPC that requires it to be satisfied that the applicant has made every reasonable effort to secure what land rights it requires by agreement before applying for a development consent.

3. Does the draft Overarching Energy National Policy Statement provide suitable information to the infrastructure Planning Commission on the Government’s energy and climate policy?

No, we regard the unnecessary and damaging limitation of nuclear power to be deeply harmful to UK Plc. 10 nuclear power stations may not be enough to keep the lights on in a low carbon world.

4. Does the draft Overarching Energy National Policy Statement provide suitable direction to the infrastructure Planning Commission on the need and urgency for new energy infrastructure?

Yes, energy infrastructure is covered adequately.

5. Do the assessment principles in the draft Overarching Energy National Policy Statement provide suitable direction to the infrastructure Planning Commission to inform its decision making?

No, the assessment principles should be amended to give greater weight to private property rights.
6. Does the draft Overarching Energy Policy Statement appropriately cover the generic impacts of new energy infrastructure and potential options to mitigate those impacts?

Yes. The NPS covers mitigation adequately.

7. Do you have any comments on any aspect of the draft Overarching Energy National Policy Statement not covered by the previous questions?

We reiterate our concern that pre-judging compulsory purchase issues may be damaging and potentially open to challenge.

We make comments below only where we have expertise and advice to Government.

2. NPS the IPC and the Nature of the Consent

The CLA argues that given the duality of the development consent, covering both planning and compulsory acquisition, there should be a significant upfront requirement on applicants to prove to IPC they have made every reasonable effort to secure the rights they require by agreement before applying for IPC consent. This follows existing compulsory acquisition guidance set out in CLG circulars and the compulsory acquisition manual.

3. Detailed Comments

EN-3—Renewables

Section 2.5: biomass and waste to energy

We have particular concerns over the National Guidance on biomass and waste combustion.

At section 2.5 the Guidance states “the combustion of biomass is likely to play an increasingly important role…”

We consider that this prejudges technology issues that should more properly be dealt with on a case by case basis. We agree that the recovery of energy from biomass, particularly biomass waste will become increasingly important, but we regard giving carte blanche to large scale incineration with low levels of energy recovery as wholly misplaced.

The key issue that we advise the IPC should be guided to is the Best Practicable Environmental Option—covering carbon saving as well other environmental outputs—for waste treatment. This is likely to maximise carbon saving and materials recovery if applicants are required to justify their proposals against the options available—which include Anaerobic Digestion for putrescible waste and gasification for dry biomass waste, together with high temperature incineration with energy recovery for plastics etc.

The current guidance is wholly misplaced. Consenting very large scale mass burn technology will lock UK waste policy into sub-optimal facilities for many years, and deny the valuable feedstocks to other sectors better able to maximise societal benefits from renewable energy and production of biofertiliser and biochar.

At section 2.5.8 it is not true to say energy from waste plants at the scale covered by IPC take fuel that would otherwise be sent to landfill.

50MW plants will demand long term contracts for waste incineration that deny feedstocks to more benign treatment plants such as AD and gasification, and disincetivise recycling and re-use.

We point DECC to guidance hidden deep inside the Waste Strategy that clearly favours AD over other waste technologies.

We quote from the waste strategy 2007:

“Technology choice

24. The various energy from waste technologies, their different feedstocks, carbon emissions performance, and outputs are described in the ‘summary guidance on energy from waste technology’ (Annex E) which is intended to act as a guide to local authorities and others who are considering procurement. The Government wishes to encourage local authorities and businesses to consider using anaerobic digestion. Such use would complement current work on measures to promote anaerobic digestion in farming, where it has benefits for manure and slurry management. And in suitable circumstances, spare capacity may be available in on-farm anaerobic digestion plant to manage biowaste from the locality, as is common practice in Denmark. Our recent research has suggested that anaerobic digestion has significant environmental benefits over other options for food waste (and may be particularly cost effective for food waste if separately collected). Although anaerobic digestion is currently a commonly used technology in some other European countries this is not the case in England.

25. The electricity derived from the energy recovered in anaerobic digestion is eligible for Renewable Obligations Certificates. The WIP New Technologies Programme is also funding demonstration project(s). Plants have been situated successfully in light industrial estates within towns, and there
is scope for using food wastes derived from both household and business sources. Defra has established an Anaerobic Digestion Policy Network to take forward work on anaerobic digestion and maximise the synergies between the different markets for it.

26. The digestate, produced by anaerobic digestion has a range of potential uses on land, including as a fertiliser or soil improver. Defra has asked WRAP and the Environment Agency to develop a standard and protocol for the digestate to help build market confidence in its recovery on land. Defra is working to establish the full potential, while WRAP is charged with developing this market along with its work to establish markets for waste-derived compost. The Environment Agency intends to have an operational protocol for anaerobic digestate by Spring 2008.

27. Subject to what is said in paragraph 25 above, the Government does not generally think it appropriate to express a preference for one technology over another, since local circumstances differ so much. Those making investment decisions should consider the ‘summary guidance on energy from waste technology’, and other similar information such as that which WIDP can supply—and make their own decisions. It is not helpful to rule out a particular technology—such as incineration—in advance, since this unnecessarily restricts options and threatens to raise costs.

Annex E

1. The various EfW technologies, their different feedstocks, carbon emissions performance, and outputs are described in Table E.1 below.

2. This is intended to act as a guide to local authorities and others who are considering procurement options. As Chapter 5 of the Strategy states, the Government wishes to encourage more consideration of the use of anaerobic digestion (AD) both by local authorities and businesses. Such use would complement strong measures which are being taken to promote AD in farming, where it has benefits for manure and slurry management. In suitable circumstances, spare capacity may be available in on-farm AD plant to manage biowaste from the locality, as is common practice in Denmark. Our recent research has suggested that AD has significant environmental benefits over other options for food waste and may be particularly cost effective for food waste if separately collected. Although AD is currently a commonly used technology in some other European countries this is not the case here.

3. Apart from AD, the Government does not generally think it appropriate to express a preference for one technology over another, since local circumstances differ so much. Those making investment decisions should consider the information in this document and other information such as that which the Waste Infrastructure Delivery Programme (WIDP) can supply—and make their own decisions. It is not helpful to rule out a particular technology—such as incineration—in advance, since this unnecessarily restricts options and threatens to raise costs.”

We argue the IPC should be given the same guidance as waste authorities in this important matter.

At paragraph 2.5.29 guidance states the IPC should accept that applicants may not know the precise details of the plant they intend to erect.

We accept that in matters of precise detail this is reasonable, we do not agree that IPC should grant consent unless the whole life cycle carbon balance of the proposal is known and compared to other alternatives for waste treatment.

Applicant should be required to demonstrate to IPC they have considered all the options and can justify combustion of valuable feedstocks at low levels of efficiency, rather than adopting a source separated approach that delivers both more energy and valuable fertilizer and soil conditioners.

At 2.5.33 “other locational considerations” no mention is made of the land rights that may be required for development consent to proceed.

SECTION 2.7: ONSHORE WIND

The CLA argues that large scale onshore wind installations are not discrete power stations as was originally envisaged in the Energy Act provisions for national need for generation stations above 50MW.

The largest turbine available is less than 5MW. The fact that several may be grouped together does not make the development a suitable case for IPC.

The CLA argues that such proposals are better dealt with at local level so that the local circumstances and impacts of a very large scale turbine group can be assessed.

We argue that this section should be removed from the National Policy statement.

DRAFT NATIONAL POLICY STATEMENT FOR GAS SUPPLY INFRASTRUCTURE AND GAS AND OIL PIPELINES (EN-4)

The CLA represents the owners and managers of the land which will be affected by these installations.

We note that the “development consent” that will be granted by the IPC extends to an approval of compulsory powers under the relevant Gas, Pipeline or Electricity Act, yet see none of the safeguards that are built into those acts in the guidance to IPC.
We were shocked that the only mention of the impact on property owners arises at paragraphs 2.2.2 and 2.2.3 of the Electricity Networks NPS (EN-5), where it occurs with a general assurance to applicants that IPC will grant them the rights they require with no consideration of the rights of the landowners who may be affected.

The CLA argues that given the duality of the development consent, covering both planning and compulsory acquisition, there should be a significant upfront requirement on applicants to prove to IPC they have made every reasonable effort to secure the rights they require by agreement before applying for IPC consent.

We suggest suitable drafting be included at 2.9.3 as follows:

2.9.3 Gas and Oil companies will need either to own the land on, over or under which construction is to take place (or to hold sufficient rights on or interest in it), or to have written permission to install their pipelines and associated equipment. They will also require subsequently to have access to that land for the purposes of inspecting, maintaining, repairing, adjusting, altering, replacing or removing the pipeline or equipment.

The necessary agreements with landowners/occupiers are generally obtained by the companies through a permanent or long leasehold easement agreement. The IPC should ensure that applicants use all reasonable endeavours to acquire the rights they need by agreement before making and application for development consent. The IPC can reasonably expect that the overwhelming majority of these contracts will have been acquired by voluntary agreement and will have been concluded before the IPC receives the application. However, where the applicant wishes to install a new pipeline or pipelines and despite making all reasonable efforts agreement cannot be reached with the landowners, the applicant may apply for a compulsory rights order as part of their application to the IPC. The applicant may also apply for the compulsory purchase of land on the rare occasions it can justify that a compulsory rights order does not confer sufficient rights and where this is necessary. This would be unlikely to be sought where pipelines and ancillary equipment are installed, but may occur where other network infrastructure, such as a new pressure reduction station, for example, is required and cannot be acquired by agreement.

Detailed comments

2.9 Gas and Oil Pipelines

Paragraph 2.9.3 covers impacts of the proposal. CLA argues that applicants should be required to assess the impacts of their proposals on the interests of the landowners who will be affected and set out proposed mitigation and working methodology to minimize this impact.

The current “Letter of Undertaking” agreed between the National Grid and the farming and landowning organisations provides a model. A copy can be supplied on request.

At paragraph 2.9.7 the guidance turns to below ground usage, ignoring the question of existing surface uses that may impact in site selection.

The CLA argues that applicants should be required to seek a route that avoids or minimizes damage to the interests of land managers and landowners.

At paragraph 2.9.22 the guidance turns to IPC decision making on landscape. Again we argue that this should also take into account existing land use and the interests of the landowner, particularly if he has alternative plans for the land that may be incompatible with a proposed pipeline.

At paragraph 2.9.25 guidance on mitigation should also point out that direct drilling can reduce the impact on rural business activities and landowners’ interests, for example where a pipeline needs to cross land set out for a golf course green or other valuable and intensively managed development.

At paragraph 2.9.30 the IPC should also be guided to assure the protection of existing piped water supplies and water availability both for human and livestock welfare, which can be severed by pipelining activities.

The IPC should also have regard to the protection of land drainage required to deliver agricultural productivity.

At para 2.9.33 mitigation should extend to:

— Replacement water supplies where these are cut off.
— Reinstatement of field drainage.

At para 2.9.34 the guidance is limited to soil geology. This is inadequate. Cutting a trench for a pipeline through valuable agricultural soils risks permanent harm to agricultural productivity. Applicant should be required to demonstrate their proposals and expertise in restoring agricultural soils when restoring pipelines.
DRAFT NATIONAL POLICY STATEMENT FOR ELECTRICITY NETWORKS INFRASTRUCTURE (EN-5)

The CLA argues that given the duality of the development consent, covering both planning and compulsory acquisition, there should be a significant upfront requirement on applicants to prove to IPC they have made every reasonable effort to secure the rights they require by agreement before applying for IPC consent.

We regard the drafting at paragraphs 2.2.2 and 2.2.3 as wholly unacceptable and set out below our alternative which we hope Government will adopt.

2.2.2 Electricity companies will need either to own the land on, over or under which construction is to take place (or to hold sufficient rights on or interest in it), or to have written permission to install their electric lines and associated equipment (for example, poles, pylons, transformers and cables). They will also require subsequently to have access to that land for the purposes of inspecting, maintaining, repairing, adjusting, altering, replacing or removing the line or equipment.

2.2.3 The necessary agreements with landowners/occupiers are obtained by the electricity company through either a wayleave or permanent easement agreement. The IPC should ensure that applicants use all reasonable endeavours to acquire the rights they need by agreement before making and application for development consent.

The IPC can reasonably expect that the overwhelming majority of these contracts will have been acquired by voluntary agreement and will have been concluded before the IPC receives the application. However, where the applicant wishes to install a new line or lines and despite making all reasonable efforts agreement cannot be reached with the landowners, the applicant may apply for a “necessary” or compulsory wayleave as part of their application to the IPC. The applicant may also apply for the compulsory purchase of land on the rare occasions it can justify that a wayleave does not confer sufficient rights and where this is necessary. This would be unlikely to be sought where lines and cables are installed, but may occur where other electricity network infrastructure, such as a new substation, for example, is required and cannot be acquired by agreement.

The above issues will be a relevant consideration in the IPC’s assessment of whether the electricity company has properly examined both alternative routes and mitigation of the effects of its proposals.

At paragraph 2.6 “impacts of electricity networks” the guidance fails to refer to impacts on landowners business and wider interests. Large scale electricity infrastructure is recorded as significant disbenefit to rural tourism in a number of studies in Wales and Scotland.

The applicant should be required to assess the wider impact of its proposal on the rural economy and relevant landowner interests as well as on the landscape and other generic impacts in EN-1.

January 2010

Memorandum submitted by the Crown Estate

SUMMARY

— We welcome the draft NPS and the opportunity to comment upon them. National Policy Statements EN-1 and EN-3 are particularly important for clearly establishing the case for the need for new offshore renewables development. In our view these documents clearly articulate the need for further renewables development and outline the issues that the IPC will need to consider when making decisions. We identify in our submission some areas where greater clarity may be provided.

— We particularly welcome the inclusion of text explaining the role of The Crown Estate and the importance of Round 3. In our view these sections provide important contextual information to assist the IPC to understand the nature of the applications that will be brought forward under this round of offshore wind farm development.

— The Crown Estate can bring to bear a high level of knowledge and expertise on issues relating to management of the foreshore, the territorial seabed and continental shelf, and we are committed to working with Government and all stakeholders on issues which affect these areas. Our Marine Estate comprises virtually the entire UK seabed out to the 12 nautical mile territorial limit, in addition to the sovereign rights to explore and make use of the natural resources of the UK continental shelf, with the exception of oil, coal and gas. We own approximately 55% of the foreshore and around half the beds of estuaries and tidal rivers in the United Kingdom.

INTRODUCTION AND CONTEXT

The Crown Estate welcomes the publication of the National Policy Statements on Energy and is grateful for the opportunity to provide these comments. This response is informed by The Crown Estate’s extensive experience of managing activities within the marine environment and, within its core remit, of balancing economic activity with stewardship of natural resources for future generations to use and enjoy. We are committed to working with government departments, stakeholders and industry in helping to manage the coastal and marine environment.
The Crown Estate can bring to bear an unparalleled level of knowledge and expertise on issues relating to management of the foreshore, the territorial seabed and continental shelf. This knowledge includes marine resource management (eg marine aggregate extraction, marine renewable energy installations, seabed infrastructure, aquaculture and new activities such as gas storage and carbon capture and storage) and its interplay with other marine activities such as defence, energy, navigation and marine safety. We have a strong understanding of the needs of a broad range of sea users, as commercial partners, customers and stakeholders.

**General Comments**

Round 3 will play a strategically important role in the achievement of renewables targets (and therefore to greenhouse gas reduction targets).

The planning regime established in the Planning Act (2008) requires that proposals for offshore wind farms of 100MW and above are treated as Nationally Significant Infrastructure Projects (NSIP). In practice we expect that this will include most, if not all, wind farms that will be brought forward under the Round 3 programme along with any proposed extensions to existing Round 1 and 2 offshore wind farm sites where the aggregate capacity of the original site and the extension together exceeds 100MW. Consequently it is easy to envisage anything between 40–70 applications being made to the IPC for offshore wind farms under these programmes. The combined capacity of these applications is likely to exceed 25GW and given the timeframe within which it is proposed that wind farms become operational (ie by 2020) it is likely that the majority of these applications will be made between 2012 and 2016.

It is critically important, therefore, that the Energy National Policy Statements (NPS) clearly and unambiguously establish the needs case and the issues which the IPC should have regard to in making its decisions.

On this basis we welcome the publication of the draft Overarching NPS for Energy (EN-1), the draft NPS for Renewable Energy Infrastructure (EN-3) and the draft NPS for Energy Networks Infrastructure (EN-5). It is our view that these documents do broadly establish the needs case for offshore renewables infrastructure and the transmission networks required and provide useful guidance for the IPC in its decision-making. We identify areas below where further clarity would be helpful.

**Draft Overarching National Policy Statement for Energy (EN-1)**

- **NPS EN-1** correctly emphasises the essential contribution offshore renewables is expected to make to:
  - Low-carbon energy generation;
  - Security of supply; and
  - Diversity of supply.

Whilst there is a clear statement in Section 3.7.1 of EN-1 that there is a significant need for all types of electricity generation to meet these aims, the NPS would benefit from a clearer statement about the quantum of offshore renewable energy development required to meet renewables and greenhouse gas reduction targets. Although Sections 3.3.14–3.3.15 and Section 3.4.4 do provide some details of the scale of renewable energy development that might be expected, the consideration of various scenarios does not lead to a clear and unambiguous understanding of the scale of development required. We believe it would be desirable to provide a clearer statement that Round 3, along with extensions to Round 1 and 2 sites, is expected to result in 25GW or more of new applications and that there is a significant need for this development.

In Section 4.19.18, EN-1 helpfully highlights the role that Grampian conditions might play in ensuring that potential impacts on Civil and Military Aviation and Defence Interests are mitigated. Grampian conditions are a useful device, where there is uncertainty about the scale of mitigation that might be required in a particular circumstance, and their potential use extends beyond aviation interests. It is suggested, therefore, that the NPS provides a more general statement about the potential applicability of Grampian conditions (along with other mechanism such as “Rochdale envelopes”) as a means of managing uncertainty.

EN-1 (and EN-3) makes little reference to the potential for trans-boundary effects. Although the need for any consultation with the devolved administrations and governments of neighbour states, where the potential for trans-boundary effects arises, can be addressed through relevant EIA Regulations and guidance, it would be useful to be clarify in the NPS the circumstances in which the IPC might reasonably expect such consultation to have taken place.

Section 4.18.12 foreshadows the designation of Marine Conservation Zones (MCZs). In light of the enactment of the Marine and Coastal Access Act (2009) and plans for MCZ designation, this section could now provide more clarity on the weight that areas with this designation should be given in the planning decision. It would be useful to make specific reference to the importance of the conservation objectives of these areas as the basis on which a judgement of any likely significant effect is to be made.

Section 4.8.20 (and elsewhere) makes reference to the role of Natural England and the Countryside Council for Wales. Reference should also be made to the role of the Joint Nature Conservation Committee (JNCC) as the Statutory Nature Conservation Agency for areas outside of territorial waters.
The Crown Estate is actively working with stakeholders to identify potential impacts to the environment and other sea users arising from the development of offshore renewables. In some cases it may be possible to identify and agree solutions to these potential effects, including, for example:

— Approaches to the analysis and interpretation of data;
— Project design; and
— Design of mitigation.

To the extent that these wider industry agreements and approaches are relevant to applications and are supported by relevant consultees, then we would urge the IPC to take them into consideration when making decisions.

The need for monitoring of consented projects is foreshadowed in Section 2.6.51–2.6.52. Monitoring is most effective when it is targeted to specific issues arising from EIA and Habitats Regulations Assessment. On this basis we suggest that this section emphasise the importance of identifying monitoring requirements that are proportionate and relevant to issues arising from the assessment process.

Draft National Policy Statement for Renewable Energy Infrastructure (EN-3)

We warmly welcome the inclusion in EN-3 of the text explaining the role of The Crown Estate and the approach that has been taken to the leasing of Round 3 wind farms. This is important contextual information for the IPC, particularly as the very large majority of the foreseeable future applications for offshore wind farms will arise under the Round 3 programme. In this respect it is important for the IPC to be aware of the zonal approach to site selection, and the (potentially extensive) zonal appraisal and planning activities that developers may have undertaken prior to site selection and project application. Failure to include this type of contextual information may lead to confusion about the zonal approach and a lack of understanding about how Round 3 differs fundamentally from previous leasing rounds.

Section 1.2.5 discusses the role of the Marine Management Organisation (MMO), in light of the recent enactment of the Marine and Coastal Access Act (2009) we suggest that, to the extent possible, those sections relating to the MMO are updated and expanded in light of the current understanding of its role.

CONCLUSION

We trust that you will find these comments constructive. We would be very willing to provide additional information on any of the points we have raised above and be very pleased to discuss these matters with you further. We are ready to engage in further discussions on these and other points relevant to our ownership or which our expertise may be brought to bear. All of this response may be put into the public domain and there is no part of it that should be treated as confidential.

THE CROWN ESTATE

The diverse portfolio of The Crown Estate comprises marine, rural and urban properties across the whole of the United Kingdom valued in total at over £7 billion (2006–07 figures). Under the 1961 Crown Estate Act, The Crown Estate is charged with maintaining and enhancing both the value of the property and the revenue from it consistent with the requirements of good management. We are a commercial organisation guided by our core values of commercialism, integrity and stewardship.

The Crown Estate’s entire revenue surplus is paid directly to HM Treasury for the benefit of all UK taxpayers; in 2006–07 this amounted to around £200 million.

THE MARINE ESTATE

Our Marine Estate comprises virtually the entire UK seabed out to the 12 nautical mile territorial limit, in addition to the sovereign rights to explore and make use of the natural resources of the UK continental shelf, with the exception of oil, coal and gas. We own approximately 55% of the foreshore and around half the beds of estuaries and tidal rivers in the United Kingdom. A wide variety of businesses and organisations conduct economic and conservation activities across our Marine Estate, with an estimated total value of some £46 billion providing almost 890,000 jobs. Over 20% of our coastal estate is leased out to conservation bodies.

The Crown Estate manages its marine assets on a commercial basis, guided by the principles of sustainable development and social responsibility. We take a consistent approach to the management of our activities around the UK, whilst retaining flexibility to take local factors into account whenever necessary. The Crown Estate can bring to bear an unparalleled level of knowledge and expertise on issues relating to management of the foreshore, the territorial seabed and continental shelf. We have a strong understanding of the needs of a broad range of sea users, as commercial partners, customers and stakeholders.

January 2010
Memorandum submitted by the Cumbria Wildlife Trust

Cumbria Wildlife Trust is the only voluntary organisation devoted solely to the conservation of the wildlife and wildplaces of Cumbria. The Trust stands up for wildlife, creates wildlife havens, and seeks to raise environmental awareness.

Formed in 1962 and supported by over 15,000 members, the Trust cares for over 40 nature reserves, campaigns for the protection of endangered habitats and species such as limestone pavements and red squirrels, and works with adults and children to discover the importance of the natural world.

Cumbria Wildlife Trust is part of a partnership of 47 local Wildlife Trusts across the UK. With 670,000 members and 2,200 nature reserves, we are the largest UK voluntary organisation dedicated to conserving the full range of the UK’s habitats and species.

Summary

— Cumbria Wildlife Trust considers that the way Imperative Reasons of Overriding Public Interest (IROPI) has been applied in this document does not stand up to scrutiny in relation to the Habitats Directive because:
  — There are alternative ways to meet energy need to those proposed in the energy National Policy Statements.
  — In relation to need, there is little ambition in the energy efficiency and community energy generation targets in EN-1.39
  — Some of the 10 nuclear sites proposed in EN-6 are capable of siting more than one reactor (and indeed, the government’s own target could not be met if this wasn’t the case), therefore it is not necessary to propose the most environmentally damaging of the currently proposed sites.
  — Site selection for nuclear sites in EN-6 appears to have been carried out purely on commercial terms, with no meaningful or rigorous consideration of the environmental effects.
  — Regardless of IROPI, the Habitats Directive indicates that if damage to Natura 2000 sites cannot be compensated for, the particular site should not be allocated as indicated in EN-1 paragraph 1.1.2.
  — The compensation required by the Habitats Directive for the most damaging nuclear sites would need to be on such a large scale as to warrant consideration at the earliest stage, and it may not ultimately be possible to compensate for loss of internationally protected habitats.

— Cumbria Wildlife Trust is very concerned that the inclusion of a site within the nuclear NPS is a presumption in favour of development that would be used to outweigh all other considerations when an application is made to the Infrastructure Planning Commission.

— Cumbria Wildlife Trust is concerned about the lack of consultation with local communities (among which we include ourselves as we represent members in the communities affected by the proposed nuclear development) which the Credible Nuclear Power Operators are required to engage in.40 This has not taken place, and Cumbria Wildlife Trust has not been consulted by the proposers of any of the Cumbrian sites.

— In particular Cumbria Wildlife Trust has grave concerns regarding the allocation of the proposed site and associated infrastructure for a nuclear power station at Kirksanton in Cumbria due to the following:
  — Loss of or damage to internationally protected habitats and species.
  — Loss of or damage to nationally protected habitats and species.
  — Loss of a County Wildlife Site.
  — Loss of UK Biodiversity Action Plan habitats and species.
  — Damage to marine life through direct and cumulative impact.
  — Coastal and inland flooding risks leading to ecologically damaging flood defence infrastructure and site raising.

Imperative Reasons of Overriding Public Interest (IROPI) and the Application of the Habitats Directive

1. The Conservation (Natural Habitats, &c.) Regulations 1994 (Habitats Regulations) make it clear that no damage to internationally protected sites will be countenanced unless there are Imperative Reasons of Overriding Public Importance (IROPI) as described in Article 6(4) of the Habitats Directive 92/43/EEC.41 However, even in the case of IROPI, the Habitats Directive indicates that any damage or loss of part of an

39 Paragraphs 3.3.16–3.3.23.
internationally protected site must be compensated by creation in the same country of new habitat of the same type, quality and extent as that lost to ensure the integrity of the Natura 2000 suite of sites, and if this is not possible, then the development cannot proceed as indicated in EN-1 para 1.1.2.

2. The government’s targets for energy efficiency and small scale renewables/community power generation as presented in EN-1 are unambitious and represent a seemingly low aspiration for decarbonising the economy. It is also disquieting that the government is prepared to encourage the UK population to make certain lifestyle changes in relation to health for example; yet will not consider encouraging other lifestyle and property changes to decrease demand for energy. In a world of declining resources, it would be sensible to start encouraging lifestyle changes rather than pretending that it will be business as usual in the long term.

3. In EN-6 the DECC make it clear that they consider that the case for nuclear power stations falls under IROPI. However, Cumbria Wildlife Trust considers that the government’s argument for a blanket application of IROPI for all nuclear power station sites is flawed on the basis that there are alternative courses of action to building nuclear power stations at all ten sites allocated in EN-6. Additionally, no evidence is presented that only these ten sites are appropriate or that these ten are the most appropriate. If EN-1 is followed, Government should have specified in the NPS the criteria appropriate to new build nuclear and left the industry to bring their proposals forward to the IPC, accompanied by Environmental Statements as appropriate. By inserting their chosen sites in EN-6, the government is taking upon itself judgments which should fall to industry and/or the IPC under the Act. There may be a case for judicial review of whether government has acted ultra vires.

4. If the nuclear sites are considered on the basis of one power plant at each site, EN-6 indicates that this would generate a maximum of 18 GW, falling some way short of the stated target of 25GW. It follows that it is feasible for some sites to have two or more plants, therefore the argument that all ten sites should be made available to meet the 25GW target is nonsensical. If more than one power plant can be built at each site, not all ten sites are needed, so the most environmentally damaging ones should be removed. Cumbria Wildlife Trust believes those sites that have a significant risk of having an irreversible impact on Natura 2000 sites should be removed from the final policy statement.

5. The allocation of sites in the nuclear NPS raises uncertainty about the potential damage to biodiversity by nuclear development. A blanket application of IROPI by the Government for development of nuclear power plants without a close look at the implications of such an application has the potential to threaten the integrity of the Natura 2000 network and could be an invalid interpretation of the Habitats Directive.

6. A cumulative assessment of impact has not been carried out properly in the NPS. Whilst there is a cumulative impact assessment in the Habitats Regulations Assessment (HRA) for each site, there is no overall cumulative impact assessment looking at the impact of five nuclear power sites on the west-central Irish Sea coast.

7. The Dungeness site was taken out of the initial round of consultation under discretionary criterion D6 (Internationally designated sites of ecological importance) on the basis of impact on nearby Natura 2000 sites. Why was the site at Kirksanton, which is as sensitive as Dungeness, not taken out of the NPS for the same reasons? Similar irreversible damage to Natura 2000 sites would be caused by development of a nuclear power station and associated infrastructure at Kirksanton as at Dungeness.

8. Sites have been allocated in a facile manner apparently on a purely commercial basis. This is illustrated in the alternative sites consideration document, in particular by the site summaries for Druridge Bay, Kingsnorth and Owston Ferry where it becomes apparent that the only reason for a site’s selection is that a developer put it forward. This is a poor standard for the assessment of whether a site is a viable alternative for inclusion in the NPS or not and it is not credible that this criteria would be acceptable in a local planning document, let alone in a National Policy Statement. For example, the Druridge Bay site summary states:

Having given Druridge Bay further consideration the Government has come to the view that it is reasonable to conclude that Druridge Bay is not credible for deployment by the end of 2025. The preliminary conclusion reached by Government is therefore that Druridge Bay is not potentially suitable and should not be included in the Nuclear NPS.

In coming to this view the Government has considered the problems inherent with deploying a site which has not previously hosted nuclear facilities, potential difficulties implementing transmission and distribution infrastructure at the site, and the difficulties (and potential delay) that the high amenity value and land ownership of the site are likely to pose for planning and licensing. In addition, the Government also notes the decision by energy companies not to nominate the site. The decision that Druridge Bay is not potentially suitable has been reached due to all these factors. Whilst some may be capable of mitigation, when considered in combination they considerably impair the credibility of deployment of the site by the end of 2025.

42 EN-1 Paragraphs 3.3.16–3.3.19.
44 https://www.energynpsconsultation.decc.gov.uk/nuclear/ssa/dungeness/assessment/
46 https://www.energynpsconsultation.decc.gov.uk/nuclear/alternatives/annex/druridgebay/
9. It appears that the principal difference between the non-inclusion of Druridge Bay and the inclusion of Kirksanton within the NPS is that a potential developer actually owns the land at Kirksanton. Kirksanton suffers from all of the difficulties listed above (a site which has not previously hosted nuclear facilities; potential difficulties implementing transmission and distribution infrastructure at the site, and the difficulties (and potential delay) that the high amenity value...are likely to pose for the site) as well as having a high level of environmental sensitivity. Despite Kirksanton being on the west coast of Cumbria, it is not the type of deindustrialised land that the Energy Coast initiative is targeting. It is in fact a rural, isolated area, of high landscape, tourist and biodiversity value, remote from the old industrial areas further north, from which it is separated by the Lake District National Park.

10. It can only be concluded that the operators have decided where these new nuclear power plants should be sited, without satisfactory consideration of environmental factors and the government taken these sites forward in the NPS. This is not an adequate or sensible way to allocate sites for such nationally important infrastructure and does not appear to meet the requirements of the Habitats Directive that alternative, less damaging sites should be considered.

11. Within the terms of the Habitats Directive, developments considered by the government as having IROPI still need to comply with the Habitats Directive and thus provide compensation over and above the damage that would be caused to some of the Natura 2000 sites can be compensated for in a way which meaningfully ensures that the integrity of the Natura 2000 network of sites is maintained. These sites should be removed from the NPS at this stage.

INCLUSION OF SITES WITHIN THE NUCLEAR NPS

12. Cumbria Wildlife Trust is concerned that the inclusion of a site within the NPS is a presumption in favour of development that would be used to outweigh all other considerations when an application is made to the Infrastructure Planning Commission even where this would give rise to conflict with European Directives transposed into UK law. DECC’s statement in EN-6 indicating that all ten sites would be needed (and that there are no alternatives appears to support this point of view. Paragraph A15 of Annex A in EN-6 states “The government does not consider it appropriate to include more than ten sites in this NPS at this stage when the need is balanced against the potential harm to Natura 2000 sites and other factors like planning blight “appears perverse when Natura 2000 sites will be harmed if a number of the currently selected sites are developed. Why weren’t more sites chosen to allow alternative sites to be developed if the damage to Natura 2000 sites is found to be of concern when they come to be put forward to the IPC?

LACK OF CONSULTATION BY OPERATORS

13. Cumbria Wildlife Trust is concerned about the lack of consultation with local communities (among which we include ourselves as we represent members in the communities affected by the proposed nuclear development) which the Credible Nuclear Power Operators are required to engage in.47 This has not taken place, and Cumbria Wildlife Trust has not been consulted by the proposers of any of the Cumbrian sites. It is also apparent that the Operators for Cumbrian sites have failed to consult many local residents and interest groups in the areas where the proposed power stations are to be sited.

CUMULATIVE IMPACT

14. The three sites proposed in Cumbria are in addition to Heysham in north Lancashire and Wylfa in North Wales. There has been no assessment of the cumulative impact that these five power stations will have on the biodiversity of the Irish Sea. This raises issues regarding the designation of Marine Conservation Zones in the Irish Sea under the Marine Act 2009. Cumulative impact is an issue that needs to be addressed and it is a glaring omission from DECC’s consultation documents. Surely the purpose of an NPS is to bring together the site and nuclear criteria in EN-6 states “The government does not consider it appropriate to include more than ten sites in this NPS at this stage when the need is balanced against the potential harm to Natura 2000 sites and other factors like planning blight “appears perverse when Natura 2000 sites will be harmed if a number of the currently selected sites are developed. Why weren’t more sites chosen to allow alternative sites to be developed if the damage to Natura 2000 sites is found to be of concern when they come to be put forward to the IPC?

SITE SPECIFIC CONCERNS

Kirksanton

15. The proposed RWE NPower site for the Kirksanton nuclear power station lies at the mouth of the Duddon Estuary. This part of Cumbria is physically isolated from much of the rest of the county by topography, including mountains, bays and estuaries. The road system comprises narrow, single carriageway roads, and apart from the small town of Millom, there is not a great deal of heavy industry or large scale settlement along this part of the Cumbrian Coast. The Kirksanton site comprises low lying land, at risk of flooding from both freshwater and coastal sources.

48 Environment Agency “What’s in your backyard” http://tiny.cc/TVd50 (URL shortened for convenience)
16. This isolation and low levels of existing development are precisely the reasons why the area around Kirksanton is of such great significance for its natural environment including habitats, species and landscapes of international value. In many respects it is one of a few places that is unspoiled for biodiversity.

17. The development of a nuclear power station at this location will necessitate a complex and sizable infrastructure to facilitate the building and operation of a nuclear complex. The consultation documents indicate that this is likely to include a marine loading facility, new road infrastructure possibly including a bridge across the Duddon Estuary, grid connections and pipelines for the abstraction and discharge of sea water required for cooling.

18. The nuclear power station and associated infrastructure will have a highly detrimental effect on the internationally designated sites, habitats and species of the Duddon Estuary and the surrounding natural environment. It is very unlikely that any developer, even with unlimited resources could compensate for the loss of these internationally important habitats, as it is inconceivable that a new estuary site could be found to replace the loss of the Duddon Estuary habitats, so ensuring the integrity of the Natura 2000 suite of Sites of Community Importance as designated and protected by the European Habitats Directive 1992 as enacted into UK law as the Conservation (Natural Habitats, &c.) Regulations 1994 (Habitats Regulations). This application therefore does not meet discretionary criterion D6 “Internationally designated sites of ecological importance” and should have been omitted.

Designations

19. The coastline directly adjacent to the proposed Kirksanton site is designated as the Morecambe Bay Special Area of Conservation (SAC), and the Duddon Estuary Special Protection Area (SPA) and Ramsar wetland site. These designations mean that the sites are of international significance for their habitats and species and are protected by the European Habitats Directive. These sites form part of the suite of Natura 2000 sites found across Europe. It is not clear that loss of or damage to large areas of the Duddon Estuary SPA/Ramsar and part of the Morecambe Bay SAC which would be caused by development at Kirksanton can be compensated for elsewhere, and if this cannot be done, the Habitats Directive cannot be complied with.

Sources of damage to Natura 2000 sites

20. As an example of potential sources of damage, Paragraph 5.17 of the Appraisal of Sustainability (AoS) for Kirksanton states “Locating the marine loading facility (if required) within the Duddon Estuary will require extensive dredging prior to construction and during operation to meet the required depths necessary to facilitate marine vessels. Dredging a channel will not only destroy habitats but will seriously degrade the amount of natural sediment available to sustain the estuarine morphodynamics and coastline to the south of the Duddon Estuary. Dredging will cause loss of or damage to large areas of the Duddon Estuary”. This paragraph of the AoS anticipates the damage that will take place if the natural processes of the estuary are affected by infrastructure. It shows that much of the SPA/Ramsar site would be damaged or adversely affected. Other infrastructure having a similar effect would be a road bridge or tidal barrage across the Duddon Estuary, which although not mentioned in the AoS have been discussed as essential for the implementation of this site. In particular, the coastal dune habitats, mudflats, reefs, shingle banks and estuary habitats which make this area so rich in biological diversity would be damaged or lost.

21. Despite paragraph 5.20 the Kirksanton AoS asserting that “There is, however, potential for mitigation or compensation of biodiversity effects, including the creation of replacement habitat for UK designated sites”, there is no explanation of how this would be done. Furthermore, there is no mention of creation of replacement habitat for loss of the internationally designated sites. It is, in fact inconceivable that the extent of loss of habitat within the Duddon could be compensated for elsewhere as all sites of similar calibre to the Duddon have already been designated, and it would be impossible to create an estuary from scratch with the same habitats that would be lost as a consequence of the development.

Marine impacts

22. The reports for Kirksanton give no indication of the amount of sea water that will be needed for cooling the reactor(s) at the site or how much would be discharged or at what temperature. However, the stated preferred option is for sea water cooling, and indeed, there is unlikely to be a source of fresh water which could be used for cooling the reactor. There is no information available regarding abstraction/discharge at the Kirksanton site. However, a report commissioned by British Energy (2008) estimated that the new generation reactors would need 72000 litres per second of cooling water. By way of comparison this is slightly more than the average flow of the River Thames at Teddington Lock.

49 http://www.jncc.gov.uk/ProtectedSites/SACselection/n2kforms/UK0013027.pdf
50 http://www.jncc.gov.uk/pdf/SPA/UK005031.pdf
51 http://www.jncc.gov.uk/pdf/RIS/UK11022.pdf
55 25 year average at the point at which the Thames becomes tidal.
23. There is no reassurance that cooling water intake and outflow at such large volume and the raised temperatures near the site of release will not affect the behaviour and distribution of marine species including Key UK Priority Habitats such as blue mussel beds, _Sabellaria_ reefs, tideswept channels and mud and sand flats. It is likely that chlorine would be used as a biocide to prevent marine life sticking to inlet and outflow pipes. The bleaching effects on marine life of chlorination will depend on volumes, rate of decay and complex chemical reactions. The chlorination process would be likely to cause harm to the ecosystem of the Duddon Estuary SPA/Ramsar and Morecambe Bay SAC. This is an area where information is lacking in the Habitats Regulations Assessment document for Kirksanton and research is required into possible impacts from an operating power station in future. It is likely however, that if the chlorinated water discharged into the marine environment has a detrimental effect on the organisms at the bottom of the food chain, species higher up the food chain which depend on these marine species would suffer. There is no information provided in the NPS documentation to indicate that there would not be an adverse effect on marine life and if there was, damage to marine environments in the Irish Sea would be practically impossible to compensate for because it is not feasible to recreate many marine habitats.

24. Water abstraction for cooling purposes is likely to have an impact on marine species which would result in possibly significant numbers of larvae, eggs and small fry being removed from the marine environment into the cooling system.

25. The discharge of large volumes of warm water in to the Duddon Estuary would inevitably have ecological effects, possibly including the creation of conditions favourable to invasive species not native to the Cumbrian coast. Of grave concern is that the Habitats Regulations Assessment for the (now omitted) site at Dungeness assessed the impact of changes in water temperature on the marine environment. This has either not been done for the Kirksanton site, or has been left out.

26. Many of the species dependant on marine sources of food are designated as interest features of the Natura 2000 sites, for example birds such as Sandwich Tern, Northern Pintail, Red Knot and Common Redshank and these species come under the same European legislation protection as the habitats themselves.

**Impacts on Species Protected under the Habitats Directive**

27. The interest features of these internationally protected sites include mobile species which move off the sites and onto the land which is proposed for the development of the nuclear power station. One of the species most at risk is the natterjack toad for which the Duddon Estuary is the most important site in the UK, supporting between 18–24% of the British population which is over 50% of the population in Cumbria. Development along the coast, including erection of sea defences, land raising, marine facilities and road and bridge infrastructure would damage and fragment much of the natterjack toad habitat leading to a sharp decline in the population. The natterjack toads are cited as one of the reasons for the designation of the Ramsar site and so are protected as part of this Natura 2000 site.

28. Along with the natterjack toads, the bird assemblages for which the Natura 2000 sites are designated will suffer from ongoing disturbance during both the construction and operational stages of the nuclear facility and associated infrastructure. It is unlikely that mitigation measures can be put in place to protect these species from the disturbance by construction and operation of the site.

**Impacts on Nationally Protected Sites and Species, Local Sites and Priority Habitats and Species**

29. The Duddon Estuary SSSI shares boundaries with the SPA and Ramsar. In addition to the importance of the site for its bird and natterjack toad populations, the site is of importance for its geomorphological interest. Any disturbance to the sediment regime of the estuary by power station infrastructure will lead to damage to the geomorphological interest of the SSSI which includes extensive sand dunes. This will have further detrimental effects on habitats in the area.

30. The site boundary at Kirksanton includes the Kirksanton Moss County Wildlife Site. This Wildlife Site of county importance would be lost due to direct land take, land raising and changes to drainage.

31. Much of the habitat just inland of the coastal strip is Priority Habitat as selected under Section 41 of the NERC 2006 Act which imposes a duty on all public bodies to conserve, restore and enhance biodiversity. These habitats have been chosen by the UK government as being of Priority importance. The proposed site of the Kirksanton power station will directly affect two of these habitats, Coastal and Floodplain Grazing Marsh and Coastal Habitats Above High Water. The implementation of the development and associated infrastructure would damage these habitats and prevent them from performing their function which is to allow corridors for movement of plant and animal species.

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57 JNCC Ramsar Information Sheet UK11022
58 http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_4#p13-pb1-11g41

Reasons for selection of Priority Habitats include: Habitats for which the UK has international obligations, habitats at risk, habitats which are important for assemblages of key species and habitats which are restricted to isolated locations which are threatened with extinction.
32. There are a number of additional protected or priority species which use the sites including:

European protected species: bats (four species), great crested newts, otters

Wildlife and Countryside Act species: common lizard, adder, slow worm and many species of nesting bird.

**BRAYSTONES**

*Internationally designated sites and species*

33. Abstraction and discharge from a facility at Braystones could have a negative impact on the interest feature species associated with a number of internationally protected sites along the coast of Cumbria. This is due to changes in water temperature and use of biocides related to the very large quantity of water which will be abstracted and discharged. It could have a negative effect on mobile species associated with the internationally protected sites as designation features (e.g., river lamprey, sea lamprey, brook lamprey, salmon, and many bird species). The sites in question include Morecambe Bay SAC/SPA/Ramsar, Duddon Estuary SPA/Ramsar, Drigg Coast SAC, Upper Solway Flats and Marshes SPA/Ramsar, Solway Firth SAC, River Derwent and Bassenthwaite Lake SAC, River Ehen SAC, River Eden SAC. Some of these sites have not even been included in the Habitats Regulations Assessment despite their interest feature species using the coastline by the Braystones site where they could be affected by any abstraction and discharge.

34. The abstraction of cooling water from the River Eden SAC would have adverse impacts on the interest features of this internationally protected site, including on the population of pearl mussels which is the most important population of this species in the UK. Development of marine loading facilities and pipelines for this site would damage natterjack toad habitat, and prevent movement of this species up and down the coast. There is not enough information provided in this submission to ensure that there will be no negative impact on internationally protected sites and species.

**NATIONALLY AND LOCALLY DESIGNATED SITES, PROTECTED SPECIES AND PRIORITY HABITAT**

35. The proximity of the site to the Silver Tarn, Hollas & Harnsey Mosses SSSI raises issues about the potential for the development to impact on the interest features of this SSSI. Changes to drainage and sediment entrainment have the potential to damage the ecological interest features of this site. The Braystones site boundary is directly adjacent to Gibb Tarn County Wildlife Site, and 100m from the Braystones Coast County Wildlife Site. These are sites of County level importance. Changes to hydrology and sediment entrainment will have the potential to damage these sites. There are records for protected species on the site and for marine mammals directly offshore. The proposed site of the Braystones power station will directly affect a Priority Habitat, Coastal Habitats Above High Water. The implementation of the development and associated infrastructure would damage this habitats and prevent it from performing its function which is to allow corridors for movement of plant and animal species.

**MARINE IMPACTS**

36. The discharge of warm water from a Braystones facility into the Irish Sea could have a major impact on the marine environment and affect the behaviour and distribution of marine species including Key UK Priority Habitats such as blue mussel beds, *Sabellaria* reefs, tideswept channels and mud and sand flats. It is also likely that chlorine would be used as a biocide to prevent marine life sticking to inlet and outflow pipes. The bleaching effects on marine life of chlorination will depend on volumes, rate of decay and complex chemical reactions. The potential effects of discharged water on the natural environment is not adequately discussed in the Habitats Regulations Assessment and the impact on populations of marine species of the abstraction of large volumes of seawater is not addressed at all. There is not enough information provided in this submission to ensure that there will be no negative impact on marine life.

**SELLAFIELD**

*Internationally protected sites*

37. Abstraction and discharge from a facility at Sellafield could have a negative impact on the interest feature species associated with a number of internationally protected sites along the coast of Cumbria. This is due to changes in water temperature and use of biocides related to the very large quantity of water abstracted and discharged. It would have a negative effect on mobile species associated with the internationally protected sites as designation features (e.g., river lamprey, sea lamprey, brook lamprey, salmon, and many bird species). The sites in question include Morecambe Bay SAC/SPA/Ramsar, Duddon Estuary SPA/Ramsar, Drigg Coast SAC, Upper Solway Flats and Marshes SPA/Ramsar, Solway Firth SAC, River Derwent and Bassenthwaite Lake SAC, River Ehen SAC, River Eden SAC. Some of these sites have not even been included in the Habitats Regulations Assessment despite their interest feature species using the coastline by the Sellafield site where they would be affected by water abstraction and discharge. More information is needed about the potential effects of discharges on these species.

38. The abstraction of cooling water from Wastwater and the River Ehen SAC would have adverse impacts on the interest features of these internationally protected sites, including on the population of pearl mussels in the Ehen which has the most important population of this species in the UK. Development of
maritime loading facilities and pipelines for this site would damage natterjack toad habitat, and prevent movement of this species up and down the coast. There is not enough information provided in this submission to ensure that there will be no negative impact on internationally protected sites and species.

**NATIONALLY AND LOCALLY DESIGNATED SITES, PROTECTED SPECIES AND PRIORITY HABITAT**

39. The area delineated for the proposed new nuclear site at Sellafield includes part of the Church Moss SSSI. As the proposed nuclear power station site is so large, it is unclear why part of Church Moss SSSI was included within the site boundary. This seems to be an unnecessary allocation of land of high ecological value. This site and its hydrologically functional surrounds should be removed from the proposed site. The SSSI is designated for its habitats and also for its invertebrate value. This richness of invertebrate diversity is extremely high on the western boundary of the site along the disused railway line where there are a number of records for the same scarce invertebrates found on the SSSI.

40. The site also includes Sellafield Tarn, a County Wildlife Site of County importance. As with the SSSI, this site should be excluded from the proposed nuclear development, or if kept within the site, should not be developed due to its biodiversity interest. It should be noted that the Sellafield site has a high species diversity including internationally protected (natterjack toads and brown long eared bats) and nationally protected species (grass snake, slow worm, adder, common lizard, badger). There are also records for marine mammals directly offshore. The Herpetological Conservation Trust have identified land in this area to be of high value for its natterjack toad population and it is delineated as Natterjack Site D23 in their dataset. Site D23 extends approximately 100m into the proposed Sellafield site on the south west side. There are a number of bird species of conservation concern found at the site including some which may be mobile features of SPA/Ramsar sites.

**MARINE IMPACTS**

41. The discharge of warm water from a Sellafield facility into the Irish Sea could have an adverse impact on the marine environment and affect the behaviour and distribution of marine species including Key UK Priority Habitats such as blue mussel beds, Sublittoral reefs, tideswept channels and mud and sand flats. It is also likely that chlorine would be used as a biocide to prevent marine life sticking to inlet and outflow pipes. The bleaching effects on marine life of chlorination will depend on volumes, rate of decay and complex chemical reactions. The potential effects of discharged water on the natural environment is not adequately discussed in the HRA and the impact on populations of marine species of the abstraction of large volumes of seawater is not addressed at all.

**IMPACT ON THE LAKE DISTRICT NATIONAL PARK**

42. Cumbria Wildlife Trust considers that the sites at Kirksanton and Braystones should be removed from the list of proposed sites in the Nuclear National Policy Statement EN-6 due to their proximity to the Lake District National Park. The designation of the Lake District National Park for its landscape includes biodiversity within the reasons for designation. The siting of the power stations on greenfield sites at Braystones and Kirksanton will adversely affect the environmental quality of the Lake District National Park.

**CONCLUSIONS**

43. Cumbria Wildlife Trust believes that the use of Imperative Reasons of Overriding Public Importance to justify damage to internationally protected sites has been misapplied in the case of EN-6. IROPI has been applied in a blanket fashion not just at a policy level as with the other NPS documents, but at a site specific level prior to an adequate assessment of those sites having been carried out. The site level Habitats Regulations Assessments are vague, and are in no way reassuring that damage to Natura 2000 sites can actually be mitigated or compensated for. This may leave the government in a situation of having allocated sites where development would cause damage to Natura 2000 sites which cannot be compensated for, therefore under the Habitats Directive, the development of the site cannot go ahead, even with IROPI. By indicating that all ten allocated sites must go ahead, the government is pushing an agenda which may not be legally possible and could in fact be considered *ultra vires*.

44. It is of particular concern that there has been no meaningful assessment of the cumulative effects that the potential development of power stations at Wylfa, Heysham, Kirksanton, Sellafield and Braystones would have on Morecambe Bay habitats and Irish Sea marine life.

45. The Kirksanton allocation should be withdrawn from the Nuclear NPS (EN-6) on the basis that the site is too ecologically sensitive to host a nuclear power plant and associated infrastructure, and that the developer will not be able to compensate for the damage that will occur to the Natura 2000 sites. It will simply prove impossible to find suitable existing habitat or to create new habitat on a large enough scale to compensate for the loss of and damage to the biodiversity of the Duddon Estuary and Morecambe Bay Natura 2000 sites. The proposed development will therefore be contrary to the requirements of the Habitats Directive/Habitats Regulations despite IROPI, on the basis that without adequate compensation for loss of habitat, the development would simply not be able to proceed.
46. There are sensitive habitats and species found at the Sellafield and Braystones proposed sites. New facilities here have the potential to impact on these and nearby internationally protected sites. Any submissions to the IPC for development at these locations will need to have extensive and rigorous investigations of the impacts of the construction and operation of these installations on the biodiversity found at these sites. A mitigation and compensation package of the highest quality should be put forward with any application to the IPC at these sites. The precautionary principle should apply, and even if IROPPI is used as a reason to go ahead with the developments, compensation over and above the losses that may take place has be put in place prior to the loss of any biodiversity.

January 2010

Memorandum submitted by Cumbrians Opposed to a Radioactive Environment

CORE [Cumbrians Opposed to a Radioactive Environment] is grateful for the opportunity to comment on the NPS and we ask that our written submission is given due consideration by the Committee.

As a local environmental group, CORE has campaigned since 1980 on nuclear issues—specifically focusing on the commercial operations undertaken at Sellafield. These include the reprocessing of spent reactor fuel, environmental discharges and contamination, radioactive waste management, nuclear transports and local health detriment. The comments we submit to the Committee are therefore largely confined to that element of the combined National Policy Statements that relates to nuclear power.

1. We make the following points on the process to date:

- The sheer volume and complexity of the consultation documents defies a properly reasoned response being made by the due date
- We do not believe that we, and communities nationwide, have been given the fullest opportunity to participate at a sufficiently early stage of the development of the Policy Statements.
- We are concerned that the Infrastructure Planning Commission (IPC) will be left to resolve issues of major import without public challenge or input, and that the unexplored and contentious question of on-site storage of high burn-up reactor fuel at new power station sites is not within the IPC remit.
- We contend that it is premature for the Government to preliminarily conclude that effective arrangements will exist to manage and dispose of future wastes produced by reactors from the new-build programme. Given the unresolved issues surrounding the MRWS programme on existing wastes, it is dangerously irresponsible for Government to postulate that, on nuclear waste disposal, the IPC “need not consider this question”.
- The MRWS programme is specifically designed and trailed to encourage public input throughout the programme—the value of such participation being wholly undermined by premature IPC approval for developments.

2. On the plans for the development/expansion of nuclear power in the UK, we comment:

- We perceive little merit in making a worthwhile contribution to the consultation on new build on the grounds that Government decisions have already been made.
- That as a means of mitigating carbon emissions, nuclear power will deliver too little too late to be of benefit;
- It will bring additional environmental detriment locally and nationally;
- Its inclusion in UK’s energy mix will act as an unjustified distraction to national effort on the vital development of renewable energies;
- That there can be no confidence whatsoever that the industry’s historic failure to deliver projects on time and to budget will not be repeated;
- That the likelihood of an increase in health detriment (as evidenced by recent US and German studies) has been inadequately addressed by Government and that
- The late publication (after the NPS and Justification consultation deadlines) of COMARE’s report on the German KiKK study on childhood leukaemia around nuclear power stations precludes public scrutiny and response.

On new-build plans for West Cumbria, we make the following site-specific points:

- We note that none of the three nominated sites in West Cumbria “fits the bill” in terms of the Government’s initial guidelines on locations for new-build—namely that a) sites should preferably be licensed nuclear sites, b) that sites should be located close to the demand for electricity and c) that sites should possess the necessary transmission infrastructure.
— It is well documented that all aspects of West Cumbria have been dominated by the nuclear industry (Sellafield) for the last half century. This dependence upon one industry has lead directly to a stagnation of non-nuclear enterprise in the area.

— New-build in West Cumbria will not only perpetuate this domination for a further 60 years or more but will also ensure the area’s continuing dependence on the vagaries of one historically unreliable industry, at the same time deterring non-nuclear investment in the region.

— The damaging prospect of one or more new nuclear power stations in the regional is already recognised by Government—as described in its Draft National Policy Statement for Nuclear Power Generation (EN-6) which acknowledges that the development of individual West Cumbrian sites could have negative effects on the local infrastructure and that "these negative effects may become more significant if more than one nuclear power station is developed in the region".

— Cumbria County Council’s Emergency Planners have already warned, in terms of emergency planning capabilities, of the inadequacy of local infrastructure systems to deal with events outside those currently scoped for the Sellafield site itself.

— Written evidence presented to the 1996 NIREX Rock Characterisation Facility (RCF) Public Inquiry by local authority planners confirmed that the long-established nuclear presence in West Cumbria—and its indelible environmental legacy of commercial operations (nuclear wastes, radioactive discharges and health detriment)—was shown to have acted not only as a deterrent to new non-nuclear enterprise and investment being attracted to West Cumbria but also as a deterrent to holidaymakers and the expansion of the tourist industry in West Cumbria.

— It is well documented that, central to the aspirations of Britain’s Energy Coast West Cumbria (BECWC), nuclear expansion is to be the mainstay of the regeneration plans. Such underpinning will be detrimental to attracting the non-nuclear investment and employment that has been sought with urgency by West Cumbria’s local authorities and others over the last decade.

— As nominator of West Cumbria’s Kirksanton site, Germany’s RWE has confirmed that development of that site will result in the removal of the long established and viable Haverigg windfarm—undermining both Government assurance that nuclear development will not damage renewable programmes and the claim by Britain’s Energy Coast Plan that it will cater equally for renewables as little more than lip service.

January 2010

Memorandum submitted by the Department of Energy and Climate Change

ENERGY NATIONAL POLICY STATEMENTS: CONSULTATION PROCESS

INTRODUCTION

This note has been produced in response to issues raised by the Energy and Climate Change Select Committee, at the Energy National Policy Statements Briefing held on 25 November 2009, about the aims and objectives of the consultation process. The Committee also questioned why the national consultation events were not being held in every region, notably the north west of England. In the light of this comment we are now proposing to run an additional event in Manchester on 26 January 2010.

The Committee stressed that it was important to engage people in active consultation and questioned whether the Regional Development Agencies (RDAs) were involved in the process. A note was requested on the public meetings held to date, their purpose, scope and format, and the location and timing of events. (Information regarding the dates, locations and venues of each event was forwarded to the Committee on 26 November 2009 and for convenience is attached to this note).

We welcome the Select Committee’s interest in how we engage with the public and would welcome further comments and suggestions for ways in which to improve the consultation process if necessary.

REQUIREMENT TO CONSULT

The Planning Act 2008 requires the Government to consult the public and stakeholders on the National Policy Statements (NPSs) before they can be designated. The particular challenges in devising the consultation programme have been the very technical nature of the information and the large quantity of information involved, given the range of energy technologies under consideration and site specific analysis required for the Nuclear NPS.

Officials of the Department for Communities and Local Government (DCLG) were engaged in the design of the consultation process for the energy NPSs. The process reflects their advice about engaging directly with communities. Planning Aid also provided advice on the accessibility of the consultation document and the format of the national events. Senior DCLG and DECC officials are actively involved in the consultation events, either attending the exhibitions or as panel members at the public meetings.
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NATURE OF THE CONSULTATION

The Government is consulting on six draft energy National Policy Statements including the associated Appraisal of Sustainability and Habitats Regulations Assessment for each document:

— Overarching National Policy Statement for Energy (EN-1).
— Fossil fuel electricity generation (EN-2).
— Renewable energy generation (EN-3).
— Gas supply infrastructure and gas and oil pipelines (EN-4).
— Electricity networks (EN-5).
— Nuclear power generation (EN-6).

A 15-week public consultation began on 9 November 2009 and will close on 22 February 2010. This extends the usual statutory consultation period of 12 weeks.

There are four main elements to the consultation process, as follows:

— National events covering all energy NPSs.
— Local events close to the 10 nuclear sites judged potentially suitable in the Nuclear NPS.
— Responses to the consultation for instance via the Government website.

National Policy Statement Events

These events are stakeholder facing, although open to the public to attend if they wish, and cover all six energy National Policy Statements including nuclear. Each event includes an exhibition, presentations by Ministers and/or Government officials, followed by a Question and Answer discussion. The events are at Peterborough, York, London, Cardiff, Exeter and Manchester.

Nuclear National Policy Statement Local Events

A series of local events are being held at locations near to the 10 potentially suitable sites for new nuclear power stations identified in the NPS, comprising three-day exhibitions (Thursday–Saturday) and a public meeting usually on a Saturday.

Stakeholder meetings

As well as the local and national events, we will be inviting stakeholders to a technology specific meeting on the draft Energy National Policy Statements (EN-1 to EN-5) on 25 January 2010, with a separate meeting on the Nuclear NPS (EN-6) on 2 February. These will be working level meetings with environmental NGOs, industry and other stakeholders to help them engage and formulate their responses to the consultation on the National Policy Statements. The original proposal was for a series of meetings to cover each NPS but these have now been amalgamated upon the request of NGOs who preferred a single event to cover the majority of NPSs in one sitting. We will also be holding an additional event for stakeholders interested in the Appraisals of Sustainability and Habitats Regulation Assessments on 3 February, as well as a meeting with Statutory Consultees (such as the Environment Agency, Natural England, and the Countryside Council for Wales) covering all the above issues, to be held on 1 February.

Online

Responses to the Energy National Policy Statement consultation can be submitted on line via the Government website www.energynpsconsultation.decc.gov.uk The online consultation has been designed to make it easy to submit responses to the questions set out in the consultation document which accompanies the draft National Energy Policy Statements.

PURPOSE, SCOPE AND FORMAT OF EVENTS

National Policy Statement Events

The events aim to raise awareness of the consultation, provide information on the ways in which responses can be made, allow respondents to understand where the consultation fits into the overall process, and answer any questions they may have regarding the consultation itself.

The consultation events are open to stakeholders and to the public, and delegates are required to register their attendance via the consultation website. The target audience includes the following:

— Members of the public with an interest in energy, planning and infrastructure.
— Elected Members and officials of Local Authorities and County Councils.
— Non-government Organisations (NGOs).
— Regional Assemblies.
— Regional Development Agencies (RDAs).
— Institute of Civil Engineers (ICE) members.
— Royal Town Planning Institute (RTPI) members.
— Private sector professionals with an interest in energy, planning and infrastructure.
— Planning consultants.
— Energy companies.

The events typically run from 10.30 am to 2.00 pm on week days, and focus on two presentations which provide an overview of the forthcoming planning reforms and the NPSs, followed by an open Q&A and an additional chance for delegates to ask questions more informally over lunch. Exhibition boards provide outline information on the six energy NPSs and an opportunity for delegates to raise any issues and questions before the presentations commence.

Consultation material provided at the events includes hard copies and CDs of the consultation documents, Planning Aid leaflets relating to the NPSs, laptops connected to the consultation website where people can submit a response if they wish, and hard copy response forms. The IPC also has a presence at the meeting to give out information about the planning application stage, and are available to discuss their role and processes informally, though to preserve their independence they are not part of the formal proceedings.

The locations of the events were selected on the basis of achieving the maximum geographic coverage within the resources available, ensuring that overlap with the Nuclear NPS Local Events was kept to a minimum. For instance, taking care not to overload potential consultees in north west England given the concentration of Nuclear NPS Local Events in Cumbria. However, the Select Committee’s concerns regarding the lack of a national consultation event in the North West is noted. As a result we will be holding an additional event in Manchester, which was recommended as the optimum location following consultation with Planning Aid, CLG and other relevant departments.

Various actions have been taken to publicise and raise awareness of the national consultation events through the following media, contacts and organisations:

**Media Coverage**

There was wide media coverage the weekend before the launch of the Energy NPSs, with press articles, television and radio interviews with the Secretary of State and other Ministers and extensive national and regional media coverage in print, broadcast and online throughout 9 and 10 November. This in turn resulted in a large number of hits on the consultation website and questions and comments sent via e-mail direct to DECC.

**Energy NPS Consultation Website**

15,200 unique visitors have viewed the website as of 5 January 2010. The website, which provides details on all Energy NPS consultation events, has been widely publicised and included on a number of related websites (DECC, DirectGov etc).

**Government Office Network**

All GO regional officers were contacted by email with details and updates about the events. They then forwarded details on to Local Authorities, community groups and local planners. GOs in the regions “hosting” events were contacted via telephone to ensure that details had been passed on and that all possible leads had been followed. We have also worked with GO press offices to encourage local and regional press coverage of the events.

**Regional Development Agencies**

The RDA network was contacted in a similar way via the lead DECC contact, Vicky O’Kelly of the North West RDA, who widely distributed the details of the consultation events to the RDA regional offices throughout the UK, and encouraged business contacts to attend. As the remit of RDAs does not include planning (that is a matter for GOs) they have not been directly involved in the organisation of events.

**Planning Aid**

Planning Aid are involved in promoting the events both through their volunteer groups across the country and their contacts at the RTPI among others. Planning Aid set up a dedicated website on the NPSs which had generated almost 60,000 hits as of 26 November 2009. Representatives of Planning Aid are facilitators at the national events and provide exhibition support at the nuclear local events. As noted above, they have also helped with ensuring the consultation document is accessible, and with the format of the national events.
National Organisation of Residents Associations

Planning Aid recommended and provided details of the National Organisation of Residents Associations (NORA) whose members they thought would be interested in the NPS events. NORA were then contacted via email regarding the consultation events.

Press Notices

The press offices of the GOs with consultation events in their regions were contacted regarding publicising the events. Press notices were then sent out to local newspaper publications and media, and to regional publications using contacts from the East of England, Yorkshire and Humber, Northeast and Northwest GOs. Emails were sent to internal and stakeholder communication colleagues in Peterborough Unitary Authority and Cambridgeshire County Council, Natural England, Environment Agency, GO policy colleagues (who in turn forwarded to policy colleagues in local authorities, planning and environmental groups, NGOS, Sustainability East and charities and local forums). The regional press office recommended specific groups to invite to the events who were subsequently informed.

Local Government Association

CLG provided details to the LGA for circulation to their members and network.

Publication of event venues and times

The location, venue and schedule of the events were publicised both on the website and via other contacts so that those who did not manage to register for an event were still able to attend if they wished.

Institute of Civil Engineers

The Institute of Civil Engineers was contacted and publicised the events to its members.

Consultation email address

We received inquiries from people interested in the events via the email address published in the consultation document (and online) who we were able to inform about the events and advise how they could register to attend.

DECC/CLG stakeholder database

Information has recently been distributed regarding the events to DECC and CLG stakeholders.

Statutory Undertakers

All Statutory Undertakers were emailed in accordance with the Planning Act 2008 with details of the consultation which contained information on the national events. Letters have been sent where emails were not successful.

Chief Planning Officers letter

The Chief Planning Officers letter, which went to all local authorities, highlighted the NPS consultation and linked to DirectGov for further information, and there was also an email that went out to thousands of LA professionals via Info4local about the NPS consultations generally.

South West Sustainable Energy Agency

Following the Peterborough and York events, we contacted the sustainable energy agency (funded by SW RDA) regarding the Exeter event. They have been helpful in identifying local issues and promoting the consultation events.

Nuclear NPS Local Events

The purposes of the local events are to raise awareness of the consultation, encourage people to take part and allow them to discuss issues with senior policy officials. The aim is to enable people who visit the events to:

— Learn more about the draft Nuclear National Policy Statement and how a site in their area has been assessed as a potential location for a nuclear power station;

— Find out how the public can have their say in the consultation process; and

— Comment on the draft NPS and test the evidence presented. We therefore consider responses made during these events as consultation responses where appropriate.
Venues for the events are selected as close to the site and in locations as populated as possible to engage a wide audience. Suggested venues have been recommended by Local Authorities and energy companies (who have undertaken similar events in the past) and we have endeavoured to use as many of these recommendations as possible. The priority is finding a large enough room that is accessible to a large majority of the public.

The events usually run for three consecutive days. The first two days (typically Thursday and Friday) comprise an exhibition which is open from 8.00 am to 8.00 pm and 8.00 am to 7.00 pm respectively. The exhibition continues on the final day from 9.00 am to 4.00 pm and includes a public meeting from 10.00 am to 12.00 midday.

The exhibition features a series of interactive touchscreens and graphic panels giving information on the draft Nuclear National Policy Statement, the consultation process and the assessment of the site. The panels provide background information on nuclear power stations to help people understand the practical implications of constructing and operating a nuclear power station. That information also appears in the consultation document.

They aim to introduce the draft Nuclear National Policy Statement and the Government’s assessment of sites in an engaging, interactive and understandable way. Respondents will still need to read the consultation documents, however the exhibitions are intended to help summarise the detailed information contained in the draft National Policy Statement and help people engage with them.

Consultation materials provided at the event include hard copies of the Nuclear NPS, the consultation documents, the Appraisal of Sustainability and Habitats Regulations Assessments for the site, and the Overarching Energy NPS. Planning Aid leaflets and flyers are provided, together with hard copy versions of the consultation questions. Laptops are provided with access to the consultation website, where visitors are assisted in navigating the consultation pages and in answering queries.

The public meeting is held over two hours and includes two slide show presentations given by senior DECC officials which provide an overview of the Nuclear NPS and planning reform, and details of the site assessment carried out at the nominated site. Each presentation is followed by a public discussion and Q&A session with an opportunity for the audience to air their views. Attendance at the public meetings is normally captured by registration via the consultation website, but additional visitors can attend on the day if space permits. The panel discussions aim to:

- Raise awareness amongst the local community of the consultation questions;
- Explain why the Government considers the listed sites as potentially suitable for new nuclear;
- Actively listen to both concerns and feedback on the substance of the NPS documents and the consultation process;
- Help people to understand and respond to the consultation questions; and
- Capture the views expressed at the events and record them as individual responses to the consultation.

Whilst the exhibitions largely raise awareness and inform consultation responses, it is important that we listen to local views and we are recording/keeping a record of the comments made. The presentations and public discussions are recorded at each event and a formal Government response to the issues raised by local delegates will be provided.

The primary target audience is the local community. Energy companies, local authorities and regulators are invited to attend the public discussions in an audience capacity, with specific support at the events provided by Planning Aid and the Environment Agency. A range of people are invited to attend the local events as follows:

- General local community (including hard to reach groups).
- Elected representatives (Councillors, MPs).
- Local protest groups/environmental groups.
- Local businesses.
- Local schools (primarily/secondary).
- Local Community Groups.
- Site Stakeholder Groups (at existing sites).
- Local Authorities.
- Site nominators/energy companies.
- Parish Councils.
- Statutory consultees.

Publicity for the local events involves the distribution of leaflets door to door, and posting notices in local community buildings including libraries and doctors’ surgeries. Advertisements are placed over two consecutive weeks* in local and regional newspapers with a combined circulation of at least 150,000. A
rolling communications campaign is underway targeting local stakeholders including Parish Councils, campaign groups and schools. We have been working with the local authorities to develop our plans and they are helping to publicise the events to their elected members and staff. We are also generating PR coverage in the local print and broadcast media.

* With the exception of the Hartlepool event which took place in the first week following the launch of the NPS:

In response to comments raised about the short notice of these events following publication of the NPS, we will be holding an additional public meeting from 6–8 pm at Hinkley Point on 27 January 2010, and attending a public meeting arranged by Hartlepool Borough Council on 26 January, involving a panel discussion with DECC (OND), EDF, Friends of the Earth, the Sustainable Development Commission and neighbouring local authorities.

More than 880 people have attended the first five consultation events (both public meetings and exhibitions). There are currently more than 450 people registered to attend the remaining five public meetings, some of which have not yet been publicised. We would expect at least as many people again to attend the exhibitions, and for registrations to increase as the meetings are publicised.

**Event Feedback**

**National Policy Statement Events**

Three of the five national consultation events have now taken place, at Peterborough and York (24 and 25 November respectively), with the London event held on 2 December. A total of 22 people attended the event in Peterborough, with 30 at York. The London event attracted over 80 delegates and was addressed by Parliamentary Under Secretary of State, David Kidney MP. Delegates came from a wide range of organisations including members of the public.

Feedback was generally positive, with the London event particularly well received. The choice of venue of the Peterborough event was however questioned by one delegate, particularly its accessibility by public transport.

We have since reviewed and amended the format of the events, and ensured the venues of the later events are located within walking distance of railway stations and public transport routes. The use of better targeting through extensive mailing lists and marketing has resulted in a substantial increase in the number of delegates for the London, Cardiff and Exeter events. We will be applying the same marketing techniques for the additional event.

The principal issues raised at the events related to planning reform, renewable energy and nuclear. Particular questions focussed on:

- Planning reform (both the principles behind the change and the capacity of the IPC to assess complex technical issues);
- Renewable energy (particularly wind power);
- Technologies not covered by the NPSs (including wave and tidal, and smaller electricity lines);
- The Appraisals of Sustainability (particularly the impact on the AoS of any changes to energy policy, and issues relating to nuclear waste);
- Local authority capacity to deal with the pre-application process and to comment on applications (especially around nuclear in Cumbria) and the weight given to local authority reports by the IPC;
- Concerns about the difference in timing between the call for evidence by the ECC Select Committee by 15 January 2010, and the close of the consultation period for the Energy NPSs, on 22 February 2010;
- How to engage with and respond to detailed extensive planning documents (which, in the case of the Nuclear NPS, also contain very important policy issues) in time;
- Concerns about impact of new nuclear build on local communities;
- Interim storage of radioactive waste and the IPC’s role in consenting these facilities;
- The costs of decommissioning nuclear power stations;
- The status of the NPSs and how they would carry forward after the general election;
- Whether policy would change as a result of the consultation, and how that would impact on the AoS; and
- Whether the planning reforms truly represent a single consents regime, and if applications could “pass” the IPC but fail other consents.

Delegates at the events have included representatives from local authorities, local residents and members of the public, energy companies, the nuclear industry, Regional Assemblies, RDAs, Parish Councils, CPRE, Commission for Rural Communities, Government Offices, planning consultancies and law firms, anti-nuclear campaign bodies, ICE, Nuclear Industry Association (NIA), and the National Federation of Fishermen’s Organisations (NFFO).
Nuclear NPS Local Events

To date, local events have taken place at the following locations:

<table>
<thead>
<tr>
<th>Site</th>
<th>Dates</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartlepool</td>
<td>12–14 November 2009</td>
<td>97</td>
</tr>
<tr>
<td>Hinkley Point, Somerset</td>
<td>19–21 November 2009</td>
<td>102</td>
</tr>
<tr>
<td>Heysham, Lancashire</td>
<td>26–28 November 2009</td>
<td>257</td>
</tr>
<tr>
<td>Sizewell, Suffolk</td>
<td>3–5 December 2009</td>
<td>206</td>
</tr>
<tr>
<td>Bradwell, Essex</td>
<td>10–12 December 2009</td>
<td>222</td>
</tr>
</tbody>
</table>

The public meetings have been highly participative with no shortage of questions. Issues raised have covered such issues as:

— potential health impacts;
— interim storage of high level waste and geological disposal;
— safety concerns regarding the proposed reactor designs;
— the case for promoting a higher proportion of renewable energy;
— key local environmental impacts;
— the potential benefits of a future new nuclear plant to the local economy; and
— economic implications in terms of potential public subsidy to support the new nuclear programme.

Media coverage at the events included local radio bulletins and regional TV at the Hartlepool event, with radio and local press coverage at Hinkley Point, Heysham, Sizewell and Bradwell.

Transcripts of the local public meetings held at each location are uploaded onto the consultation website and can be accessed via the “Nuclear” page under the “Sites” link: www.energynpsconsultation.decc.gov.uk/nuclear/ssa

The detail of how the national and local consultation events are organised and structured is kept under review and amended appropriately following feedback to ensure we are responsive to issues raised.

Conclusion

Whilst we have made some changes to the format and venues for the national events and we are very receptive to any suggestions as to how they might be improved, we are nonetheless satisfied that the events to date, and those planned for the future, have constituted an effective means of consulting and provided an effective and meaningful opportunity for people to engage with and understand the Energy NPSs. We therefore consider the consultation process is fit for purpose.

Consultation Venues and Dates

National Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 November 2009</td>
<td>Peterborough</td>
<td>Marriot</td>
</tr>
<tr>
<td>25 November 2009</td>
<td>York</td>
<td>York Racecourse</td>
</tr>
<tr>
<td>2 December 2009</td>
<td>London</td>
<td>Kensington Hilton</td>
</tr>
<tr>
<td>20 January 2010</td>
<td>Cardiff</td>
<td>Novotel</td>
</tr>
<tr>
<td>21 January 2010</td>
<td>Exeter</td>
<td>The Rougemont Hotel</td>
</tr>
<tr>
<td>26 January 2010</td>
<td>Manchester</td>
<td>The Palace Hotel</td>
</tr>
</tbody>
</table>

Nuclear Local Events

<table>
<thead>
<tr>
<th>Site</th>
<th>Dates of local events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartlepool</td>
<td>12–14 November 2009</td>
</tr>
<tr>
<td>Hinkley Point, Somerset</td>
<td>19–21 November 2009</td>
</tr>
<tr>
<td>Heysham, Lancashire</td>
<td>26–28 November 2009</td>
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<tr>
<td>Sizewell, Suffolk</td>
<td>3–5 December 2009</td>
</tr>
<tr>
<td>Bradwell, Essex</td>
<td>10–12 December 2009</td>
</tr>
<tr>
<td>Wylfa, Anglesey</td>
<td>7–9 January 2010</td>
</tr>
<tr>
<td>Braystones and Sellafield, Cumbria</td>
<td>11–16 January 2010</td>
</tr>
<tr>
<td>Kirksanton, Cumbria</td>
<td>21–23 January 2010</td>
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Stakeholder Workshop Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 January 2010</td>
<td>Hartlepool (Panel discussion hosted by Hartlepool Borough Council)</td>
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</tr>
<tr>
<td>27 January 2010</td>
<td>Hinkley Point, Somerset (Additional public meeting)</td>
<td></td>
</tr>
<tr>
<td>4–6 February 2010</td>
<td>Oldbury, South Gloucestershire</td>
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* Appraisal of Sustainability and Habitats Regulation Assessment

January 2010

Supplementary memorandum submitted by the Department of Energy and Climate Change

Note on Consideration of an Application for Sites not Listed in the Nuclear NPS

The Energy and Climate Change Select Committee requested a note from DECC on the procedure to be followed for any application for development consent for a new nuclear power station on a site not listed in the Nuclear NPS.

The draft Nuclear NPS says:

1.3.4 “It is Government policy that the IPC should only be able to grant development consent for a new nuclear power station in relation to a sites that the Government has assessed to be potentially suitable. This is to ensure development consent applications for sites listed in the NPS have been:

— Assessed strategically by the Government using criteria that have been subject to public consultation;
— Subject to an Appraisal of Sustainability (AoS) that incorporates the requirements of the Strategic Environmental Assessment (SEA) Directive;
— Subject to a strategic level Habitats Regulations Assessment (HRA); and
— Been the subject of public consultation and Parliamentary scrutiny.

1.3.5 Accordingly, the NPS only has effect in relation to applications for the development of new nuclear power stations on sites listed in this NPS. This means that the IPC has the function of deciding applications in relation to the development of new nuclear power stations only on those sites. In the event that a development consent application for a new nuclear power station is submitted to the IPC for a site not listed in this NPS, that application would need to be decided by the Secretary of State”.

This is supported and augmented by the following text which appears at paragraphs 5.27–5.30 of the Consultation Document which accompanied the Energy NPSs:

Sites not Listed in the Nuclear NPS

“5.27 The Government has conducted an extensive exercise to identify potentially suitable sites for new nuclear power stations deployable by the end of 2025. That search has only identified ten sites which the Government considers to be both potentially suitable and deployable by the end of 2025, and those sites are listed in the draft Nuclear NPS.

5.28 The effect of the Nuclear NPS is limited to the development of new nuclear power stations on the sites listed in the Nuclear NPS. This means that the IPC does not have the function of deciding applications for the development of new nuclear power stations on sites which are not listed in the Nuclear NPS.

5.29 Any application for development consent for a new nuclear power station on a site which is not listed in the Nuclear NPS would be decided by the Secretary of State; the IPC would examine the application and make a recommendation to the Secretary of State on it. In considering any such application, as well as having regard to the recommendation from the IPC and the matters set out in section 105(2) of the Planning Act, the Secretary of State could also expect to have regard to:

— the Strategic Siting Assessment (SSA) criteria, including consideration of whether or not it is necessary to review the criteria or conduct a further SSA; and
5.30 Specifically, in the event that a developer made an application early in the period between now and 2025, the Government would expect the developer to be able to demonstrate that the site is suitable for the deployment of new nuclear power stations by the end of 2025.”

The Department will consider in the light of comments received during the public consultation and parliamentary scrutiny, whether there is a need to make any changes to the Nuclear NPS to clarify the position covered by this note.

Department of Energy and Climate Change
17 February 2010

Further supplementary submitted by the Department of Energy and Climate Change
At the oral hearing with Lord Hunt of Kings Heath on 10 February 2010 the Energy and Climate Change Select Committee requested further details on:

— rationale for non-location specific National Policy Statements (NPSs);
— Carbon Capture Storage (CCS) and economic feasibility;
— 50MW threshold for Energy from Waste (EfW) stations; and
— carbon footprint of waste derived fuel and waste hierarchy.

This note provides this information.

1. Rationale for non-location specific National Policy Statements

To review and specify all potentially suitable locations for energy infrastructure types in the non-nuclear draft energy National Policy Statements (EN-2 to EN-5) would be a long, complex and expensive task that would not deliver commensurate benefits. There is potentially no limit to the detailed work that would be needed to consider every possible potential site for all types of energy infrastructure.

Such an exercise would also have considerable risks that identification of potentially suitable sites could chill potential future development of non-energy development (e.g. housing) and raise fears that energy infrastructure would be built on the identified sites without adequate local involvement.

The policy to identify potentially suitable sites for new nuclear generating stations was set out in the Policy Framework for New Nuclear Build—Consultation Document published in July 2006. The Government gave a commitment that it would carry out suitable siting assessments and so EN-6 on nuclear power is location-specific. This was based on the need for industry to have a reasonable degree of certainty as to which sites would be potentially suitable so that they could reasonably commit investment, the limited availability of sites that were technically suitable for new nuclear generating stations and the desire to avoid “planning blight”.

2. Carbon Capture Storage and economic feasibility

The text in EN-1 reflects the requirements of the EU Directive 2009/31/EC on CCS. Article 33 of the Directive specifies that an assessment of economic feasibility is necessary. DECC published guidance on CCR for Electricity Act S36 applicants in November 2009. This guidance makes it clear that such economic assessment should be based on reasonable assumptions made about future market circumstances and CCS technology, given information available at present.

Therefore an economic feasibility assessment made at the time of an application cannot predict with complete accuracy either in what circumstances it will be feasible to fit CCS to a proposed power station nor when those circumstances will arise. However, it ensures developers consider the possible costs of retrofitting CCS to the power station during the application phase and indicate potential circumstances where retrofitting operational CCS may be economically feasible during the lifetime of the proposed new station. We do not believe that the level of information needed to demonstrate economic feasibility as required by DECC’s CCR guidance sets an unreasonable hurdle for applicants.

Although the IPC and applicants and applicants are directed to follow DECC’s CCR guidance, we will consider whether the current draft in the NPS is sufficient or should include more text from DECC’s published guidance.

3. 50MW threshold for Energy from Waste stations

The Electricity Act 1989 sets the 50MW threshold (s36). The Planning Act 2008 transferred consent decision-making for 50MW and above electricity generating stations from the Secretary of State to the Infrastructure Planning Commission; the 2008 Act did not affect local authority powers with regard to energy infrastructure thresholds.
Government is working with local authorities (through DEFRA’s Waste Infrastructure Delivery Programme (WIDP)) to encourage authorities to collaborate with each other over procurements for waste treatment and disposal infrastructure in order to avoid:

— the duplication of investment by adjacent local authorities; and
— the building of sub-optimally sized plant.

We have had success in promoting partnership working amongst local authorities as evidenced by procurements for waste facilities in, for example, Lancashire, Greater Manchester, Northamptonshire/Milton Keynes and Essex/Southend.

The economics of small scale plant will reflect in higher gate fees paid by local authorities for the delivery of waste management services. However, it is also important to understand that alongside recycling, Energy from Waste management solutions usually combine a number of technologies which can include Anaerobic Digestion (AD), Mechanical Biological Treatment (MBT) and autoclave, all of which produce residues which can either go to landfill, energy recovery or be spread on land (in the case of AD). Where energy recovery is involved we want to see the most climate change friendly outcome, namely Combined Heat and Power (CHP).

CHP can be achieved in many ways, including through the provision of waste derived fuels to industrial intensive energy users burnt in Waste Incineration Directive (WID) compliant plants in substitution for fossil fuels where the preparation of those fuels has observed the waste hierarchy methodology.

4. Carbon footprint of waste derived fuel and waste hierarchy

DECC and DEFRA are working on a cross-government EfW strategy to provide guidance to waste managers, industry and planners on the most carbon friendly and economically viable EfW pathways. Part of this work will be to provide a hierarchy of EfW outcomes including CHP. This work is on-going and will be concluded in autumn 2010.

We are still looking into the issue raised by Friends of the Earth and energy footprint of EfW and gas power stations.

Department of Energy and Climate Change

9 March 2010

Memorandum submitted by EDF Energy

KEY POINTS

— EDF Energy welcomes the draft National Policy Statements (NPSs) as a means of providing guidance on the Government’s policy for the delivery of major energy infrastructure in a clear and transparent manner.
— We wish to see the draft NPSs designated as soon as possible following public consultation and parliamentary scrutiny.
— EDF Energy agrees with the Government’s conclusion on the need for new low-carbon generation by 2025, a significant proportion of which is expected to be filled by nuclear power.
— We support the principle of a diverse energy mix and all of the draft NPSs as a means of developing the relevant individual technologies.
— Explicit reference should be made to the UK’s legally binding climate change objectives out to 2050 to reinforce the policy context for new low-carbon investment.
— At this stage, Dungeness should be included as a potentially suitable site for new nuclear build.

INTRODUCTION

1. EDF Energy is one of the UK’s largest energy companies with activities throughout the energy chain. Our interests include nuclear, renewables, coal and gas-fired electricity generation, combined heat and power, electricity networks and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including both residential and business users.

2. EDF Energy believes that, as well as concerted efforts to improve energy efficiency, large scale investment in electricity infrastructure is urgently required to replace existing plants and meet our climate change targets. It is important that the transition to a low carbon economy is progressed efficiently to ensure that the competitiveness of UK energy supplies is maintained while also ensuring the stability and affordability of energy prices. It is essential that the right decisions are made now to secure investment in large-scale low-carbon electricity generation and promote the transition to a low carbon economy incorporating a diverse energy mix.
3. EDF Energy has supported the reform of the planning system, including the majority of the Planning Act 2008 provisions, as a means of delivering an efficient and effective system that is conducive to supporting large-scale investment in major infrastructure developments in the UK, including energy infrastructure projects. Without prompt implementation of this reform, there is a serious risk that the UK will not be able to meet its energy supply and climate change objectives owing to continued planning uncertainties and delays.

4. We therefore believe that the NPSs, as a fundamental part of the package of planning reforms, are a very welcome step forward in ensuring that the UK meets its challenging long-term goals. The NPSs, as currently drafted, will help establish a clear policy framework for nationally significant infrastructure projects (NSIPs) and help ensure more timely and transparent decision-making. Where a project is of national importance, its benefits may be largely national in nature but its impact may be local. It is appropriate that such projects are judged against their fit with national policy objectives but with proper scrutiny of these benefits against any local impact. This approach will allow for a co-ordinated process for delivering environmental, economic, and social objectives and sustainable development for the UK as a whole. By separating the assessment of national need from the assessment of local impact, this will remove a major source of delay from planning inquiries.

5. The last nuclear power station built in the UK, Sizewell B, was granted consent under the provisions of Section 2 of the Electric Lighting Act 1909, and under Section 40 of the Town and Country Planning Act 1971. The public inquiry for Sizewell B lasted for almost three years, and it took over six years from planning application to consent. The delays and uncertainty caused by the planning system are not restricted to nuclear projects alone. For example, EDF Energy is developing an offshore wind farm near Teesside and this project took 41 months to gain its original consent. Similarly, the time taken to fully consent the North Yorkshire grid upgrade took 77 months. It is essential that Government policy is clear, and that the consenting process is predictable, timely and transparent to allow the private sector to come forward with confidence to invest in very large infrastructure projects and reduce the risk of any projected capacity shortages.

**National Policy Statements**

6. We welcome the draft Overarching National Policy Statement for Energy, together with the technology-specific draft NPSs, as they clearly set out in one place the Government’s policy for delivery of major energy infrastructure, including new power generation facilities and the necessary transmission and distribution infrastructure. They provide sufficient detail for all affected parties and stakeholders in terms of the implications of a proposed development and as a means of providing a comprehensive list of issues that they might wish to understand further. This can help facilitate the stakeholder pre-application consultations that developers are committed to delivering as part of the new system.

7. The statements represent a significant step forward in this regard and we recommend that the Government should finalise the draft NPSs as soon as practicable, following proper consideration of views expressed during the public consultation and recommendations from the Energy and Climate Change Committee. This will provide clarity to the Infrastructure Planning Commission (IPC) and limit the scope for re-examination of policy issues, which are properly determined by the Government. We believe that the NPSs should be accorded a very strong presumptive weight by the IPC that can only be displaced by evidence of compelling adverse local consequences that cannot be suitably mitigated by the developer.

8. EDF Energy supports the need for flexibility concerning the submission of different elements of a project, with the option for each in their own right to be submitted as a separate NSIP. This is particularly relevant in the context of maintaining the option for separate power station and grid connection applications, as it may be necessary to consider applications for nuclear development in advance of any applications for related network reinforcement because of the long lead time for nuclear power plant construction, and the fact that network reinforcements are often related to more than one project or that these reinforcements provide wider benefits in terms of system security.

9. However, even though EDF Energy is keen for the draft NPSs to be finalised as soon as possible, we believe that they should be subject to a thorough form of parliamentary scrutiny. The designation of the draft NPSs after a rigorous parliamentary examination will, in our opinion, enhance the authority of the statements, ensuring both the integrity of the process as well as securing greater confidence in their actual content.

**Need for Investment in New Nuclear Power Stations**

10. EDF Energy welcomes the fact that Government made a clear policy statement in its White Paper on Nuclear Power\(^6\) that it is in the public interest that new nuclear power stations should have a role to play in the future electricity generating mix for the UK alongside other low carbon sources.

11. The draft National Policy Statement for Nuclear Power Generation elaborates on this policy, and provides an essential quantification of the need for new nuclear investment, both in terms of scale and urgency. Such an explicit statement of need is of great importance, as it means that for the first time the

Government has clearly outlined its specific vision for nuclear power. This is now more consistent with the approach for renewables (with its own dedicated support mechanism) and to a lesser extent Carbon Capture and Storage (CCS).

12. EDF Energy strongly supports the Government’s analysis that there is a need for around 60GW of new electricity generation capacity by 2025, of which as much as possible should be low carbon. We also endorse the Government’s conclusion that the UK’s need for additional supplies of low carbon electricity should be based on a diverse mix including both renewable and low carbon thermal (ie nuclear or, possibly, CCS) generation.

13. The Government has assessed that the generation “gap” that new, non-renewable generation will need to fill in 2025 is around 25GW, based on analysis forecasting that 35GW (of the 60GW) could be provided from renewable sources. We believe that the 35GW figure is ambitious and represents the top end of what is likely to be delivered from renewable sources. As a result there is a significant probability that by 2025 the UK’s need for new non-renewable generation could turn out in practice to be significantly greater than 25GW. It is therefore important as part of the Nuclear NPS to contemplate what actions could be necessary for this renewable contribution not to be met, and that the “gap” to be filled by non-renewable generation turned out to be larger than currently expected.

14. However, despite this strong statement of need, we remain concerned that in its current form, the draft still does not fully inform the IPC of the Government’s climate change policy objectives and the role that low carbon generation has to play in achieving these objectives. We believe it would be useful to reinforce the policy context by making an explicit reference to the UK’s legally binding target to deliver an 80% reduction in carbon emissions, which was established in the 2008 Climate Change Act. The Committee on Climate Change (CCC), in providing its first report to Parliament in October 2009, confirmed that delivering this target will require the power sector to be almost, if not completely, decarbonised by 2050. In fact the CCC, along with other stakeholders, believes that an early reduction in carbon emissions from the electricity generating sector (to be almost entirely complete by 2030) is key to achieving this. The rationale supporting this assertion is:

— Unlike many other sectors, the electricity sector already has a number of low carbon technologies such as nuclear power and wind farms that are capable of being deployed.

— Low and zero carbon electricity will make a significant contribution to the decarbonisation of other sectors, such as heat and transport. Early decarbonisation of electricity may therefore support a more rapid uptake of these technologies.

— Moving to a carbon free electricity sector will not be easy. It will require a number of developments, including many years of investment in the skills and supply chain needed to support the delivery of these technologies, and probably large changes to the way in which the electricity market operates to ensure that there is sufficient incentive for investment.

— If we make these changes now, and use the upcoming capacity gap as an opportunity to switch to low carbon sources, then the UK will be in a very strong position to deliver its 2050 ambitions. The alternative is to delay change and invest in another generation of unabated fossil fuel generation. Due to the long lived nature of these assets this alternative pathway would delay decarbonisation by many years and even decades, thus threatening the ability of the UK to ‘gear up’ in time to achieve its 2050 ambitions.

15. We believe that the IPC should be made explicitly aware of this essential long term requirement for low carbon generation in the UK. This will help provide a much needed longer term context to its decision making. Reaching the generation figure quoted in the NPS for 2025 is not the end goal in itself and is simply a milestone on the path towards longer term climate change mitigation objectives. Further investment in low carbon technology such as nuclear power will be needed beyond this date and this will depend on a number of factors including electricity demand growth assumptions, plant asset life and fossil fuel price volatility. With this mind, it is more than likely that all the sites listed in the draft Nuclear NPS will be needed in the future, including Dungeness. This is especially true given that, as the draft Nuclear NPS points out, it is possible that not all of the sites listed will see projects emerge and that some may be rejected by the IPC following the examination of local and/or technical issues.

16. EDF Energy also agrees with the Government’s conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. There are no unsolved fundamental technical difficulties associated with long term management and disposal of radioactive waste, and worldwide experience is accumulating. The Government White Paper on radioactive waste provides a pathway for implementing geological disposal, based on gaining public confidence for a safe, secure and environmentally acceptable solution. It is important that steady and consistent progress is made along this pathway.

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SITEs

17. The requirements for the siting of a nuclear power station are complex. The sites already in use for nuclear power generation (including decommissioning sites) were chosen for good reasons and have a proven track record in demonstrating their ability to successfully accommodate nuclear power. Both historic studies and more recent work have confirmed that the availability of such suitable sites in the UK is limited and it therefore makes sense to continue to make use of these locations for new development. This will reduce the need for new supporting infrastructure such as transmission lines. The communities around existing sites are familiar with nuclear power, and value the economic contribution and employment opportunities provided by the power station.

18. Industry nominated a total of eleven sites for assessment, and the draft Nuclear NPS proposes that ten of these are suitable, at a strategic level, for new nuclear development, and that all ten are needed. However, as the draft Nuclear NPS points out, it cannot be guaranteed that projects will come forward for every one of these sites. For example, it is possible that some proposals are rejected by the IPC following examination of local issues, or are found to be unsuitable for technical reasons. Some, but not all, of the sites may be capable of accommodating more than one modern reactor.

19. The Government’s stated aim is to ensure that as much as possible of the 25GW of thermal generation required by 2025 is filled by low carbon technologies to meet its climate change and energy security goals. For this to happen there is a need to maximise the contribution of nuclear as soon as possible as a proven low-carbon technology and to make a contribution to the delivery of even more ambitious climate change objectives for 2050.

20. Given the considerations outlined in paragraph 18, it is quite possible that ten sites would not be enough to meet this policy aim by 2025. Therefore, if nuclear power is to “be free to contribute as much as possible” towards meeting this new capacity, then further sites are likely to be needed in the Nuclear NPS and this has relevance to the status of Dungeness as explained below.

21. EDF Energy welcomes the listing of the five sites within the draft Nuclear NPS, where it owns potential development land, as suitable at a strategic level, for deployment of new nuclear power stations. These sites are at Bradwell, Hartlepool, Hinkley Point, Heysham and Sizewell. EDF Energy also owns potential development land at Wylfa, which has been sold (subject to contract). It is helpful that the NPS identifies the issues that the IPC should have regard to at each site, based on the strategic level assessment, although the more detailed project level environmental assessment should consider these issues in any event.

DUNGENESS

22. EDF Energy nominated land at Dungeness in Kent, adjacent to the existing nuclear power stations, for the Government’s strategic siting assessment (SSA) process. Having assessed Dungeness, the Government has said it is not satisfied that Dungeness is potentially suitable for the deployment of a new nuclear power station by 2025, and has therefore not included the site in the draft Nuclear NPS. We believe this is not an appropriate conclusion to be drawn at this stage.

23. The Government concluded in its draft Nuclear NPS that nuclear development at Dungeness could deliver power on the 2025 timescale. So, on this criterion, Dungeness is clearly in no different position from the other 10 sites that were included in the draft Nuclear NPS as “potentially suitable”. Nor is it suggested that new nuclear development at the Dungeness site would be any different in terms of the scale of benefits provided through the supply of much needed additional, low carbon electricity.

24. Therefore, if the national need is to “maximise the contribution of nuclear as soon as possible” and Dungeness is a site that could, if developed, make a valuable contribution, we find it difficult to understand why the overriding public interest arguments that the Government advances for the ten sites should not equally apply to Dungeness. The case for including Dungeness within the Imperative Reasons of Overriding Public Interest (IROPI) statement in the draft NPS is made even stronger by the arguments above. These suggest that it is probable that the “gap” for nuclear to fill could by 2025 turn out to be even larger than estimated and that ten sites could well prove insufficient for the Government’s low carbon energy needs to be met. We believe there is no valid and objective reason why the Dungeness site should be excluded at this stage.

25. The only criterion within the Government’s Strategic Siting Assessment process which the Dungeness site does not meet criteria is D6—“Internationally designated sites of ecological importance”. This is a “discretionary” criterion, which means that the Government can include the site even where the criterion is not met. EDF Energy believes that there is no basis for the Government using its discretion to exclude Dungeness at the strategic assessment stage on the basis of criterion D6, and it is premature to rule out Dungeness as a potential site based on the evidence available, and in advance of any project-specific proposal. The test of whether compensation is or is not needed and, if it is, whether it is possible on the scale required, is a matter that the IPC should be allowed to consider at the project development stage—just as they will for all other sites. It will be for the promoter to satisfy the requirements of European law, and there is no current sound evidential basis to conclude that this would be impossible. These difficulties, which a promoter of the site would have to address, are not a logical basis for saying that the site is not needed, or could not fall within the IROPI test.
26. Coastal protection is also identified as an area of concern, but the Government has concluded, on the basis of advice from the Environment Agency, that there is potential to protect the site from the risk of flooding and the impact of coastal processes. The impact of coastal protection measures on European designated habitats would be the subject of detailed work at the project level.

27. The risk of planning blight is cited in the draft NPS as a factor to justify limiting the number of sites to ten, and therefore for excluding Dungeness but without any more detailed explanation. However, there has been nuclear power at Dungeness since the 1960s and for at least 25 years the site has been included within lists of locations where future nuclear development might take place. There is a high level of local support for nuclear power operations at Dungeness, and the potential economic benefits of development more than offset any issues of blight caused by uncertainty over whether development would proceed.

Mitigating Potential Climate Change Adaptation Requirements

28. A number of conventional power stations (fossil fuel and nuclear) are likely to be proposed for coastal or estuarine sites, and we agree that applicants should in particular set out how the proposal would be resilient to:
   — coastal changes and increased risk from storm surge;
   — effects of higher temperatures, including higher temperatures of cooling water; and
   — increased risk of drought leading to a lack of available cooling water.

29. We recognise the importance of climate change adaptation and support the requirement to consider these potential effects of climate change during planning. However, there is currently a high level of uncertainty about the actual changes that will arise in practice from climate change. Developers apply business principles when making decisions, based upon risk assessments, and will need to strike a balance between implementing additional measures now, increasing project costs, and the probability that those measures will actually be required.

30. We believe a more effective approach may be to monitor changes and to ensure that there are no barriers to implementing additional measures at a later date, if the need should arise.

31. We consider it important that the IPC take account of this uncertainty and should be prepared to accept the option of active monitoring and demonstrable plans for adaptation, rather than implementing advance measures to deal with uncertain outcomes. As with the waste issue, the appropriate question in our view is whether the relevant sites can in principle be protected over the relevant period, as opposed to how exactly this would be done, if it proved necessary.

Conclusions

32. EDF Energy believes that the draft NPSs represent a significant step forward and we recommend that the Government should finalise the draft NPSs as soon as practicable. We believe that these statements provide both the stable policy framework energy developers need to invest, and the right level of detail to enable effective assessment of compliance with national policy. They thereby provide greater opportunity for the IPC, and all stakeholders during the IPC’s examination of applications, to consider and satisfactorily deal with the real issues that could affect a local community, in the full knowledge that the national need for the projects has been established.

33. We believe that the effectiveness of the NPSs will be further improved by the current consultation and parliamentary scrutiny. The guidance to the IPC would also benefit from a more explicit reference to the UK Government’s climate change policy objectives out to 2050 and the context provided by the reports produced by the CCC, recognising that 2025 is not an end in itself but a milestone towards longer term policy objectives.

34. The Government should reconsider its assessment of the site at Dungeness. While it will be challenging to meet the requirements of the Habitats Directive, it is premature to exclude this site from consideration as a suitable site on these grounds.

January 2010

Memorandum submitted by the Energy Networks Association

1.1 ENA supports the introduction of National Policy Statements (NPS) to ensure there is a clear policy framework for significant infrastructure. The need to set out at a national level a statement of Government intent will provide clear and unambiguous investment signals to network developers so they can plan efficiently for the future. However the interrelationship between them and the hierarchy of the existing suite of planning policies, statements and guidance must be clear if they are to be effective. NPS must play a significant role in defining the approach of all consenting regimes both the local and regional planning regimes as well as the Infrastructure Planning Commission and the DECC Consents team.
1.2 Whilst the IPC regime will not apply to electricity network projects under 132 KV (unless part of a Nationally Significant Infrastructure Project) the NPS must play a significant part in defining the approach taken by the DECC Consents team and the local TCPA planning regime.

2. **The Need for Energy Network Infrastructure**

2.1 The need to develop a more streamlined and responsive planning system has never been more important in the field of energy. Energy developments require large scale infrastructure that inevitably touches on local communities. The need to transport new and diverse energy from remote areas and between communities calls for a new approach to planning.

2.2 The low carbon agenda and the importance of security of energy supply set out in the Government’s Energy White Paper can only be achieved by the construction of new electricity and gas networks. A third of the UK’s existing electricity generation portfolio needs replacing over the next 10 to 15 years, and within a decade 80% of the UK’s gas will be imported. At the same time development of major renewables including microgeneration will be needed to achieve the 2050 carbon dioxide reduction targets.

2.3 There is a clear need for new energy infrastructure. A central component of this will be network infrastructure. ENA agrees with the National Policy Statement that 60 GW of new capacity will be needed by 2025. With 30% of electricity coming from renewable sources by 2020 there will be a need for a wide portfolio of new energy sources. Many of these will have a significant impact on the distribution network that will increasingly have a more active role and eventually will have to act as district system operators, a legion of “mini-National Grids” plotted across the country.

2.4 ENA welcomes the approach set out in the Statement on maintaining security of supply as we move to a low carbon economy. The UK must make substantial investment in energy network infrastructure to address the need for low carbon secure energy supplies. Under the current planning arrangements there is a considerable level of planning risk inherent in investing in this infrastructure. ENA has been calling for policy certainty and ENA members welcome the clarity and policy certainty that the NPS introduces. The uncertainties of the planning regime have been an important factor in deciding international investment strategies and in delaying connection of new renewable energy sources.

2.5 New electricity network infrastructure will provide crucial national benefits. ENA welcomes the statement in the NPS that a failure to put the necessary network infrastructure in place will reduce the reliability of energy systems with potentially damaging consequences for local, regional and national communities and economies.

2.6 Network infrastructure projects often have long lead times and are designed to cater for longer-term needs based on careful forward planning by energy companies.

2.7 Network companies will have to respond to expected increases in demand due to the development of new housing estates and business premises. The number of households in the UK is expected to rise by 31% by 2031. The electrification of transport will also have a significant impact on the development of electricity networks.

2.8 ENA welcomes the statement in the NPS that the recent report by the Electricity Networks Strategy Group on the electricity transmission needs to meet the 2020 renewable targets represents the best available view of the optimum strategy for reinforcing electricity network infrastructure to meet those targets. ENA is playing a full part in its work on smart grids as well as on the 2050 network vision. These all point to an increasingly crucial role for the networks in facilitating the low carbon energy sources of tomorrow.

3. **Flexibility**

3.1 Whilst the new regime very much improves the ability for all stakeholders to consider the holistic implications of any nationally significant infrastructure project (NSIP), it also retains flexibility around submission of different elements of a project, with the option for each in their own right being submitted as a NSIP eg a proposed electricity generation project and any connection or indeed deeper reinforcement of the electricity network system.

3.2 The proposed approach strikes the right balance enabling the Infrastructure Planning Commission and other stakeholders to understand the likely full implications of a proposed development, whilst enabling the developers of the respective elements of an energy project, the opportunity to apply on behalf of all involved, to jointly apply or to apply separately.

4. **The Electricity Networks National Policy Statement**


4.2 *General Assessment Principles*—ENA has consistently supported a holistic planning process. At the same time there is a need to separate out some network project applications and ENA welcomes the recognition of this in the NPS.

4.3 *Climate Change Adaptation*—ENA welcomes the emphasis in the NPS on the need to adapt our energy infrastructure to the effects of climate change.
4.4 **Landscape and Visual**—Energy network companies are fully committed to the principles of the Holford Rules. Companies have made full use of Ofgem undergrounding allowances, where appropriate, in areas of outstanding natural beauty. In addition, companies are very sensitive to the impact of overhead line locations in respect of communities and scenic landscapes. However, ENA welcomes the recognition in the NPS of the costs of undergrounding and the impact on the ability of network companies to maintain and repair undergrounded assets.

4.5 **Mitigation**—ENA fully supports the principles set out in the National Policy Statement on mitigation.

5. **EMFs**

5.1 ENA welcomes the clear statement of Government policy on this issue set out in its recent response to the Stakeholder Advisory Group on electric and magnetic fields recommendations (SAGE).

5.2 As a responsible industry, we take this issue extremely seriously. Our approach is always to follow authoritative independent advice. This statement now gives complete clarity on Government policy and we welcome it. Government policy is that as long as the exposure limits and other specified measures are complied with, there are no other restrictions on building near power lines. This clarity will be particularly helpful to local planning authorities, as well as to developers and industry.

5.3 The Government has identified some sensible, low-cost steps to take in the best interests of society as a whole. We support these and have already volunteered to implement those measures which fall to us.

5.4 Some campaigners had called for more extreme actions. However, those actions would have quite serious consequences for individuals and society that simply aren’t justified by the evidence. Government have now clearly said that those more extreme actions are not part of national policy. That conclusion is based on a careful analysis by the stakeholder group SAGE, where all the different opinions were represented.

5.5 The Government decision is the end result of a long process involving all the many stakeholders. ENA strongly support this approach. This is a sensitive issue which needs to be addressed by all the shades of opinion working together and ENA is committed to working with other stakeholders to find the right solution for society as a whole.

6. **Consultation Process**

6.1 The Draft NPSs must be subject to the deepest and widest consultation process. This must take as long as is necessary. This will ensure that the NPSs agreed have the widest agreement and legitimacy and go into the right level of detail to aid the IPC in their decision making. It will prevent unnecessary delay caused by challenges later through the Judicial Review process.

7. **Summary**

7.1 The challenges faced by the energy sector in delivering a sustainable and secure energy future are considerable. The planning process has acted as a serious barrier to the energy developments designed to meet those challenges. The publication of the NPSs on energy infrastructure including the one on electricity networks represents a profound and significant step in addressing this issue. ENA strongly supports them and believes that any dilution of them will have a fundamental impact on the ability of the networks in meeting the low carbon challenge.

January 2010

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**Memorandum submitted by English Heritage**

**EXECUTIVE SUMMARY**

1. English Heritage agree with the approach of reflecting the text of the Planning Policy Statement 15: Planning for the historic environment (PPS15) in the drafting of the overarching energy National Policy Statement (NPS) (EN-1) and that being read in conjunction with technologically specific energy NPSs (though there are some points of detail as to how this relationship works which are covered below). However, we would like to emphasise that PPS15 remains in draft form (at the time of writing). We would expect the Department of Energy and Climate Change (DECC) to continue to involve English Heritage and the Department for Communities and Local Government in reflecting the final version of the PPS in EN-1.

2. Aside from the historic environment section of EN-1, there are other key areas where changes need to be made to ensure that the consideration and appropriate protection of the historic environment is properly reflected. Principally, these concerns fall under the headings: Design; Landscape and Visual Impact (which cover all of the draft energy NPSs); and the definition of “Temporary” in draft NPS EN-3. These are outlined below.
landscape

3. As currently drafted the NPSs do not recognise the concept of the historic landscape—the idea that heritage assets should be viewed within their wider contexts. These contexts bring added meaning and value to those assets and it is vital that any Nationally Significant Infrastructure Projects should be evaluated against the impact on the historic (as well as the natural) landscape.

4. The sections on Landscape and Visualisation fail to recognise the contribution that heritage makes to landscapes and views, a contribution that has been recognised in the European Landscape Convention which has been in force in the UK since March 2007. Similarly this is not covered within the Historic Environment section of EN-1.

5. It is important that the significance of heritage assets should, be recognised and their position in the wider landscape taken account of when considering the impact development will have on them.

design

6. High quality design plays an important role in seeking to mitigate the effect of a new development on its surroundings—and a key element of those surrounding might be historic assets. High quality design doesn’t prevent impact, but can lessen it. Therefore it is vital that this potential impact is a material factor when considering design options.

7. Currently the setting on listed buildings is a statutory consideration and the setting of all heritage assets is a material consideration in PPG 15. We would expect comparable obligations to be incorporated in the NPSs.

“TEMPORARY”

8. The current NPS on renewable energy sources (EN-3) makes it clear that wind energy applications are typically for a period of 25 years. When making such decisions, the IPC should not place emphasis on the “temporary” nature of the structures. Damage will still be done to archaeological remains, irrelevant of how long they remain in place, and the best part of a generation would be deprived the opportunity to view an unblemished historic landscape.

introduction

9. As the government’s adviser on matters relating to the historic environment, English Heritage is a statutory consultee for Nationally Significant Infrastructure Projects. The term “historic environment” includes buildings, archaeology, landscapes (including registered parks and gardens and battlefields), conservation areas, World Heritage Sites and scheduled monuments.

10. We have been involved in the drafting of the NPSs up to the current iteration. We have also provided comments on the Appraisals of Sustainability. This role fits well with our function as a statutory advisor to the planning system. Whilst we feel that the current drafts are an improvement on previous versions, there remain a number of areas which require further development.

11. As well as being involved in commenting on previous drafts of the NPSs, we have also been working closely with the Department for Communities and Local Government (CLG) and the Department for Culture, Media and Sport (DCMS), on the development of the draft PPS15 and the accompanying practice guidance. It has been established, both in a statement in the House of Lords, given by then CLG Minister Baroness Andrews, and within the consultation document, that the NPSs should wherever possible reflect the relevant PPS. We support this need for consistency and hope to continue to work with colleagues in CLG and DECC to ensure that it is achieved.

12. English Heritage will be submitting a response to the consultation on each of the energy NPSs. That response will be consistent with this written evidence, but will go into more detail regarding changes to text as we appreciate that given the nature of this inquiry it would not be appropriate to go into the level of detail of commenting on the specifics of the wording. We therefore wish to bring to the committee’s attention the broader issues which we consider need particular attention. These issues, were they to go uncorrected, could lead to significant and unnecessary damage being done to the historic environment.

13. A fuller explanation about the role of English Heritage is set out in Appendix 1, with contact details in Appendix 2

14. For ease of reference, because most of our comments cut across each of the Energy NPSs, we are providing evidence for each within the one submission. It is hoped that this will provide greater clarity for the Committee.
Detailed points

Historic Environment (section 4.23, EN-1)

15. The text currently reflects that of the draft PPS15 which was consulted upon (closing on 30 October 2009) by the Department for Communities and Local Government. English Heritage has worked closely with CLG and DCMS on the drafting of both the PPS itself and also the reflection of the PPS within EN-1. It is however, important to stress the principle that PPS15 is still being developed and will no doubt undergo further amendments. Given the assurances given by CLG, those amendments will need to be reflected in EN-1. We feel that as the government’s adviser on the historic environment it is important that we play a full role in how those amendments are reflected in the NPS and are seeking assurances from DECC that this will be the case.

16. In addition, there is a need to ensure consistency in approach between the energy NPSs. Currently EN2-6 all refer to the principle of the overarching statement. For example, EN-5, 1.3.2, states “This NPS does not repeat material set out in EN-1”. Yet within EN-5 there are Landscape and Visual Noise sections (which are repeated in EN-1). We feel that this inconsistency will cause confusion and possibly lead to different factors being given different weight (when that was not the intention). Within EN-3, there is an historic environment section under both Offshore and Onshore Wind Farm Impacts, but not under Biomass/Waste Impacts. The implication being that the historic environment should not be a consideration in the latter.

Design (all)

17. Each of the energy NPSs quite rightly emphasises the importance of good design. However, as currently drafted they do not recognise the role that design has to play in potentially mitigating the impact on historic views. English Heritage works closely with local government and partners to ensure that new developments sit well with historic contexts and are not a detriment to historic views. High quality design is a key factor in minimising such impact. This principle needs to be reflected at the scale of Nationally Significant Infrastructure Projects. Therefore, the historic environment, and ensuring new structures do not detract from what is already in place, needs to be a material consideration when assessing design.

18. In EN-1, 4.23.17 refers to the role that “high quality” design can make in improving the setting of a heritage asset. We would expect that the bar remains set at that high level. Currently we consider that this is not the case, for example, sections 3.5 of EN-6 (Nuclear) and 4.5 of EN-1 simply refer to “good design”. It is essential that there is consistency within each and throughout the NPSs regarding design and the approach to be taken when dealing with development proposals.

Landscape (all)

19. Each of the energy NPSs include sections on “Landscape and Visual Impacts”. We feel that none of these sections properly reflect the role the historic environment has to play in these areas.

20. Heritage assets are an important element of viewpoints. Many of England’s iconic views have an historic element at their heart. The NPSs need to be worded in such a way to ensure the preservation of both such nationally important viewpoints and those of importance to local communities. This should accord with the European Landscape Convention. The preamble to the Convention states that “the landscape contributes to the formation of local cultures and ... is a basic component of the European natural and cultural heritage”.

21. Within the current drafts the historic environment has not been properly incorporated into these sections, with the term “landscape” focusing just on the natural landscape. In EN-1, the Landscape and Visual Impacts section (4.24) makes no reference to the contribution of heritage to this area. It is fundamentally important that in any assessment of landscape and visual assessments carried out refer to the impact on the historic landscape.

22. Under EN-1, 4.24.6, National Parks, the Broads and Areas of Outstanding Natural Beauty are listed as having the highest status of protection in relation to landscape and scenic beauty. It states that “Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the IPC should have regard to in its decisions.” It should be acknowledged that part of the reason for a designation may be the historic value of the landscape, and that, alongside natural beauty, this should be given weight by the decision-maker.

23. It is important that designated sites, buildings or monuments should not just be considered on their own, but also account is taken of their setting and also where appropriate, as part of a wider landscape. Where there is a historic landscape greater weight should be attributed to its protection.

Temporary (EN-1 and EN-3)

24. EN-3, 2.7.16–19, directs the IPC to view the temporary nature of wind farms as an important consideration when assessing impacts. Applicants will be expected to specify the length of time that they are seeking consent for (usually 25 years). At the end of the period of consent, the turbines can be decommissioned and removed from the landscape. The principle being that any indirect effect on the historic environment (ie on setting and visualisation) will not be permanent. Paragraph 2.7.50 explains that the time
limited nature of wind farms should be a relevant consideration for the IPC when assessing the indirect impacts on the historic environment, such as the effects on the setting of other heritage features such as listed buildings or conservation areas.

25. It is our view that the period of 25 years should not be classed as “temporary”. These clauses appear to establish a principle that unacceptable impacts to the setting of a heritage asset, no matter how important, are not to be given any appreciable weight if that impact will only last for 25 years.

26. In addition, EN-3 refers to applications to re-power turbine arrays in order to extend the active life of a site. Although EN-3 refers to applications being made for re-powering, in effect, once a wind farm has been connected to the grid, such an application is unlikely to be treated in the same way as a wholly new application. This places further emphasis on the need to ensure that all factors are fully considered at the time of the original application.

CONCLUSION

27. English Heritage feels that there remain points of considerable concern within the current text that we feel are the result of a lack of understanding of both the contribution and impact of heritage on modern life and the need for it to be adequately protected. We feel that these can be easily rectified, without presenting significant problems for meeting the need for energy provision laid out in each of the documents. Therefore, we would recommend the following:

Historic Environment
— English Heritage to be properly consulted on the final reflection of PPS15 into EN-1.

Design
— That section 4.5 of EN-1 (Criteria for “good design” for energy infrastructure) is amended to reflect the need for high quality design (thus ensuring consistency) and include a specific section on “criteria for high quality design”.

Landscape and Visual Impact
— Insert reference to the historic environment to the final sentence on EN-1, 4.24.4 (under the section on Landscape and Visual Impacts).
— That reference to designated historic landscapes is included in EN-1, 4.24.6.

Temporary
— That the position regarding temporary consents outlined in EN-3 is amended to more accurately reflect the impact of structures which remain in place for a quarter of a century with the possibility of further extensions being made to that permission.

January 2010

APPENDIX 1

THE ROLE OF ENGLISH HERITAGE

1.1 English Heritage is an independent grant-aided body governed by Commissioners. It was established with effect from 1 April 1984 under section 32 of the National Heritage Act 1983. The general duties of English Heritage are prescribed in Section 33(1) of the Act and are as follows:
“...So far as is practicable...
(a) to secure the preservation of ancient monuments and historic buildings situated in England;
(b) to promote the preservation and enhancement of the character and appearance of conservation areas situated in England; and
(c) to promote the public’s enjoyment, and advance their knowledge, of ancient monuments and historic buildings situated in England and their preservation.’

1.2 English Heritage’s sponsoring department is the Department for Culture, Media and Sport (DCMS), although its remit in conservation matters intersects with the functions of a number of other government departments, particularly the Department of Communities and Local Government (DCLG), with its responsibilities for land-use planning matters.

1.3 English Heritage is a statutory consultee providing advice to local planning authorities on certain categories of application for planning permission, listed building consent and conservation area consent. Similarly English Heritage advises both Secretaries of State on those applications, subsequent appeals and on other matters generally affecting the historic environment. It is the lead body for the heritage sector and is the Government’s principal adviser on the historic environment.
1.4 English Heritage is a major source of funding for the historic environment and is responsible for the preservation and presentation of over four hundred historic properties in the nation’s care. English Heritage has a large research and standards function that carries out projects that aim to increase understanding of the historic environment thereby leading to a greater appreciation of its value to this and future generations. Further details are set out in Annex A6-A9 of Planning Policy Guidance Note 15: Planning and the Historic Environment (PPG15).

Memorandum submitted by the Environment Agency

SUMMARY

The Environment Agency welcomes the opportunity to submit evidence to the Energy and Climate Change Committee’s inquiry into the proposals for National Policy Statements (NPSs) on Energy.

— We welcome the potential contribution that NPSs could play towards meeting greenhouse gas reduction targets through emphasising the need for greater levels of low carbon energy generation including renewable, nuclear, demonstration projects for Carbon Capture and Storage (CCS) and Combined Heat and Power (CHP). We believe greater clarity is required on how a low carbon generation mix, and greater energy efficiency will be delivered in practice.

— We support the nuclear NPS’s approach of identification at the strategic level of the potential sites for nuclear power generation. This does not replace the need for detailed assessment of specific project proposals including Environmental Impact Assessments before any application is made.

— We believe the Government and Nuclear Decommissioning Authority (NDA) must continue to show credible commitment in progressing the development of a geological disposal facility for higher-activity solid radioactive wastes, and advancing the clean up of the UK’s past nuclear legacy.

— We recommend that the NPSs give clearer guidance on the information required in applications for the transport of carbon dioxide (CO2) for the implementation of CCS.

— We emphasise the need for applicants to work with us at pre-application stage so that the IPC’s development consent regime and our regulatory regimes move forward together. We would welcome the wording on “parallel tracking” being strengthened.

— We recommend further development of the Appraisal of Sustainability (AoS) so that the NPSs can be shown to contribute to delivering Government’s objectives for sustainable development.

1. INTRODUCTION

1.1 The Environment Agency is a statutory consultee for NPSs and for all applications that will be made to the IPC for Development Consent Orders.

1.2 We are the environmental regulator for many energy related operations and will be issuing environmental permits and other consents for many of the projects seeking IPC consent.

1.3 We are a statutory consultee for the Environmental Impact Assessments (EIAs) that will accompany most applications.

1.3 We welcome the advice the draft NPSs give the IPC on how to assess applications for nationally significant infrastructure projects (NSIPs) and the advice they give applicants on the need for pre-application consultation with us.

2. CLIMATE CHANGE AND ENERGY INFRASTRUCTURE

2.1 We are pleased that the NPSs are based on recent energy policy to reduce greenhouse gas emissions. We are concerned however that there is a strong reliance on market forces and limited Government incentives to deliver a low carbon generation mix.

2.2 We believe that without a strategic vision of the future energy mix from the Government there is a danger that the NPSs, in their current form would require the IPC to approve suitable proposals if they are put forward without consideration of the potential emissions and their place in the overall energy mix. This risks a scenario where emissions are not sufficiently lowered for the Government to meet its greenhouse gas reduction targets.

2.3 We believe the Government should commit to the target of almost fully decarbonising electricity generation by 2030 as recommended by the Committee on Climate Change. To meet this goal, EN1 would need to promote the rapid deployment of renewable energy generation, new nuclear capacity and fossil fuelled power stations that all contain carbon capture elements from the outset, and full CCS by the early 2020s in the case of coal and by 2030 in the case of gas. To improve the efficiency with which we utilise energy EN1 should also promote combined heat and power and heat networks.
2.4 We believe the NPSs should signal that energy efficiency is the Government’s first priority for energy policy so that demand is reduced wherever possible. The transition towards a low carbon economy may increase electricity demand in some areas such as the move towards electric vehicles and domestic heating from electricity rather than gas.

3. **EN1 Overarching Energy NPS**

3.1 We are concerned that there is no mention of pipelines for CO2 that would be necessary for power stations required to have CCS. We recommend that more should be said on the policy for providing the pipeline network that will be necessary to implement CCS effectively.

3.2 We agree that EN1 addresses the important generic environmental impacts including flood risk, coastal change, climate change adaptation, biodiversity, water and waste management.

3.3 We believe that the effectiveness of EN1 will rely on good quality pre-application consultation by applicants together with Environmental Statements that properly assess environmental issues such as climate change adaptation, alternative options, cumulative effects and the requirements of environmental Directives including the Water Framework Directive (WFD).

3.4 There are some parts of EN1 that we believe need to be strengthened. For example, there is no generic assessment guidance for impacts on fish in EN1 although three of the technology specific NPS (EN3, EN4 and EN6) do make some reference to impacts on fish. EN2, which should cover impacts due to cooling water intake and discharge, does not mention fish either and should do so.

3.5 Other areas where we believe the NPS could be improved include evaluating physical modifications of water bodies as required by the Water Framework Directive, the interpretation of climate change projections, biodiversity and waste management.

3.6 This NPS and the associated NPS will be applicable to England and Wales. It needs significant revision to include references to technical standards and practice specific to Wales.

4. **EN2 – 5 Non Nuclear Technologies**

4.1 **EN2 Fossil Fuel Generation**

4.1.1 We recommend the NPS should provide a strategic context for CO2 pipelines as an essential part of the CCS chain, including the protection of corridors where appropriate. It should also indicate when CCS is likely to be required for gas powered generation.

4.1.2 We believe that the NPS should advise the IPC on how to assess the impacts of cooling water on fisheries. This should include reference to the relevant Directives such as the fresh water fish and shellfish Directives.

4.1.3 Where water resources are limited applicants may need to carry out water cycle studies to give an overview of water issues and may need to consider new technologies such as the use of treated waste water for cooling.

4.2 **EN3 Renewable Energy**

4.2.1 We believe that more needs to be said on why tide and wave power schemes are not included in EN3. We recommend the NPS says whether, and when, schemes of more than 100MW are expected to come forward.

4.2.2 We note that biomass and waste fuelled power generation are categorised as renewable. The NPS should identify the need to ensure that fuels are from sustainable sources and that waste is not diverted from re-use or recycling, where those are feasible options.

4.2.3 We expect a considerable number of large biomass power plants to come to the IPC in the future. These plants will mostly use imported woodchip from countries such as Canada, the USA, Brazil and Indonesia. We recommend that the NPS recognises this and the environmental risks it poses if the material is not taken from sustainable sources in these countries.

4.2.4 The draft NPS currently advises that the sustainability reporting requirement under the Renewables Obligation is an adequate safeguard against unsustainable biomass to justify no IPC involvement in this issue. In reality, this is not the case. The reporting requirement includes insufficient detail to determine the lifecycle greenhouse gas emissions, does not set a minimum standard and is essentially voluntary in nature as generators may report that the fuel origin is unknown. We therefore strongly recommend that the IPC requires evidence from developers that demonstrates their plant will minimise lifecycle greenhouse gas emissions and will only source biomass that is independently certified as sustainable through schemes such as the Forest Stewardship Council and the Sustainable Forestry Initiative. The Environment Agency has developed a lifecycle greenhouse gas calculator (the Biomass Environmental Assessment Tool—BEAT) that is freely available and that operators can use in support of this goal.
4.3 EN4 Gas Supply Infrastructure and Oil and Gas Pipelines

4.3.1 As with EN1 and EN2, we recommend that EN4 explains how applicants will obtain approval for CO2 pipelines.

4.3.2 We support the requirement in the NPS to co-operate with us on arrangements for discharge permits and abstraction licences. Brine disposal may be subject to environmental limits including the Directives on bathing water, shellfish and habitats.

4.3.3 We prefer pipelines at installations to be above ground for easy maintenance to reduce the risk of pollution. Where pipelines have to cross flood defences applicants should discuss this with us as part of pre-application consultation.

4.4 EN5 Electricity Networks

4.4.1 We recommend that this NPS should more strongly incorporate requirements that the location of infrastructure avoids the adverse impacts of climate change wherever possible and increases their resilience so that they operate in all predictable conditions including flooding.

5. EN6 Nuclear Power Generation

5.1 We welcome the clarification of the relationship between the planning regime and the role of the nuclear regulators.

5.2 We support the advice to the IPC that relevant licensing and permitting regimes will be properly applied and enforced, and that it should not delay a decision on granting development consent until completion of the licensing or permitting process.

5.3 We confirm that we will work with the IPC to ensure that their development consent process and the nuclear regulatory processes for which we are responsible work together effectively and efficiently.

5.4 We believe at the strategic level, potential impacts on aquatic habitats, water quality, flood risk and coastal processes have been identified. In particular these include impacts from cooling water abstractions and discharges, along with construction of flood and coastal defences.

5.5 We participated in the Strategic Site Assessment that considered the potential sites for new nuclear power stations. We are already engaging with developers on their proposals and providing them with pre-application advice. We are recovering our costs for this work from developers.

5.6 We believe that EN6 is consistent with the Government’s 2008 Nuclear White Paper in identifying the need for a Geological Disposal Facility for spent fuel and intermediate level radioactive waste from new nuclear power stations. A Geological Disposal Facility will underpin the programme for new nuclear power generation and we believe it is essential that Government establishes milestones that demonstrate commitment and continued progress to secure it.

6. Environmental Regulation

6.1 The Government has already proposed new roles for us such as regulating CCS and proposes to deliver these by changing the Environmental Permitting Regulations.

6.2 We recommend applicants should contact us early in the pre-application process so that the necessary arrangements can be put in place, for example through a parallel track approach. This will help to ensure permit applications can be dealt with early enough especially where they are also subject to appraisal under environmental Directives.

6.3 EN1 encourages “parallel tracking” of applications for development consent but stops short of indicating that this will be necessary if the IPC is to be satisfied to the extent stipulated in the NPS before it grants development consent. We would welcome the requirement for “parallel tracking” being strengthened so we will be in a position to give meaningful advice to the IPC when it considers an application for a Development Consent Order. For example if planning and environmental permitting requirements are parallel tracked in the nuclear NPS this will help us to advise the IPC on whether we consider we would be able to issue the relevant licences, authorisations and permits that are required by a new nuclear power station.

7. Appraisals of Sustainability

7.1 We welcome the Appraisals of Sustainability (AoS) which are valuable in considering the potential significant environmental, social and economic effects of developing new nationally significant energy infrastructure. We have suggested where we believe improvements can be made.

7.2 We are pleased to see that all the AoSs incorporate an assessment in accordance with the requirements of Sustainable Environment Assessment (SEA) Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.
7.3 AoS EN1—5 Overarching and non-nuclear NPSs

7.3.1 We found a lack of depth of analysis of potential effects on the AoS objectives. We recommend more detail on potential impacts is made available and how this analysis has informed the development of the NPS. We would also like to see more evidence of how cumulative impacts have been assessed, what the outcomes are and which potential mitigation measures have been identified.

7.3.2 We are concerned that the assessment should find “no overall” or an “uncertain” effect on many of the AoS objectives and view as insufficient the reason given, relating to no additional requirements being set out above the existing planning system. We recommend that clear evidence of how conclusions were reached is made available.

7.3.3 We are concerned about the definition of “alternatives” used in the AoS and that these should relate to different outcomes on the ground rather than different kinds of NPS. We recommend the alternatives are revisited and refined following advice from the Department of Communities and Local Government.

7.3.4 We are pleased to see the summary of responses DECC received to the AoS scoping report consultation and actions taken as a result. However, this should have further explained exactly how the AoS process has been adjusted or draft NPS amended and why. We recommend that evidence of how the AoS informed the development of the NPS is more clearly presented.

7.3.5 We recommend that AoS monitoring during NPS implementation should focus on all identified significant environmental effects, as required by the SEA Directive, rather than just those which may give rise to irreversible damage. Over time the significance of these effects may change and so monitoring of all effects is vital.

7.3.6 We would like to see the impacts of abstraction and discharge of cooling water on fish and fisheries assessed as there is no evidence this was included within the AoS. We recommend that the latest best practice methodologies for abstracting and discharging in the water environment are considered within EN1 and that the role and requirements of the WFD are explained more clearly.

7.4 AoS EN6 Nuclear power

7.4.1 We are concerned that in circumstances where the AoS has identified potential negative effects there needs to be sufficient evidence to demonstrate appropriately how those effects will be addressed in relation to the AoS objectives set out under the various sustainable development themes.

7.4.2 Specifically more evidence needs to be provided to demonstrate how the assessment conclusions have been reached both with regard to effects on biodiversity, water quality and resources, particularly as a result of cooling water discharge and abstraction, and also with regard to cumulative impacts.

7.4.3 In some circumstances realistic mitigation or compensation options have not been identified by the AoS. The AoS appears to have a reliance on Environment Agency consenting regimes to ensure mitigation of negative effects are achieved. These regimes cannot in themselves fully mitigate all negative effects and therefore compensation measures may need to be examined in the application stage.

7.4.4 We consider that as in relation to site specific assessment, the AoS should present more information with regard to both the significance of effects and reasonable mitigation or compensation options. This should ensure greater certainty for developers when putting forward applications for new nuclear power stations.

January 2010

Memorandum submitted by the Environmental Law Foundation

ELF is concerned that the legitimacy and effectiveness of the draft NPSs have been severely compromised by the consultation process and a lack of meaningful parliamentary scrutiny and public participation. Furthermore the NPS Consultation is unlikely to be compliant with the Aarhus Convention.

1. INTRODUCTION: THE ENVIRONMENTAL LAW FOUNDATION

1.1 The Environmental Law Foundation (ELF) is the leading national UK charity founded in 1992 that helps people use the law to protect and improve their local environment and quality of life. Through its network of specialist lawyers and consultants across the UK, ELF provides free advice and continuing support to those in need of assistance.

1.2 This is a response by ELF to the inquiry into the proposals for the energy National Policy Statements (NPSs) being conducted by the House of Commons Energy and Climate Change Committee. It refers to all the energy NPSs (EN-1—EN-6) and associated documents. In relation to the specified work of the Select Committee this response makes reference to (i) the role of the energy NPSs within the rest of the planning system and (ii) the consultation process.

Further information on the ELF from: http://www.elflaw.org/site/
1.3 The principal issues of concern to ELF are those of fairness, lawfulness and access to environmental justice. This response will focus on a number of legal and factual aspects of the Department of Energy and Climate Change (DECC) Consultation on draft National Policy Statements for Energy Infrastructure (the Consultation),63 and the government’s wider approach to energy policy, which are likely to give concern to the local communities ELF represents. The opportunities for meaningful public participation in decision making relating to these NPSs will be examined with reference to international conventions, European and national law.

2. EXECUTIVE SUMMARY

2.1 The central concern of ELF is that of the fairness and lawfulness of the NPS consultation process.

2.2 The Aarhus Convention64 sets out a legal framework for the provision of public participation within environmental decision making and policy formation.

2.3 Recent energy policy consultations have been characterised by their abundance, complexity and emphasis on administrative efficiency—rather than their effectiveness at engaging the public. This sets the context for the current NPS consultation.

2.4 Public consultation is not sufficient to comprise public participation which includes dialogue, scrutiny, consideration and response.

2.5 The ELF do not consider the NPS Consultation compliant with the Aarhus Convention.

2.6 Substantive participatory issues with the Consultation include:

— the short inadequate timescale for response;
— the commencement of Select Committee proceedings before the close of the DECC Consultation;
— the very large quantity of material associated with the Consultation, amounting to over 3,000 pages, limiting public access;
— the lack of opportunity to test the technical evidence by means of inquiry;
— the lack of transparency of decision making with many of the key issues already decided;
— the removal of the consideration of regulatory Justification from the Consultation and absence of opportunity for parliamentary scrutiny of the Justification decision; and
— the lack of detailed and verifiable health information concerning radiological dose limits within the AoSs and availability of this information to the public.

2.7 Whilst ELF regards the NPSs as being of vital national importance for the appropriate development of energy (and other) infrastructure over the coming decades, the legitimacy and effectiveness of the draft NPSs has been severely compromised by a lack of meaningful parliamentary scrutiny and public participation.

2.8 It is a false economy to attempt to make the decision making process more efficient by removing important elements of public participation and scrutiny. Attempting to fast track the decision making is likely to backfire in various forms of public opposition including legal challenge and create further alienation from the democratic processes.

3. CONTEXT

The Aarhus Convention and the legal framework for public participation.

3.1 The need for effective public participation in issues of environmental decision making are outlined in the UN Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters 1998 (Aarhus Convention) which has been ratified by both the UK and the European Union. It provides that citizens must be entitled to participate in environmental decision making, records that public participation enhances the quality and implementation of decisions and commits the Government to guaranteeing the rights of citizens to public participation in decision making in accordance with the Convention.65

3.2 The need for public scrutiny under Aarhus was recognised in the Judicial Review R (Greenpeace) v Secretary of State for Trade and Industry [2007] in which the legitimacy of the government consultation on energy policy in the July 2006 Energy Review66 was challenged. Justice Sullivan stated:
“Whatever the position may be in other policy areas, in the development of policy in the environmental field consultation is no longer a privilege to be granted or withheld at will by the executive. The United Kingdom Government is a signatory to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (‘the Aarhus Convention’).”

3.3 Sullivan J also affirmed comments made in R v Brent London Borough Council, Ex p Gunning (1985) LGR168 which held:

“To be proper, consultation must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken.”

The energy NPSs Consultation in context: energy and related consultations since the 2007 Judicial Review.

3.4 Before detailed consideration of the current NPS Consultation is made, E.L.F. believes that it is worth placing this in the context of recent government energy policy consultations. Since 2007 there have been a plethora of consultations associated with energy policy and with the government’s plans for new nuclear build in particular. The Committee is asked to briefly consider, as an illustrative example, the DECC “Indicative timeline for first new nuclear power stations” which is included below in section 6.0 annex. This indicates the key steps being taken by the government since 2008 to facilitate new nuclear power by 2018 and includes the consultations being undertaken with these steps. These are represented by green dots and indicated in the key as “milestones”.

The public has lost its voice

3.5 It is clear that this timetable involves a very complex strategy and structure which is designed to make the process happen quickly and efficiently. However, many of the steps in this timetable are not the technical or administrative hurdles (or “milestones”) that might be assumed to be the case from this chart but are in fact decision making points in which the public expects to be involved through consultation and participation. The consultation points are included within the structure but arranged in such a way that there is very little opportunity or possibility of an actual change in policy position whatever the consultation outcome. There is clearly a presumption that the steps will all go through—that new nuclear is, in other words, a “done deal”. Therefore, whilst there appears to be considerable “consultation”, ELF is concerned that there is very limited true public participation. These concerns will be explored further with respect to the draft energy NPSs below in section 4.0 of this response.

4. Fairness and Legality

The stated aim for participation and consultation in the new planning system

4.1 As the Committee will be aware, the NPS is the policy statement to be given primary consideration by the Infrastructure Planning Commission for granting new development consents. The NPS Consultation states the purpose of planning reform has been “designed to create a more efficient, transparent and accessible planning regime” and “the new regime aims to be more transparent and to facilitate participation in decision making, strengthening the voice of communities” (lines 2 and 6, paragraph 1.6 of the Consultation). The Consultation notes that the “NPSs are intended to remove the need for lengthy planning inquiries on fundamental policy questions at the application stage” (line 8, paragraph 1.14 of the Consultation). Importantly, the IPC or Secretary of State “may disregard representations relating to the merits of policy set out in the NPS” and “… may also refuse to allow representations [on NPSs] to be made at a hearing” (paragraph 1.21 of the Consultation).

The NPS Consultation is not compliant with the Aarhus Convention

4.2 The overall objection to the Consultation raised by ELF is that the process is not compliant with the Aarhus Convention. Commentators have noted that international law generally identifies three motivations for public participation: improving decisions; furthering international human rights; and legitimacy. It is commented upon that “participation” in terms of the Aarhus Convention can mean “consultation” but that such consultation must generally aim to improve environmental protection. In addition, to satisfy the Convention consultation must be more than “listening” mode to take “due account” of the outcome of public participation (article 6 (8) of the Convention).

68 Ibid. para 55
69 As referred to in section 3.1 above: R (Greenpeace) v Secretary of State for Trade and Industry [2007] EWHC 311 (Admin) para 49
70 It is interesting also to note that none of the consultations are included under the timetable key as “Critical Paths”—in contrast to government and regulatory body decision points
71 Ibid. para 55
72 R (Greenpeace) v Secretary of State for Trade and Industry (greenpeace) v Secretary of State for Trade and Industry [2007] EWHL 311 (Admin) para 49
The difference between public participation and public consultation

4.3 The ELF does not consider “public consultation” as equivalent to “public participation”. Consultation is a passive process of asking for representations usually only in writing. However, participation requires active involvement in the decision making process. There is a material and important difference between the two concepts. Consultation, if it is to go beyond mere ‘listening’ mode, must include dialogue, scrutiny, consideration and response. Participation in its fullest sense would require an open forum in which all stakeholders can take an active part and where their views are given equal consideration.

4.4 ELF have reviewed and considered the Consultation document, the draft NPSs, and their ancillary documents. Several aspects of the Consultation may preclude individuals and groups from participating in decision making, contrary to the government’s stated aim for the planning policy (section 4.1 above) and in breach of the aims of the Aarhus Convention. ELF does not believe that the consultation process enables the public to “exert a genuine influence on decisions” suggested by Lee and Abbott as an objective of Aarhus provisions.72

Applicable articles of the Aarhus Convention

4.5 Article 7 of the Aarhus Convention deals with public participation concerning plans, programmes and policies relating to the environment—and therefore the draft energy NPSs. It obliges the Government to make appropriate practical and other provisions for public participation during the preparation of such proposals, within a transparent and fair framework. There must be sufficient time for the public to prepare and participate effectively during the decision making process, and this must be at a stage when all options are open and when public participation can be effective. Due account must be taken of the outcome of the public participation.

4.6 Article 7 specifically applies article 6 (3), (4) and (8) to the decision making process. By virtue of article 6 (4) the information set out at article 6 (2) is also required. The nuclear NPS is distinct as it is site specific and comprises both a national plan for energy and the phased authorisation of aspects of new nuclear build. As such the site specific elements are beyond the realm of a plan which is apparent in so far as the IPC will be unable to consider issues such as the siting of new nuclear power stations and the siting of nuclear waste facilities. The ELF contends that therefore the full remit of Article 6 of the Convention should apply to the nuclear NPS in addition to Article 7.73

Substantive participatory issues with the NPS Consultation

4.7 Timescale for response. The consultation opened on 9 November 2009 giving just 10 weeks, including the Christmas period, to respond to the consultation. Although formally, the consultation ends on 22 February 2010, which would technically allow 16 weeks for response, any respondent wishing to be able to present oral evidence at this Select Committee on the draft NPSs is required to submit their response some time before 15 January 2009.74 ELF would note that in general the ability to find and instruct technical or legal experts over this short period, and consequent availability of those experts owing to the Christmas period, may compromise the quality and ability of individuals and groups to submit a response on these important issues.

4.8 Select Committee proceedings. The government has previously stated in parliamentary discussions the process by which national planning policy would be considered and undertook that “Committees will have at least four to six weeks after the end of the three-month public consultation period to complete their work. This is an important and valuable part of the parliamentary scrutiny process.” (from Hansard, debate on 20 May 2009, Column 1538). From this the public would legitimately expect that the Select Committee would meet only after the Consultation had been concluded. Any party wishing to make representations capable of being heard by the Committee must do so in a shortened timescale, possibly before that party has yet made its final response to DECC, or otherwise loses a valuable right to participate in the debate. Importantly, the purpose of the Select Committee proceedings is frustrated if it cannot hear the very evidence it was established to consider. More recently we have been informed by the Select Committee itself that there the government’s timetable does not allow us to make oral representations, depriving organisations like ELF of a vital opportunity to have our concerns listened to by an independent forum.

4.9 Volume of Consultation Documents. The quantity of published material associated with the NPSs is very considerable (over 3,000 pages) and limits the ability of the public, individuals, and third sector organisations (especially those with limited resources) to make a detailed response to the Consultation. Over two thirds of this material is associated with the nuclear NPS.

4.10 Structure of Consultation. Although ELF welcomes the accessibility of Consultation documents online, the structure of the Consultation is complex and the Consultation questions belie the volume and significance of the material on which comments are sought. ELF would also note that it is not simply “draft policy” on which consultation views are sought. The draft NPSs also include Appraisals of Sustainability (AoSs) which includes a Strategic Environmental Impact Assessments (SEAs), Habitats Regulations

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72 Ibid. p.99  
74 ELF notes that the list of participants scheduled to give oral evidence to the Committee was finalised and distributed in a memorandum issued 17 December 2009—less than six weeks from start of consultation.
Assessments (HRA) Reports and Impact Assessments. The AoS for Nuclear Power Generation (EN-6) also includes site-level reports. These are significant site-specific issues on which the public will not be able to make any future representations, once approved, as argument on NPSs may be excluded from any future scrutiny at the IPC consent stage of the planning process. The structure of the Consultation, particularly this “bundling” or incorporation of key information within national “policy” statements is potentially misleading.

4.11 Comments made by the House of Lords in Berkeley v Secretary of State for the Environment (2001) 2 AC 603 (affirmed by Sullivan J, see para 3.3 above) equally apply to the current consultation situation particularly in relation to the SEA process. ELF contend that these documents have been produced in a similarly disparate fashion and many are traceable “only by a person with a good deal of energy and persistence” (per Lord Hoffman). One example is in the context of radiological health whereby the health impacts can only properly be understood by means of accessing the technical documents provided in the concurrent consultation process into justification.

4.12 Moreover, the opportunity to put forward technical evidence on these important legal issues, or to raise further questions for clarification purposes, appears extremely limited, if not wholly curtailed by the volume of consultation documents in question.

4.13 Right to test the technical evidence by means of inquiry. From a practical perspective, anyone wishing to challenge the technical evidence upon which decisions concerning the permitting of nuclear power station sites and the justification of nuclear reactors must lodge representations to this consultation. There is no opportunity to test the assertions upon which the evidence is based. In light of this, Article 6 (7) of the Convention allows for a public hearing “where appropriate”.75 In this context, ELF consider it is entirely reasonable for the public to expect a hearing into these very important issues in order to ensure the legitimacy of both the plan and the partial authorisation granted to already to new nuclear facilities through the site selection process.

4.14 ELF has further concerns about whether the failure to hold a public inquiry into the technical evidence of radiological detriment on dose constraints and limits to the critical group of individuals living within close proximity to the reactor might not be considered a breach of article 6 and 8 of the European Convention of Human Rights (ECHR) or indeed whether these technical issues would be better expressed before the IPC. ELF note that under the Planning Act 2008 of citizen’s claiming interference to their right to a private life under article 8 of the ECHR (as a result of the significant health impact from radiological emissions, discharges to air and sea, and volumes of nuclear waste stored on site, will have no opportunity for a fair hearing of those issues before any independent tribunal—such as a planning inspector.

4.15 Transparency of decision making. A number of statements in the consultation document reflect the wider assertion that planning policy has already been decided. ELF notes that the Secretary of State of DECC, Ed Milliband, in the opening pages of the Consultation makes a case for certain aspects of the energy policy, for example, that nuclear will be required as part of an energy mix. Taken overall, there is a real concern that the government has pre-determined the issues and may have failed to have an open mind to alternatives or to genuinely broadening the scope of meaningful public participation. By the time communities are engaged, the issues of real substance may already have been decided and the scope of the consultation may be limited to issues only of implementation. In other words: “Your new power station goes here—(what colour would you like the gates?)”.76 This is a further breach of the Aarhus Convention which requires that full public participation takes place early and before any decisions have been taken.

4.16 This is further illustrated by the manner in which the AoSs (and therefore SEAs) have been approached. As they were conducted following the identification of potential nuclear sites in the Strategic Siting Assessment (SSA) they have become a “backend” process rather than the front end process as they were intended and can therefore have little potential to impact on planning. Instead measures resulting from adverse assessments made by the SEA simply result in statements and promises of mitigation measures. Clearly there is no assurance of the outcome of these. In any event, any proper SEA and AoS process ought to be able to demonstrate the mitigation measures that will be taken to reduce environmental harm and involve the public in a determination of the robustness of the measures concerned. In particular, ELF have real concern that the UK government is not properly conforming to article 6 of the EU Habitat’s Directive as there will be no opportunity for the IPC to reconsider the assessments and thereby undertake the type of scrutiny that satisfies the purpose of the Directive.

4.17 ELF also notes that the Secretary of State, who may in some cases be responsible for independently deciding planning cases, may have expressed views in the Consultation which do not reflect independent and unbiased opinion. The government’s approach appears to belie the aim of the Aarhus Convention that requires participation “sufficiently early” in the process and before any decisions are taken.

75 on the basis that Article 6 applies generally in the case of the site specific nuclear NPS.
The removal of the consideration of Justification from the Consultation

4.18 The Committee will be aware that Justification is a statutory process applicable to all new activities or type of practices involving emissions from ionizing radiation in advance of their adoption or authorisation. Concurrent to the NPS Consultation process the government is consulting on the draft Justification decision.

4.19 The government is at pains to present Justification as a “high level regulatory requirement” which is not of particular relevance or interest to the public. It is presented as a technical and expert-driven process. The consultation currently underway reflects this. (It is much more low key and less accessible than the NPS Consultation). However, the issues embedded within Justification include the broad range of overarching pros and cons to nuclear power (inter alia, safety, waste disposal, cost to public, ethics, climate change) which could not be of greater interest and importance to the public. There has been no public inquiry into the significant technical and value judgements made as part of this process.

4.20 ELF have real concerns about the approach adopted here on two counts. First, the draft justification decisions will not be subject to specific scrutiny at this Parliamentary Select Committee. Following the consultation (ending 22 Feb 2010) the final justification decision is incorporated into Statutory Instruments and put before parliament in normal manner. Thus scrutiny of justification is being limited and separated from the NPSs. It is accepted that once Justification has been finalised these higher level questions concerning the benefits and disbenefits of nuclear energy will not be capable of reconsideration.

4.21 Second, ELF are concerned that there is a lack of detailed health information provided to the public within the SEA process (and embedded within the AoS documents) to be sufficiently compliant. We assume that this is because the government expect the public to make reference to the Justification process in order to properly consider these issues. Instead, the government argues that radiological dose limits and constraints will fall within regulatory limits and therefore there are no significant environmental effects or impacts on human health.

4.22 However, this assumption is based solely on the technical data provided for the health detriment with regards the operation of the nuclear facility. There is a lack of information provided to the public on the radiological and environmental impacts from the site as a whole when one takes into account all operations on the site, including decommissioning of of existing old reactors and the on site storage of new volumes of waste including highly radioactive spent fuel. Instead, assertions are made that high level waste will be stored underground in deep repositories. The government has created a policy for the future management and disposal of radioactive waste but does not have any concrete plans for this at present.

IAEA Joint Convention on the safety of spent fuel management and on the safety of radioactive waste management (“Joint Convention”)\textsuperscript{77}

4.23 Related issues pertaining to the availability of adequate information to the public apply to Article 6 of the Joint Convention which concerns the siting of proposed facilities for spent nuclear fuel. The EURATOM has declared that article 6 falls within the competence of the European Union. Thus, the Convention in this respect is binding upon the UK government and is applicable UK law.

Article 6 (1): Each Contracting Party shall take the appropriate steps to ensure that procedures are established and implemented for a proposed spent fuel management facility: (iii) to make information on the safety of such a facility available to members of the public.\textsuperscript{77}

4.24 Such information is not fully contained within the AoSs and indeed details for the spent fuel stores at the new reactor sites are as yet undisclosed. In order to comply with the Joint Convention this information will need to be made publicly available at the point of development consent applications to the IPC.

5. Recommendations and Conclusion

5.1 Whilst ELF regards the NPSs as being of vital national importance for the development of energy (and other) infrastructure over the coming decades, the legitimacy and effectiveness of the draft NPSs has been severely compromised by the lack of meaningful parliamentary scrutiny and public participation.

5.2 It is a false economy to attempt to make the decision making process more efficient by seeking to remove important elements of public participation in decisions on nationally significant energy infrastructure projects. While the government is concerned to provide a process that reduces delay, uncertainty and upfront cost, ELF believes that this may result in a system that is less fair and transparent, especially for communities who will bear the impacts of those decisions for many years to come. Decisions that have been subject to full and fair public participation will secure greater public acceptance and will strengthen trust between the state and the community.

5.3 Attempting to fast track the decision making is likely to backfire in various forms of public opposition including legal challenge. If people and communities affected by proposed individual projects feel that they have not been able to adequately influence the relevant NPS they may try to halt developments by other legal means such as seeking judicial review of the validity of the consultation carried out. More importantly, the government will find it increasingly difficult to obtain public legitimacy for the plans and will produce the undesired belief in the public that they are intrinsically undemocratic and poor decisions.

January 2010
TIMETABLE FOR NEW NUCLEAR BUILD (DECC, NOVEMBER 2009)

 Annex

 Source: DECC—http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=What we do\UK energy supply\Energy mix\Nuclear\newnuclear\1_20091111105719_e_@@_newnucleartimeline.pdf&filetype=4
1. ESA is the sectoral trade association for the United Kingdom’s regulated waste and secondary resource management industry, a sector contributing £9 billion per annum to GDP. Our Members recover more of the value contained in the UK’s waste—for example, household recycling has quintupled in the last decade—whilst protecting the environment and human health.

2. It is perhaps symptomatic of difficulties faced by our sector that, although we produce one third of the UK’s renewable electricity, our sector has not been invited to appear before the Committee.

3. Energy from waste is an essential component of modern waste management infrastructure. More recovery of energy from waste is compatible with further increases in recycling and, as well as achieving the secondary, but important objective of diversion from landfill, it offers an indigenous and secure source of supply of energy. It is also—as evidenced by repeated official studies and as below stated—very safe and emissions from our Members’ regulated infrastructure are particularly strictly regulated under EU law. HMG’s international commitments on reduction of carbon emissions rely in part on energy from waste.

4. An effective and efficient planning process is required to achieve greater economic and environmental sustainability and to enable the UK to meet its legal duties resulting from EU laws on waste management, which in practice require more recycling of materials and recovery of energy from waste.

5. Defra predicts that £11 billion investment in new waste management capacity is needed by 2020 to comply with the relevant EU laws predating the 2008 Waste Framework Directive, a law which may necessitate even more investment. Our sector is therefore effectively asked to invest £1 billion every year for more than a decade in new infrastructure.

6. Obtaining planning permission remains the single biggest barrier to the timely delivery of new waste management infrastructure. Of the eight Energy from Waste (EfW) planning applications submitted by ESA’s largest Members over the last three years, six have been refused consent: often against the recommendations of local authority officers.

7. While the Planning Act has in a number of respects fallen some way short of the modernisation of the planning regime the Government had intimated would be forthcoming for our sector in the current Parliament, in principle we welcome the concept of a robust Energy National Policy Statement providing a coherent and practical planning policy framework.

8. We may in the light of practical experience invite the Secretary of State to propose an Amending Order to clarify and amend thresholds in the Planning Act for qualifying waste management infrastructure which currently, contrary to some political preferences, discriminate against meritorious EfW facilities not large enough to meet the 50MW threshold. (Also, while not directly relevant to the Committee, the threshold for hazardous waste infrastructure is too low: imposing the expensive IPC process on small items of such infrastructure would render them wholly uneconomic.) Only one of the UK’s existing 29 EfW facilities would have met the Section 15 threshold, although five potential schemes do exceed 50MW. While HMG is promoting Anaerobic Digestion as a waste treatment, no such facility would approach the 50MW threshold and neither would advanced conversion technologies such as gasification and pyrolysis, in part as a result of the lower energy generating efficiencies of these alternatives.

9. It might be helpful if HMG provided more guidance to local authorities on the practical application of 1.2.1 of EN-1 and 1.2.4 of EN-3.

10. ESA welcomes HMG’s acknowledgment that waste combustion plants should be considered renewable energy projects and that the IPC should begin its assessment of relevant applications on the basis that need had already been demonstrated. However, we would welcome the policy being made more robust, with specific recognition of waste’s potential to provide a more reliable electricity base load than other more intermittent renewable generation technologies. The waste sector remains the largest generator of renewable electricity in the UK despite the supposed installed generating capacity of onshore wind being more than twice as great as that of waste–fuelled technologies.

11. The IPC should note that the Waste Strategy 2007 (paragraph 22 of chapter 5) rebuts objections to EfW that cite the precautionary principle: research carried out to date shows no credible evidence of adverse health outcomes for those living near incinerators. A recent decision by the Secretary of State has also been consistent with this.

12. In 2009, the Health Protection Agency (HPA) revised its guidance on the health effects of EfW, and reinforced its previous position that there are no significant health effects associated with the emissions from such facilities.
13. The reference in the third bullet point to biomass is of limited relevance as no infrastructure—other than EfW facilities—combusting waste biomass would meet the 50MW threshold. In the fourth bullet point, we believe the “principal purpose of burning waste” is not as stated but is “to recover energy”.

14. Opportunities for development of waste fired CHP plants remain constrained by un-coordinated public policy. However, the IPC should note that an electricity generation-only facility can in some circumstances offer net environmental benefits over CHP, as evidenced by the EU’s Waste Framework Directive which considers electricity generation to be more valuable than heat when considering the benefits of waste fired CHP.

15. The final sentence of 4.29.5 is not an accurate or adequate summary of the waste hierarchy set out in 4.29.2.

ENERGY HIERARCHY

16. We note the oral evidence provided by the Institution of Civil Engineers. Their support for a hierarchy allowing the IPC to prioritise renewable energy development over more carbon intensive generation of energy could merit consideration when relevant sectors have made further progress on harmonising metrics. ESA launched a major initiative in 2009 giving more transparency to the carbon footprint of Members’ various operations.

January 2010

Memorandum submitted by E.ON UK

Effective and timely implementation of planning reform is crucial given the pressing need in the UK for new energy infrastructure both to reduce CO₂ emissions from the energy sector and to maintain security of energy supplies given the large volume of generating capacity which will close over the next fifteen years. The National Policy Statements (NPSs) have a central role to play in this.

Overall the draft NPSs published by the Government do provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications for energy infrastructure, but we would like to see some modifications.

Following this consultation process, the NPSs should be published as a final draft to allow for a brief period for further comment before they are designated by the Secretary of State.

Generation investment in the UK is significantly determined by Government and EU energy and climate change policies which incentivise low carbon investment. Government policy also reflects the advice of the Climate Change Committee. The projects which come forward will reflect this and for this reason neither the NPSs nor the IPC need to impose additional energy policy constraints or limit construction of particular technologies.

The NPSs should state that the IPC should give substantial weight to the need for new energy infrastructure. This is important given the benefits this will have in reducing CO₂ emissions or in providing secure supplies, and the adverse consequences of these objectives not being met. This broad approach has already been adopted for nuclear in EN-6 and we support this.

The need for new coal and CCS capacity and for renewables energy sources should be given more emphasis. The need for new gas storage could also be expressed more strongly. The NPSs currently focus on transmission investment and more emphasis should be given to distribution investment.

The need for low or zero carbon capacity would be strengthened if the Government were to adopt formally the recommendation from the Climate Change Committee that the power sector should be significantly decarbonised by 2030.

We welcome the non-spatial nature of the non-nuclear NPSs. There are a wider range of siting options for non nuclear developments and technologies and mitigating measures vary significantly. NPSs which specified predetermined locations for development would be unnecessarily restrictive. A flexible approach is required which enables a judgement to be reached by the IPC in relation to the location and development in question.

1. E.ON is investing or is a potential investor in the UK across a wide range of generation technologies including renewables, gas-fired CCGT plant, and new coal-fired capacity with carbon capture and storage. We are also developing gas storage in the UK and our distribution business, Central Networks, intends to invest substantially in new network infrastructure across the East and West Midlands.
2. E.ON UK and RWE npower have also formed a joint venture, Horizon Nuclear Power (HNP), to develop new nuclear projects and HNP are responding separately to the committee on the nuclear NPS EN-6. This E.ON submission does not comment in detail on the nuclear NPS.

3. The reform of the planning system introduced under the Planning Act 2008 is intended to provide a more efficient, predictable and timely process for reaching decisions on nationally significant infrastructure projects for both developers and for other parties wishing to express their view on proposed projects. Effective and timely implementation of this system is now crucial given the pressing need in the UK for new energy infrastructure both to reduce carbon emissions from the energy sector and to maintain security of energy supplies given the large volume of existing generating capacity which will close over the next fifteen years.

4. The NPSs have a central role because they are the primary basis on which the Infrastructure Planning Commission (IPC) will be reaching decisions on new projects. It is essential that they fully reflect the need for new investment, the Government’s energy policy objectives, and provide guidance to the IPC on how adverse and beneficial impacts of developments and mitigating measures should be assessed by the IPC in coming to a decision. This will avoid repeated consideration of issues such as whether new generating capacity is required or the relative merits of different technologies and will help focus time and resources on the specific impacts of projects and on whether the adverse impacts outweigh the benefits of the investment.

5. Overall, we believe the draft NPSs published by Government do provide a coherent and practical framework within which the IPC can assess future planning applications for energy infrastructure, subject to some modifications. In particular we endorse the statements on the requirement for new capacity and network investment. We have a number of high level comments on the NPSs which we set out below and our more detailed comments, which include those areas where we would welcome more clarity, are attached as appendices to this evidence.

GOVERNMENT ENERGY POLICY

6. In general the NPSs are accurate reflections of existing Government policies. While it is not the Government’s intention to use the consultation process to reopen existing policies which have already been consulted on separately, the Government will need to keep its energy policies under review in the light of comments received, continuing developments in its own policy (in the light for example of advice given to it by the Climate Change Committee) and other developments, for example, occurring at the EU and international level. This will need to be reflected in the NPSs that the Secretary of State intends to designate and it would be helpful if these could be published in a further draft to allow for a brief period for final comment.

7. The NPSs also reflect Government energy policy in that it is primarily for market participants to decide which applications for generation projects to bring forward within the energy policy framework set by Government, and that the IPC does not need to look at whether there is a need for new infrastructure or the advantages of one generation technology over another.

8. We were also pleased to see that the NPSs have not sought to impose limits or quotas on the levels each technology can contribute to the requirement for new capacity. Government energy policy already has a significant impact on generation investment, for example through the Renewables Obligation and policy on new coal-fired plants. The EU ETS also has a major impact on investment. The level of network investment is determined through the system of price controls imposed by Ofgem. Government policy reflects the advice of the Climate Change Committee. For this reason neither the NPSs nor the IPC need to impose additional energy policy constraints or limit construction of particular technologies.

THE NEED FOR NEW INFRASTRUCTURE

9. While the NPSs, and particularly EN-1, set out the need for new generating and network capacity, we do not consider that the statements in EN-1 that the need is ‘significant’ sufficiently reflects the importance of securing new investment. We would prefer a less ambiguous and stronger term such as ‘considerable’. We also note that the NPSs, except EN-6, do not state what weight the IPC should give to this need when they are deciding applications. This would provide the IPC with a clearer basis on which to balance this need and other benefits against the adverse impacts of projects. The NPSs should therefore state that the IPC should give substantial weight to the need for new infrastructure given the benefits this will have in reducing CO₂ emissions or in providing secure supplies to consumers, and the adverse consequences of these objectives not being met. This broad approach has already been adopted for nuclear in EN-6. The benefits of the investment and adverse consequences of failing to deliver it should be summarised succinctly for each technology.

10. More specifically, we believe the need for new energy sources and new coal and CCS capacity should be given more emphasis given the value they have in contributing to reducing CO₂ emissions and to security of supply. In the case of renewables it should make clear that failure to deliver the investment could leave the UK exposed to infragation proceedings from the Commission. The need for new gas storage is also not sufficiently strongly expressed, given its role in reducing UK exposure to the risk of gas supply interruptions as UKCS gas production declines. NPS EN-1 and EN-5 focus on transmission investment and more emphasis should be given to distribution investment.
11. The need for low or zero carbon capacity would be strengthened if the Government were to adopt formally the recommendation from the Climate Change Committee that the power sector should be significantly decarbonised by 2030.

12. In the context of coal and CCS projects, the NPSs do not cover CO2 pipelines. EN-1 and EN-2 should be amended to set out the consenting process and the IPC role. The IPC will need to give development consent to CO2 pipelines where they come within Section 21 (Other Pipe-lines) of the 2008 Planning Act. There also needs to be an assessment of impacts, mitigation measures and a statement on IPC decision making in this case.

SPATIAL ISSUES

13. We support the non-spatial nature of the non-nuclear NPSs. In the case of nuclear there are a limited number of suitable sites capable of development within the timescale envisaged of 2025 and it has been appropriate to conduct a national strategic siting assessment to identify preferred potential locations. However there are a wider range of options for other developments and technologies tend to vary more significantly. NPSs which specified locations or predetermined areas for development would be unnecessarily restrictive and stifle development. Technologies and mitigation measures also continue to evolve. This means that spatial plans could quickly become out of date, rendering the NPSs out of date also. For example the spatial approach adopted as part of the Technical Advice Note (TAN) 8 process in Wales has restricted the extent of onshore wind development below the potential level that could reasonably have been achieved given available wind resources. A flexible approach is required which enables a judgement to be reached by the IPC in relation the location and development in question. The NPSs already make clear the approach the IPC should take to the location of projects in areas of particular amenity value.

SYNCHRONISED APPLICATIONS

14. We welcome recognition in the NPSs that it is not possible in every project to provide a synchronised application to the IPC for all the developments which may come within the remit of the IPC, for example for a power station and the associated transmission connection (section 4.9).

Alternative Sites

15. We welcome the proposal that the IPC should adopt a proportionate approach to the consideration of alternative sites to that proposed and for alternatives considered to be realistic prospects. In particular we welcome the need for third parties to justify their proposed alternatives, rather than expect the applicant to assess them, so as to minimise spurious obstacles to a development being raised during the consenting process (see paragraph 4.4.3 of EN-1).

AVIATION AND DEFENCE INTERESTS

16. We welcome the wording regarding civil and military aviation and defence interests within section 4.19 of EN-1. We believe this provides clearer guidance to the IPC and developers about how impacts can and should be mitigated. Where adverse effects have been identified it may be possible to overcome this through mitigation and we support the emphasis given to the need for conflicts between Government’s energy and transport policies to be resolved and for the relevant parties to work together to identify realistic and pragmatic solutions to the conflict as noted in paragraph 4.19.15 of EN-1.

DESIGN

17. The NPSs refer to “good design” which we welcome but the attempts to describe good design are too open to interpretation. Furthermore the principles of ‘attractive, durable and adaptable’ referred to in the NPSs are not generally used in assessing the design of infrastructure. Alternative wording should be considered which emphasises the need for aesthetics to be considered in producing a design which is functional and can be built at reasonable cost. This guidance may need to be more technology specific than is currently the case.

E.ON

15 January 2010

APPENDIX A

EN-1 OVERARCHING POLICY STATEMENT

EN-1 sets out the requirement for new generating and network capacity, but does not indicate sufficiently and explicitly that the IPC should give that requirement substantial weight given the benefits this will have in reducing CO2 emissions or in providing secure supplies to consumers, and the adverse consequences of these objectives not being met. This will provide the IPC with a clearer basis on which to balance this need against the impacts of the projects.
More specifically, the need for new coal and CCS and renewable capacity should be given more emphasis given the value that CCS technology has in contributing to reducing CO$_2$ emissions and to security of supply. In the case of renewables it should make clear that substantial weight should be given to the need for both onshore and offshore wind projects given their contribution to delivering CO$_2$ emission reductions and that failure to deliver the investment could leave the UK exposed to infraction proceedings from the Commission. The need for new gas storage is also not sufficiently strongly expressed, given its role in reducing UK exposure to the risk of gas supply interruptions as the UKCS gas production declines. The NPS focuses on transmission investment and we believe it should cover distribution investment more fully.

The need for low or zero carbon capacity set out in EN-1 would be strengthened if the Government were to adopt formally the recommendation from the Climate Change Committee that the power sector should be significantly decarbonised by 2030. This would enable the NPS to give an indication of capacity requirements beyond 2025.

We welcome the emphasis placed on new nuclear capacity; this has an important role to play in ensuring we meet our low carbon targets particularly beyond 2020 at reasonable cost and in providing diverse and secure electricity supplies.

We note what the NPS says about demand reduction decentralised generation, demand side management, electrical storage and interconnection in meeting the UK’s future energy requirements. These technologies have a contribution to make and it would be helpful if Government could quantify this further to clarify what their role might be.

We also agree with the approach that the market decides which applications to bring forward and that the IPC does not have to look at need in terms of the advantages of one technology over the other.

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**Paragraph Comment**

**1.2.1** The NPS may be a material consideration in decision making on planning applications under the Town and Country Planning Act, as far as practicable. We certainly agree with the principle but the wording could be tighter to strengthen the requirement on the LPA to have regard to the NPS. The NPS should set a clear direction for all infrastructure development regardless of its size.

We also believe Local Authorities should be given additional guidance as to the relevance of aspects of each NPS for the preparation of local and regional development plans.

**Scope of EN-1**

**1.3.4** The development consent order allows the developer to seek consent for other ancillary development or use other powers. Compulsory purchase of land is included here and we look forward to receiving more guidance on this.

**1.3.5** Generation from bio-methane should come within the scope of the NPS.

**Governments Energy & Climate Change Strategy**

**2.1** The “Summary of the Government’s Energy and Climate Change Objectives for the Power Sector”, should be extended to cover oil and gas.

**2.1.1** Towards the end of this paragraph it states: “... there are many aspects that will not be relevant to IPC decisions or decisions by local authorities”.

A possible interpretation of this statement is that some aspects of energy and climate change policy could be disregarded by the IPC. If aspects of policy can be disregarded, then that could lead to a debate at the examination of an application over which aspects of policy should apply and which aspects should not. This should be amended to indicate which aspects of energy and climate policy are not relevant to energy applications.

**2.1.16** This paragraph states that in the longer term the UK must reduce its dependence on fossil fuels. While reduced fossil fuel consumption unabated by CCS is required to reduce carbon emissions, it is not self-evident why the UK needs to reduce its “dependence” on fossil fuels on security of supply grounds as opposed to ensuring diversity of fossil fuel supply. It should clarify the logic here and the meaning of “longer term”.

**Need for New Energy Infrastructure**

**General**

Whilst Part 3 of the NPS sets out the need for new energy infrastructure, there is nothing in the NPS to clarify what weight should be given to that need. As the IPC must balance the need for new energy infrastructure against any adverse impacts of
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<td>the proposal it would be helpful if the draft NPS made it clear that the need for new energy infrastructure should be given substantial weight.</td>
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<tr>
<td>3.1 The need for new energy infrastructure cannot be separated from grid investment to connect the generation capacity and accommodate power flows. The need for additional grid infrastructure should be included in the summary statement of need at para 3.1.</td>
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<td>The central assumptions are based on work carried out by an external consultancy. Given their significance should DECC state that they have validated that they reflect the Government’s central view? Are they consistent with the data provided in the UEP for the Low Carbon Transition Plan?</td>
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<td>The reference to 25 GW of new non-renewable capacity should make clear this is by 2025.</td>
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<td>We believe that 3.1 could be clearer on the expected level of renewables capacity (while recognising these could be exceeded) as we believe several conclusions could be reached from the information currently presented in Part 3.</td>
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<td>The IPC should not use these figures as a limit to the overall amount of projects they should be consenting. It should also be clear that the consent of projects over and above these stated figures will be necessary, taking account of potential project failure on other grounds (eg technical/economic).</td>
<td></td>
</tr>
<tr>
<td>Figure 3.2 estimating future capacity requirements differs from our analysis. The graph implies that there is no need for further new build over and above that already consented (assuming all consented plant is built). In particular it does not take account of expected closures of existing capacity after 2015 nor the probability that a proportion of consented projects will not proceed. It does not appear to support the analysis in para 3.3.14. Our analysis of capacity requirements indicates a need for new capacity over and above consented new build by 2016–17.</td>
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<tr>
<td>We believe the conclusion in this paragraph does not take account of the fact that not all schemes that are granted consent will necessarily be implemented. We believe the tone of the paragraph should be more cautious.</td>
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<tr>
<td>The statement that 3 GW of pumped storage is less than 3% of total generation capacity is inconsistent the statement that current generation capacity is around 80 GW.</td>
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<tr>
<td>We support the statement that there is nothing to prevent development beyond the levels set out in the lead scenarios for renewable technology for 2020 and that these are not targets.</td>
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<tr>
<td>The first sentence should read “The majority of the 17 GW of new conventional generating capacity envisaged by 2020 under the central set of modelling assumptions is likely to need to come from fossil fuel generating stations” given the limited new nuclear capacity that will be built by 2020.</td>
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</tr>
<tr>
<td>In paragraph 3.1 there is no direct mention of the need to re-route, rebuild or refurbish or build new distribution or transmission circuits to connect new generation sources or where increased capacity is required. It is however noted in section 3.8.4 but with a focus on “new build”. Therefore we would like 3.8 to be revised to put projects that will be required on existing networks on an even footing with new build works and section 3.1 should also be revised to reflect this amended section.</td>
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</tr>
<tr>
<td>The paragraph states that the Low Carbon Transition Plan is expected to reduce UK gas demand across the economy by around 30% by 2020. We believe that such a large reduction cannot be relied upon and that the requirement for gas storage could be higher.</td>
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</table>

**Assessment Principles and Generic Impacts**

4.1.6 We strongly support this statement and believe financial and technical viability of a proposal should not be of relevance to the IPC.

4.2.5 This paragraph could be construed as requiring the developer to submit information that was equivalent to an Environmental Impact Assessment for all IPC applications, even where the development would not require an assessment under the relevant European Directive. In our view, this would be excessive and inappropriate.

4.4.1 It is not clear where the policy requirements for the IPC to consider alternatives are or under what circumstances they would apply. This point needs to be clarified in the NPS.
<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4.3</td>
<td>We believe the paragraph should make clear that nothing in the paragraph requires the IPC to consider any alternatives. Otherwise, there is a possibility that this paragraph could be interpreted as requiring the IPC to consider alternatives.</td>
</tr>
<tr>
<td>4.5.5</td>
<td>This needs to be amended to say that where alternatives are considered, the applicant must set out the main alternatives that have been looked at. This will make it consistent with the current requirements of the EIA Directive and Regulations.</td>
</tr>
<tr>
<td>4.6</td>
<td>The Environment Agency have adopted a policy to check compliance with CHP requirements and recently requested “reports to be submitted to them, regularly, to demonstrate that we had investigated CHP opportunities”. This was in addition to a planning condition. We need a clear statement in the NPS of what the EA’s role in CHP is to avoid confusion.</td>
</tr>
<tr>
<td>4.6.10</td>
<td>This paragraph allows the IPC to ask an applicant to pursue possible customers of CHP. While the IPC needs to be satisfied that the applicant has complied with paragraph 4.6.5 and 4.6.6, it may not be economic to provide heat for a limited number of customers or it may not be possible to reach acceptable terms and this needs to be recognised. The IPC should not have a role in seeking to arbitrate between the applicant and customers.</td>
</tr>
<tr>
<td>4.6.11</td>
<td>The optimal design of a CHP plant differs from that of a non CHP plant, and will also depend on the balance between heat and electricity demand. There is therefore some danger that CHP ready plant will be required in a sub-optimal configuration at reduced efficiency to facilitate an uncertain possible future heat demand. We are not clear that the IPC would be in a position to make this judgement.</td>
</tr>
<tr>
<td>4.7.4</td>
<td>The second bullet point contains a requirement to submit reports on the technical aspects of the CCR to the Secretary of State. However, it is not clear whether this is a requirement that is supposed to be inserted into the DCO and approved before commencement of the development or whether it has to be submitted with the application.</td>
</tr>
<tr>
<td>4.7.12</td>
<td>This refers to the consent as a “planning application” when it should be “application for development consent”. This should be amended.</td>
</tr>
<tr>
<td>4.7.13</td>
<td>The consents listed here may not be comprehensive. If the pipeline for the CO₂ storage has to go through a main river, then it may need consent under the Water Resources Act 1991. If a platform has to be stationed in the North Sea to receive the CO₂ and pump it into the storage site, then this will need a licence under the Coast Protection Act and consent under the Offshore Chemicals Regulations 2002. The Coast Protection Act consent can be given under the development consent order. The Water Resources Act licence and Offshore Chemicals Regulations consent have to be applied for separately. Greater clarity of the proposed consenting regime for CCS infrastructure would be welcome and a coordinated approach to the entire CCS chain through the IPC should be implemented. EN-1 and 2 should be amended to set out the consenting process and the IPC role for CO₂ pipelines. The IPC will need to give development consent to CO₂ pipelines where they come within Section 21 of the 2008 Planning Act. There also needs to be an assessment of impacts, mitigation measures and a statement on IPC decision making in this case.</td>
</tr>
<tr>
<td>4.8.8</td>
<td>The paragraph requires the IPC to consider whether to ask for further information on a project where a new set of UK Climate Projections become available. This appears to happen once a year. Therefore, it is likely that over the course of an application the IPC will ask for further environmental information. This has the potential to delay the overall timescale for determining the application. We believe that the guidance should make it clear that the IPC should apply the Climate Projections current at the time of the application, unless it believes there are substantial changes.</td>
</tr>
<tr>
<td>4.9.3</td>
<td>It is not clear whether the second sentence of this paragraph is referring to the adverse impacts of the grid connection or the adverse impacts of the whole scheme. We believe this sentence needs to be clearer in what it means by “adverse impacts”.</td>
</tr>
<tr>
<td>4.12.3</td>
<td>The consultation zone referred to in this paragraph is only used where a site is at risk of having a major accident. Where a site has consent to store hazardous substances it is not automatically designated as a major accident site. The NPS appears to have confused the hazardous substances consent regime with the regime for controlling major accident sites.</td>
</tr>
</tbody>
</table>
4.17–4.30 In these sections we believe that the section on mitigation should come before the section on IPC decision making, since mitigation is something the IPC should take into account when making its decision.

4.17.2 We are not sure why eutrophication is singled out here. We believe it would be better to have a more balanced paragraph addressing a number of likely effects.

4.17.7 The paragraph says that developments should be refused where they would cause air quality limits to be exceeded. It then goes on to say that development can be approved if the IPC is satisfied that measures will be in place to ensure the project will not cause the air quality limits to be exceeded. We believe the second part of this paragraph contradicts the first part.

4.18.11 The paragraph requires alternative sites to be considered across the country. However, it is difficult to see how a power station could satisfy a consideration of alternative sites across the whole country.

4.19.9/14/17 Paragraph 4.19.9 and 4.19.17 we support the use of the term ‘significantly impede or compromise’ and believe this is really important. Adverse effects should not of themselves be enough to prevent consent being granted so we are pleased to see that the MoD would have to demonstrate significant harm. This will encourage a constructive assessment by all parties of potential impacts and mitigation measures. Similarly paragraph 4.19.14 aerodrome operators will be expected to consider making changes to their operating procedures. This will encourage aviation interests to look at all alternatives and mitigation solutions.

4.19.18 We welcome the statement that, even where the proposal will significantly impede or compromise aviation interests, if these can be overcome in the future within the life time of the consent then a Grampian condition can be used.

4.18.18 We do not believe the first bullet point is required.

4.22.4 This paragraph does not quite accord with the proposed revisions to PPS25, since under those revisions a renewable energy project would not be subject to the sequential test. However, the way this paragraph is drafted means that all energy projects in flood zones would be subject to the sequential test. This should be amended to reflect the emerging policy.

4.22.6 It is not clear from the paragraph whether PPS25 should be applied to flooding issues. If PPS25 conflicts with the NPS, then the NPS will prevail. We believe the paragraph needs to be clearer about whether it is incorporating the guidance to PPS25 or not.

4.23 This section uses the term “heritage assets”, as it does in the draft PPS15. However, this terminology has been heavily criticised in responses to draft PPS15, as it leads to uncertainty and is likely to involve applicants in considering non-designated cultural heritage assets to a significant degree.

4.23.5 We do not believe the second sentence is an appropriate way to deal with non-designated assets. It is likely to create significant debates at the examination of the application over how the non-designated assets should be treated.

4.23.10 We believe that the requirement in this paragraph goes too far. Instead, we believe that this could be handled by a requirement in the development consent order to provide detailed information on the impact of the development prior to commencement of the development.

4.23.13 The requirement in this paragraph goes beyond the current statutory test in the Listed Buildings legislation. We believe that the paragraph should be amended to reflect the statutory test.

4.23.18 Preservation of archaeological artefacts by recording them has been an acceptable solution for many years. We do not see any reason why it should be unacceptable for nationally significant projects.

4.24.9 This seems to suggest that there is a buffer zone around nationally designated areas, which would contradict current planning policies.

4.24.15 The paragraph states that the IPC must judge whether “visual effects outweigh the benefits”. However, visual effects are just one factor that has to be combined with the other impacts of the development and weighed against the benefits. The test does not assess the impacts individually.

4.24.17 The examples given in this paragraph are at the extreme ends of the spectrum. In practice, most applications will fall somewhere between these two extremes. We believe it would be helpful, therefore, to have a more realistic example.
Paragraph Comment

4.25.12 Overhead lines should be regarded as appropriate development in the Green Belt and this paragraph should acknowledge this.

Pg 34 footnotes This states that where “condition” is used it means “planning requirements” and where the term “planning obligations” is used it refers to “development consent obligations”. It would be simpler if the proper terms were used in the NPS.

APPENDIX B

EN-2 FOSSIL FUEL ELECTRICITY INFRASTRUCTURE

We welcome this draft NPS and believe that it should be designated subject to comments below.

Firstly we are pleased to see that fossil fuel electricity generation is included as part of the need for a diverse power portfolio as this is critical to security of electricity supply. It can provide an economical and flexible supply of power generation and should continue to play an important role in meeting the UK’s electricity needs within a framework which reduces their impact on the environment.

Designating the Fossil Fuel NPS is an important step in ensuring the planning process provides the certainty and confidence for investors in these technologies.

Whilst we support much of the content within this NPS there are a number of small modifications we wish to propose to remove any ambiguities and prevent delays in the future. Furthermore we are concerned that there is little reference to cultural heritage, fauna and flora, although we recognise this has been covered in EN-1. The section on the IPC decision making and mitigation is high level and generic in some areas and we would like to see more detailed guidance.

Paragraph Comment

1.1.1 The third sentence of the paragraph suggests that it is Government policy that all new coal fired generating stations should be required to capture and store the carbon emissions from a substantial proportion of their capacity. However, the policy is more accurately set out in paragraph 2.3.6. The statement in paragraph 1.1.1 should be amended to reflect this.

2.1.1 As the IPC must balance any adverse impact of the proposed development against its benefits it would be helpful if the NPS made it clear that the need in terms of the benefits of fossil fuel electricity generation in providing reliable and flexible electricity supplies and a secure and diverse energy mix should be given substantial weight.

2.1.2 It is not clear what is meant by the term “satisfies the impact considerations” in the final sentence of this paragraph. Presumably, the impact considerations are matters that should be taken into account by the IPC, rather than being matters that need to be satisfied. This sentence should be amended accordingly.

Water resources

2.2.6 This suggests that the volume and availability of water depend on a number of factors including (amongst others) the power consumption of the cooling system. The link between power consumption and the volume and availability of water is tenuous. Also the direct power consumption of the cooling system is a factor to be taken into account in selecting a cooling system design. However, we would like it to also recognise that the cooling system has a significant impact on the condenser performance characteristics and hence in the efficiency of the steam turbines and therefore the whole power station operation. This is not a simple case of estimating the works power consumed in pumping the cooling water, or by fans etc. in assessing the merits of alternative cooling systems.

It is not clear what relevance “the visual impact of the chosen system” has to the volume and availability of water. This should be deleted.

Grid Connection

2.2.9 We firmly support the text here. It is critical that flexibility is retained in the relationship with grid applications.

Government Criteria

2.3.3 “If an application does not demonstrate that CHP has been considered, as described in EN-1, the IPC should seek further information from the applicant. The IPC should not give development consent unless it is satisfied that the applicant has provided appropriate evidence that opportunities for CHP have been properly explored.”
The EA have adopted a policy to check compliance with CHP and recently tried to request reports to be submitted to them, regularly, to demonstrate that we had investigated CHP opportunities. This was in addition to a planning condition. We believe it is important to make a clear statement within the NPS what the role of EA’s is for CHP without this we will face contradiction and confusion.

We acknowledge the importance of climate change adaptation and support the requirement to consider these potential effects of climate change in proposing new developments. However, we will carry out risk assessments that strike a balance between implementing additional measures now at additional cost and the probability that those measures will actually be required. Therefore a more efficient approach may be not to implement additional resilience measures now but to monitor changes and to ensure that there are no barriers to implementing additional measures at a later date, if the need should arise.

We would like the IPC to take account of this uncertainty and believe it should be prepared to accept the option of active monitoring, rather than implementing advance measures to deal with uncertain outcomes.

Further clarity on what is meant by achieving good design in terms of “attractiveness” would be helpful. We believe this to be very ambiguous and that further guidance is necessary so that it is not open to interpretation. A definition should take account of cost factors.

The meaning of the words “attractive, durable and adaptable” is unclear in this paragraph and paragraph 4.5.2 of EN1. These are not words that are generally used in assessing the design of infrastructure. Similar wording is also used in paragraph 4.5.1 of EN-1, although usable and contributing to sustainable development are also added. Alternative wording should be considered.

The paragraph does not explain how “good design” is to be achieved. We believe this part of the NPS would be more useful if it provided more detail on what “good design” means.

Landscape and Visual

The words “landscape and” should be inserted before “visual impacts” in the first sentence. There is inconsistency between this paragraph which refers simply to minimising impact on visual amenity as far as reasonably practicable and paragraph 2.6.10 which refers to sufficient measures having being taken to minimise effects on landscape and visual amenity. 2.6.10 should also refer to “as far as reasonably practicable”.

Paragraph 2.6.6 is within the section headed IPC Decision Making. However, in section 2.5 a distinction is made between IPC decision making and mitigation. There should be consistency in those sections dealing with impacts. It should be made clear what the IPC is expected to take into consideration and what mitigation would be expected from Applicants.

This paragraph lacks clarity and ought to be re drafted.

It instructs the IPC that they should:

“. . . expect the applicant to justify the use of a cooling system that involves visible steam plumes. It should be satisfied that application of modern hybrid cooling technology is not reasonably practicable before giving consent.”

Whilst it is reasonable to expect developers to justify the selection of the cooling system, we do not feel that it is justified to direct the IPC to weight visual impact considerations over other factors in this manner.

The European Commission guidance (BREF) on Industrial Cooling Systems (Integrated Pollution Prevention and Control (IPPC) Reference Document on the application of Best Available Techniques to Industrial Cooling Systems), clearly indicates that a number of factors should be taken into account in designing cooling system and selection of the best option. This particularly includes consideration of efficiency of the process and hence greenhouse gas emissions per unit of electricity generated. Direct (once-through) cooling is generally the most efficient system where there is sufficient water available. Natural draught cooling towers are the next most efficient, followed by forced draught, hybrid towers and then air cooled condensers.
Any of these technologies may be the most appropriate depending on local circumstances and we see no justification in directing the IPC to weight visible plume impacts in this manner.

It would be preferable to direct IPC to take account of the European Commission reference documents (BREFs) in determining projects that come under the Pollution Prevention and Control Directive, rather than give superficial ‘guidance’ where there is no particular national interest reason to do so.

Finally we would like the following to be inserted at the end of the final sentence “for the use of a cooling system that involves visible steam plumes”

2.6.11 “The visibility of a fossil fuel generating station should be given limited weight by the IPC if, having regard to the considerations set out in EN-1 and this section, it is satisfied that the location is acceptable for the project and it has been designed sensitively given the various siting, operational and other relevant constraints, to minimise harm to landscape and visual amenity”.

Whilst this is helpful does the consideration of whether the site is an acceptable location itself include consideration of visual impact?

APPENDIX C
EN-3 RENEWABLE ENERGY INFRASTRUCTURE

We welcome this draft NPS and believe that it should be designated subject to comments below. Renewable energy has a key contribution to make to meeting climate change targets and to energy security by improving diversity of energy sources and reducing dependence on imported oil and gas.

Renewable electricity is planned to contribute 30% of the UK’s final electricity consumption by 2020 to enable the UK to deliver its statutory target of achieving 15% of all energy consumption from all renewable energy sources, including heat and transport, by 2020. The majority of this is set to come from both offshore and onshore wind, supplemented by biomass-fired energy. To deliver the 2020 targets it would be beneficial if the NPS reinforced the clear need for a minimum of 14GW of offshore wind and 14GW of onshore wind by 2020.

Delivering the proposed targets poses major challenges, and the extent to which it can be delivered is dependent on a number of barriers, of which planning is a significant one which must be overcome. Designating the Renewable Energy NPS is an important step in ensuring the planning process provides the certainty and confidence for investors in this technology.

Overall we are pleased by the guidelines and content included within this NPS, however there are a number of small alternations we wish to propose to remove any uncertainty and prevent future delays in the planning process. We also wish to highlight some particular areas of strength within this NPS which we do not wish to see removed.
## Renewable energy in Wales remains underdeveloped and will need to do more if it is to facilitate the delivery of the 2020 targets. The approach set out in paragraph 2.2.1 of the NPS will allow further development opportunities to arise in Wales, which we fully support.

2.3.2 This requires climate change resilience measures to be included in the EIA, which seems to be beyond the normal EIA requirements.

2.4 The Planning Act 2008 requires the NPS for a particular type of development to set out the design criteria for that type of development. We are not sure that section 2.4 is sufficient, given that it, in effect, says that energy infrastructure should be of “good design”. This part of the NPS could usefully provide more detail on what it means by “good design” in this context.

### BIOMASS AND WASTE COMBUSTION

We are supportive of the text in respect to Biomass and Waste Combustion and believe that this section will enable us to carry out our role within clear guidelines. We would however like to note one minor point:

2.5.31 The paragraph explicitly acknowledges the need to weigh the benefits of the scheme against the impacts. However, it is not clear as to what weight should be given to the benefits. The paragraph needs to make it clear that significant weight should be given to the benefits.

### OFFSHORE WIND

We broadly welcome the guidance for offshore wind development and believe them to be well written sections and provide clear guidelines. It would be beneficial if the NPS reiterated the need for at least 14GW of offshore wind by 2020 and the resources that could be exploited further beyond this timescale to deliver a low carbon economy.

In particular we support sections on biodiversity, subtidal, Commercial Fisheries and Fishing, Oil, Gas and other infrastructure activities, navigation and shipping, Seascape and Visual Effects. The approach taken is pragmatic and the mitigation options highlighted are capable of being delivered by developers. We would be concerned if there were material changes to these sections as this would move away from the well balanced approach that’s been taken.

However, we would like to raise the following number of small modifications to remove any ambiguities and prevent delays in the future:

#### Water depth and foundation conditions

2.6.31 Similar to 2.6.30 and wind resource, water depth has a significant influence over economics. This should be stated.

There is no mention of distance from shore. This will also impact on project design economics and should be mentioned in the document.

#### Other offshore infrastructure

2.6.35 The NPS should also recognise that a range of offshore developments will need to co-exist. As currently drafted we believe the onus is too great on the offshore wind developer. There is quite a lot of infrastructure in the sea and whilst the majority of it can be avoided through careful siting, there are a number of pipelines/cables that offshore wind export cables will need to cross to be able to connect to the transmission network. Offshore wind developers do not want to be in a position of weakness when such crossings need to be made.

This would benefit from a “weighting” statement as used in other parts of this section.

2.6.51 Monitoring is mentioned on several occasions within this section. It is important that monitoring requests and conditions are reasonable in their nature and do not impose disproportionately onerous survey campaigns on offshore developments. The industry has had a number of examples of monitoring conditions that are difficult to implement in practice. We would urge that developers be asked to undertake reasonable monitoring where this is practical recognising that some aspects may not be possible.

#### Fish

2.6.76 “The inter-array and export cables should be armoured and buried at a sufficient depth to reduce electromagnetic fields (EMF) (greater than 1.5m below the sea bed)”.

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</table>
This is a significant constraint which we oppose. Our experience of operating offshore wind farms in the UK suggests that the risk addressed by this mitigation proposal is extremely low and that this mitigation measure is not proportionate. Cable burial depth is contingent on individual site and environmental conditions and economics.

**Intertidal**

2.6.88 Whilst we welcome the proposed mitigation highlighted in the draft we believe it would be enhanced by inserting “technical practicalities” at the end of the sentence.

2.6.89 This paragraph should recognise that an OFTO appointed by Ofgem will be responsible for installing and operating export cables running across intertidal habitats. Though developers can work together to minimise export cables if applying for them as associated development with an offshore wind farm, it is ultimately the decision of an OFTO or OFTOs as to how many cables are required.

**Marine Mammals**

2.6.96 We would like “Reasonable” to be added at the start of the sentence.

2.6.97 We would like “if practical” to be added to the first sentence after the word “employed”.

2.6.98 In the final sentence we would like “are caused” to be replaced by “may be caused.”

**Ornithology**

2.6.101 We would like this to say “reasonable” ornithological surveys recognising in the past onerous conditions have been set which have been extremely difficult to implement.

2.6.104 This mentions a FEPA licence, but it is our understanding that this will be part of the development consent order and not require a separate licence. We would like this to be made clearer.

2.6.105 We do not believe that this paragraph is necessary, as it is a statutory requirement to decide an application in accordance with the NPS. Some parts of paragraph 2.6.103 seem to be appropriate for the decision-making section and could usefully be moved here.

2.6.107 “Subject to other constraints, wind turbines should be laid out within a site, to minimise collision risk, where the collision risk assessment shows there is a significant risk of collision”.

A site layout is dependent upon many variables. There will naturally be some competing factors and so it would be helpful to explicitly recognise this within the NPS. We also propose that the mitigation measure should state that developers should, where practical, seek to minimise collision risk. This will provide flexibility where this may not be possible because of the conditions of the site in question.

**Historic Environment**

2.6.151 We would like “necessary monitoring” in the first bullet to be replaced by “reasonable monitoring”.

2.6.152 We urge a pragmatic approach to the Historic Environment as we are concerned that changes may be required to layouts during construction, due to the discovery of marine archaeological remains.

**Physical Environment**

2.6.201 Geotechnical investigations are potentially very expensive and do not necessarily need to be completed prior to consent (though they will certainly be completed before construction). Therefore we propose that this paragraph is deleted.

**Onshore Wind**

We welcome the general comments made in respect to onshore wind. We particularly support the wording in paragraph 2.7.1;

“Onshore wind farms will continue to play an important role in meeting renewable energy targets”.

If the UK is to deliver around 30% renewable electricity by 2020, onshore wind will need to contribute around 14GW in capacity. At present there is a little over 3GW in operation, and hence within a decade, there will be a requirement for a further 11GW to be consented and constructed.

Furthermore we welcome the statement made on the “Capacity” of a site in paragraph 2.7.10:

“The spacing will depend on the prevailing wind direction and the physical characteristics of the site . . . This is a matter for the applicant”.


In addition 2.7.13 in respect to Access is also another important paragraph:

“Given that potential onshore wind farm sites are largely in rural areas, access for the delivery of turbine components during construction can be a significant consideration for wind farm siting”.

**Technical Considerations**

2.7.7 Although this paragraph states that wind resource is a “key consideration for the Applicant”, it is not clear whether this is or is not a matter that will be taken into account by the IPC. Many objectors try to question the capacity factor and the efficiency of onshore wind. The NPS should make it clear that these are not factors that are relevant to the IPC application, although the IPC will need to be aware of the economic impact of changes to the configuration of the proposal which affect the wind resource.

2.7.16 & 2.7.19 We support the following statements and believe these are critical to ensuring appropriate development is allowed:

“They are not permanent and can be decommissioned relatively easily and cheaply”

. . . “the time-limited, non-permanent nature of wind farms is likely to be an important consideration for the IPC when assessing impacts such as landscape and visual effects and potential effects on the settings of historic assets.”

2.7.21 and 2.7.24 We are supportive of the flexibility in the project details as noted in these two paragraphs.

2.7.25 We welcome the wording here.

2.7.26 The paragraph suggests that the IPC should investigate the reasons for a micro-siting request. The tone of the paragraph is at odds with para 2.7.53, which suggests that micro-siting as an acceptable form of mitigation. We would like the paragraphs to present a consistent picture and allow for micro-siting.

2.7.30 “In determining an application for the repowering of a site, the new proposed replacement scheme should be determined by the IPC on its individual merits”.

On a repowered site, the concept has already been agreed that the area is suitable for wind development and therefore impacts have already been addressed by the original consent. As it is therefore an accredited wind farm site, it should require a more streamlined EIA compared with a new site as it is effectively already a brownfield site.

2.7.34 “The IPC should not seek a sequential approach”. We would like further clarification on what this will mean in practice?

**Biodiversity and Geological Conservation**

2.7.36 This paragraph refers to potential for bat and bird strikes. However, paragraph 2.7.40 only refers to an assessment of collision risk for birds. It is not clear whether collision risk modelling is required for bats. This is a particularly sensitive issue that has been raised at a number of recent wind farm inquiries. It is not clear why an inconsistent position is taken in the draft NPS.

2.7.46 “the IPC should seek to validate the results of the EIA and any collision risk modelling by requiring, where reasonable, relevant monitoring during the construction and operational phases of onshore wind farms”.

Our concern is what happens if during construction and operation, the results are not validated; will the consent condition force the wind farm to be shut down, placing significant risk on the developer?

**Landscape and visual**

General We are concerned that this section is very light in detail. It may be useful to include the SNH guidelines on visual representation?

2.7.56 It would be helpful if this paragraph clearly stated that the presence of significant landscape and visual effects, which are unavoidable, does not mean that a project is necessarily unacceptable. Although this may be inferred, it would be better if it was stated explicitly.

2.7.57 This introduces a duty to “minimise” effects on the landscape. It is not clear what this means, bearing in mind that paragraph 2.7.59 states that mitigation in the form of a reduction in scale may not be feasible. Further clarification would be useful. Furthermore we also note that this does not introduce a requirement to mitigate visual effects, only landscape effects; is this intentional?
2.7.58 The paragraph states that the IPC should consider any evidence put before it on the effects of turbines where those turbines are similar in scale to the turbines proposed for the development and where those turbines are at a similar distance from residential properties as the turbines proposed in the development. We are not sure how this requirement would be achievable if the applicant has not submitted details of the turbine they propose to use for the development.

2.7.59 The paragraph states that mitigation in the form of reduction in scale of the wind farm may not be feasible. However, there is no other guidance given on mitigation. We believe that this section needs further detail on landscape and visual mitigation measures.

Noise
2.7.64 It is not clear what is meant by updated guidance issued and accepted by Government. We do not believe it is clear whether or not this would take into account the recent Acoustic Bulletin article, which has now been accepted as best practice interpretation of ETSU, but has not been formally accepted by Government.

2.7.68 Whilst we welcome the statements made in this paragraph, it is unhelpful that reference is simply made to PPS22, bearing in mind the age of the PPS and its forthcoming revision. Instead, there should be a more up to date reference taking into account recent “evidence” that is circulating at virtually all wind farm inquiries.

2.7.71 This paragraph (and the preceding one) appears to be suggesting that a noise condition relating to levels of operational noise from the wind farm is only required where effects on ambient noise levels in residential amenity “cannot be ruled out”. It is not clear what this means or whether it is suggesting that where there is clear compliance with ETSU-R-97 that a requirement on the DCO is not necessary. Further clarity is required on this point.

Shadow Flicker
General We welcome the pragmatic approach taken in particular accepting that where the possibility of shadow flicker exists, mitigation can be enforced through use of conditions.

Where properties are constructed following operation of a wind farm, we would not want retrospective action taken against the development. This should instead be factored into the planning decision made on the housing development.

Traffic and Transport
2.7.92 “it may be appropriate to request that the applicant undertake a dry-run of the delivery of the largest components to ensure delivery is possible in a way that minimises disruption”.

We do not support this sentence and propose instead the following:

“The applicant should be required to submit sufficient desktop evidence to demonstrate delivery of the largest components is possible in a way that minimises disruption”.

APPENDIX D

EN-4 GAS SUPPLY INFRASTRUCTURE AND GAS AND OIL PIPELINES

We welcome much of the detail included in this NPS and believe that it should be designated subject to comments below. However we do wish to raise some points we believe to be outstanding in this draft.

We believe there is still a key role for gas supply infrastructure including gas storage facilities and pipelines and believe that this need should be made much stronger in the NPS. Little emphasis is placed on its importance within the current drafting. The UK needs more gas storage investment as the UK’s effective use of the UKCS as a source of flexible gas supply diminishes. LNG import facilities are needed to improve the UK’s access to alternative gas supplies.

Furthermore this NPS to be notably weak on for CO₂ pipelines and would like further clarity as to whether this is to be included as a project for determination by the IPC.

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Clarity over technology to be included</td>
<td></td>
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<tr>
<td>1.2.4</td>
<td>Why is it “may” and not “should be” of consideration –as indicated in the following example; This NPS, and in particular the policy and guidance on impacts in Part 2, may be helpful to local planning authorities (LPAs) in preparing their local impact reports.</td>
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We believe it should be re-worded to state “should be”.

1.7.1 This paragraph does not accurately reflect the provisions of section 17 of the Planning Act 2008, which describes the underground gas storage facilities that constitute a Nationally Significant Infrastructure Project. For example, section 17 treats storage facilities differently depending on whether they are located in England or Wales.

Section 17(2) states that development is NSIP if it relates to creating underground gas storage facilities in England or starting to use underground gas storage facilities in England.

Section 17(3) states that development is caught if it is starting to use underground gas storage facilities in Wales and it relates to storage in natural porous strata and the developer is a gas transporter. This is an interesting distinction, because it suggests that creation of a storage facility in a cavern in Wales would not require development consent.

Similarly, the paragraph does not mention the differences in approach in relation to LNG facilities as set out in Section 18. For example, it would appear that an LNG facility is not an NSIP if it is to be located in Wales, given that Section 18 only refers to such facilities within England. This should be mentioned in the NPS.

A similar situation exists in relation to gas reception facilities, as set out in Section 19 of the Act.

The NPS indicates that only gas reception facilities within England fall within the definition of NSIP. We would ask that this is amended.

Need

2.1.1 The paragraph states that the IPC should start its consideration of applications on the basis that need for the development has been demonstrated. However, no indication is given as to what weight should be accorded to that need. As the IPC must balance any adverse impact of the proposed development against its benefits it would be helpful if the draft NPS made it clear that the need for the development should be given substantial weight.

Good design

General As noted in response to the other draft NPS there is a need for greater clarity in respect of “good design”.

2.3.3 It is not clear what is meant by requiring Applicants to demonstrate “good design”. Although more guidance is given in paragraph 4.5 of EN-1 as to what is meant by “good design”, it is not clear how this would apply to gas supply infrastructure and pipelines.

Hazardous substances consent

2.4.3 This paragraph is similar to paragraph 4.12.3 in EN-1 where the NPS appears to have confused the requirement for hazardous substances consent and the scheme for controlling major accident risks.

Site selection

2.6 Landscape and visual It would be helpful if there was some discussion in Section 2.6 about possible landscape and visual effects from above ground facilities related to underground gas storage projects. This is important because such facilities are often in the open countryside and therefore significant landscape and visual effects are likely to arise from the development required for such a facility including compressor buildings and stacks.

2.6.10 We also find that this paragraph is quite vague and that the statement made in 2.6.10 is not entirely true:

“... there are very strong seasonal and daily variations in gas demand. It also highlights the fact that our previous ability to rely on direct offshore gas production is diminishing as UK Continental Shelf (UKCS) production declines with a consequent increased need for storage”

We do not believe it states the need for gas storage clearly enough. We would like to see something much more powerful like the Secretary of State statement from May 2006:
**Paragraph** | **Comment**
---|---
“. . . we need timely and appropriately sited gas supply infrastructure to be delivered to the market because:”

- Great Britain is becoming increasingly dependent on gas imports and requires new gas supply infrastructure to help ensure security of supply;
- new projects enable extra supply and storage options if they proceed without avoidable delays;
- there are limited locations currently suitable for much needed gas storage projects;
- onshore storage is needed to enable slow-moving gas to be available close to market when consumers require it;
- new energy infrastructure projects provide national benefits shared by all localities”

(Secretary of State for Trade and Industry announcement to House of Commons on 16 May 2006)

2.6.10 This focuses predominantly on short to medium range and there is little reference to/ clarity on long range storage and it is unclear on how the NPS has arrived at this conclusion. DECC should explain its thinking here?

*Water quality and resources*

2.6.17 This paragraph refers to 2.5.22. However, this is an incorrect reference. We assume that the reference should be to 2.6.23

*Gas and Oil pipeline safety*

2.9.4 It would be helpful if the NPS made it clear that the IPC should regard any pipeline that meets the standards set out in paragraph 2.9.6, or other established standards, as being safe.

*Location*

General We would like the NPS to make it clear that there are only limited locations where gas storage is possible and it is likely that such locations will be within the open countryside. However, given the need for such storage facilities, the landscape and visual effects that would inevitably occur, should not be held as a reason, in their own right, to refuse development consent.

2.9.7 It is not clear in the first sentence of this paragraph what is meant by the terms “relevant operator”, “authority” or “utility”. In the second sentence it would be useful to clarify in what circumstances an investigation of contaminated ground will be needed.

**APPENDIX E**

**EN-5 ELECTRICITY NETWORKS INFRASTRUCTURE**

We welcome this draft NPS and believe that it should be designated subject to comments below.

We welcome the guidelines set out and particularly support the inclusion and prominence given to the Holford Rules in the Landscape and Visual section.

The NPS rightly points out the difficulties of “Under Grounding” and the recognition that this can be a very costly alternative, which also has a number of impacts that would need mitigating. We believe it is critical to maintain this commentary within the final NPS.

However the draft NPS is very orientated towards transmission line reinforcement as opposed to distribution. This could be rectified quite simply by adding in “and/or distribution” after transmission in much of the document, for example.

2.4.1: Bullet 3: “. . . increased transmission and distribution losses”;

2.8.2: “All high voltage transmission and distribution lines”

2.8.3: “Transmission and distribution line conductors”

2.9.5: “. . . EMFs arising from the transmission, distribution and use of electricity.”

2.9.7 and 2.9.8: “. . . transmission or distribution line”
We would reiterate the need to continue to maintain and apply the overhead lines exemption rules so that ‘business as usual’ work does not create an unduly onerous process for the developer and hold up necessary and routine work. Furthermore it is needed to ensure the IPC is not flooded with straightforward work that had typically been covered by this rule in the past. We have submitted a response to the recent consultation supporting the need to maintain the overhead lines exemption rules.

**Statement of Need**

2.1.1 The last sentence in this paragraph indicates that the IPC should assume that the need for the infrastructure has been demonstrated, as suggested in Section 3.8 of EN-1. However, Section 3.8 only describes in detail the need case that has already been put forward for reinforcement of the transmission system. It does not deal with the need case for reinforcement of the distribution network in any detail. Furthermore, there is a conflict with paragraph 2.3.4 of EN-5, which suggests that the IPC may require further evidence in relation to need for a particular project.

The weight that should be given to the need for development is not mentioned, either here or in other parts of the NPS. It would be helpful if the NPS could clarify that the need for distribution electricity network development should be given significant weight.

**Site Selection**

2.2.1 The most suitable route to take should be via the most expedient and not necessarily the most direct as this NPS states.

Furthermore, the applicant will need to consider cost and obligations under its license as well as engineering and environmental aspects that are noted.

We would also like an amendment to be made to ensure it is clear that the section also refers to substations, as well as generating stations, whilst this is only a slight amendment it is important. The revised wording should be as follows:

“The general location of electricity network projects is often determined by the location, or anticipated location, of a particular generating station or substation and the existing network infrastructure taking electricity to centres of energy use”

2.2.2 The first sentence is confusing as to whether “permission” means “development consent” or not. This needs to be clarified.

2.2.5 Reference is made to the Schedule 9 duties in the Electricity Act 1989. However, this paragraph does not make it clear whether the IPC will take these factors into account when considering an application, or what weight should be given to those duties.

**General assessment principles**

2.3.1 The paragraph refers to providing environmental information even where an ES is not required. As with the requirements in EN-1, we believe that this is excessive and should be deleted.

2.3.2 We believe the wording here is important as it allows the necessary flexibility in submitting applications for generating stations and overhead lines etc. either together or separately. We welcome the recognition that it is not always possible to take a holistic approach to this.

2.3.5 We note that this paragraph is referring to duties that are placed on National Grid. However, there should be more specific reference to the statutory duties as set out in Section 9 of the Electricity Act 1989, which requires transmission and network operators to develop and maintain an efficient, coordinated and economical system of electricity supply. Furthermore, it should be specifically stated that this must be taken into account by the IPC when determining any application.

**Good design**

2.5 This section relates to proposed development being of “good design”. However, there is very little to say what “good design” actually consists of. We believe it would be helpful for the NPS to explain what it means by “good design”.

**Landscape and visual**

2.7.7 Our understanding is that this range may not be completely accurate and that 12-17 is a more appropriate figure.
Similarly we are also led to believe that with connection of a new nuclear power plant this range may be much higher with at least 18 cables, if not 24. As such the cost will be even greater and a stronger emphasis on overhead lines should therefore be made.

The first bullet point states that the IPC should expect the applicant to have considered network reinforcement options (where alternatives exist) which might allow improvements to an existing line rather than the building of an entirely new line. A DNO will have evaluated fully the need for the investment as part of his licence obligations and can set out the process he has gone through to arrive at the conclusion that the proposed investment is required in his application. He should not, however, be expected to set out why all the various alternatives to a proposed network reinforcement would not meet his objectives. This would go significantly beyond current practice.

We are pleased to see this objective approach.

This paragraph suggests that the IPC will still need to be satisfied that 132kV lines will comply with ICNIRP basic restrictions. However, this does not accord with the Route Map as shown in Annex A, which suggests that lines of 132kV and below are assumed to comply with ICNIRP and therefore will not be an issue for the IPC.

This paragraph is inconsistent with the table and route map. We believe that the route map is to be relied upon, rather than this paragraph.

Planning arrangements for a geological disposal facility


This states at paragraph 5.24 that under current arrangements, applications would be determined by the relevant local planning authority, or by Ministers under powers to call in some planning applications. This would be under the Town and Country Planning Act 1990.

In paragraphs 5.30 and 5.31 the document states that:

“5.30 Whilst not having yet taken a final decision, Government is currently inclined to look towards applying the new planning system. Government considers that a geological disposal facility is likely to be regarded as a nationally significant infrastructure project and believes that the new arrangements could assist the delivery of agreements with local communities.

5.31 If it is decided in future that radioactive waste should be dealt with by the IPC, the Government will bring forward a statutory instrument to have it included. That would be subject to the affirmative resolution procedure, thus ensuring parliamentary debate and a decision from both Houses.”

Memorandum submitted by Dr Ian Fairlie

I am an independent consultant on radiation matters. Between 2000 and 2004, I served as scientific Secretary to the Government’s CERRIE Committee on internal radiation hazards. I wish to submit evidence to the Committee on one aspect: the recent evidence that living near nuclear reactors carries grave health risks for infants and children—more than doubling their risk of leukemia. I have written extensively on this matter in scientific journals: a list of my published articles in recent years in contained in the box below.

In the late 1980s and early 1990s, several studies revealed increased incidences of childhood leukemia near UK nuclear facilities. However official estimated doses from released nuclides were too low, by two to three orders of magnitude, to explain the increased leukemias.
Recent epidemiological studies have reopened the childhood leukemia debate. Baker and Hoel (2007) carried out a meta-analysis of 136 nuclear sites in the UK, Canada, France, US, Germany, Japan and Spain and found cancer death rates for children were elevated by 5–24% depending on proximity to nuclear facilities. Hoffmann et al (2007) found 14 leukemia cases between 1990–2005 in children living within 5 km of the Krümmel nuclear plant in Germany, significantly exceeding the 0.45 predicted cases.

Most important, however, is the KiKK study (Kinderkrebs in der Umgebung von Kernkraftwerken = Childhood Cancer in the Vicinity of Nuclear Power Plants) Spix et al (2007) and Kaatsch et al (2008). The main findings were a 160% increase in solid cancer risk and a 220% increase in leukemia risk among young children living within 5 km of all German nuclear reactors. These are big increases in risk.

The KiKK report is significant because it is a large and well-conducted study; because it is scientifically rigorous; because its evidence is particularly strong; and because the German Government, which commissioned the study, has confirmed its findings. Over 60 other studies world-wide (Körblein and Fairlie, 2009) have investigated child leukemias near nuclear facilities. The large majority of these studies have found increased incidences of leukemia: this lends considerable support to the KiKK findings.

The KiKK observations are presently the subject of intense research and discussion throughout the world, including at least three studies in the UK. Last November, the Department of Health requested the Government’s Committee on the Medical Aspects of Radiation in the Environment (COMARE) to examine the German study and report back.

(Also last November, in a case of unfortunate timing, the Department of Energy and Climate Change (DECC) published a Consultation paper justifying the radiation exposures from its proposed new nuclear stations. The problem is that COMARE’s report will not be finished until after the Consultation’s February 22 deadline, and DECC has refused public requests to extend its deadline until the COMARE report is finished. This is unfortunate and, in my view, it is an unreasonable position for DECC to take. It is clearly important that we get to grips with the KiKK evidence before decisions are made on building more nuclear power stations.)

In 2009, the Health Protection Agency submitted a memorandum (Mobbs et al, 2009) on health risks from radiation to the Government’s Consultations. This seeks to diminish the KiKK study and devotes only half a page to the lengthy KiKK report. The HPA’s criticisms are cursory, poorly argued and misleading. For example, the HPA memorandum seeks to argue that the KiKK study merely found an association between NPP (nuclear power plant) proximity and risk, ie and not between dose and risk—implying that radiation exposures were not a causative factor. This is unpersuasive: childhood leukemia is well known to be closely associated with radiation exposures. The HPA memorandum also states that a UK study and a French study “have not replicated” the KiKK findings. This is misleading as the two studies actually did find small leukemia increases in children near NPPs. Their data were not statistically significant but this was due to the smallness of the studies and not the absence of effect. The HPA’s view remains that official estimated doses from NPP releases are much too small to result in the observed levels of leukemia. But the CERRIE (2004) report showed that there could be very large uncertainties in official dose estimates from inhaled and ingested radionuclides.

It is too early to provide an explanation for these increased cancers, although radiation exposures are clearly implicated. I have put forward the hypothesis (Fairlie, 2009) that these infant leukemias are a teratogenic effect resulting from in utero exposures to radiation from intakes of radionuclides during pregnancy. It suggests that (a) doses from environmental emissions from nuclear reactors to embryos/foetuses near reactors may be much larger than currently estimated, and (b) that haematopoietic tissues may be considerably more radiosensitive in embryos/foetuses than in babies. Whatever the explanation(s), the recent epidemiological evidence provides strong evidence that living near nuclear reactors carries grave health risks for babies and children—more than doubling their risk of leukemia.


Fairlie I. Childhood Cancers Near German Nuclear Power Stations: hypothesis to explain the cancer increases. Medicine, Conflict and Survival Vol 25, No 3. 2009, pp 206–220


REFERENCES


January 2010

Memorandum submitted by the Federation of Petroleum Suppliers

SUMMARY
The Federation of Petroleum Suppliers Ltd (FPS) welcomes the proposed Energy National Planning Statements, but considers that further supporting guidance is needed for downstream oil distribution infrastructure that is to remain within the jurisdiction of local planning authorities.

1. Oil will remain a vital fuel, especially for rural communities, for many years to come.

2. The reduction in the number of oil terminals has made distribution of oil more difficult and has resulted in increased movement of oil by road over far greater distances. This has made distributors’ depot storage of greater importance within the downstream oil distribution infrastructure.

3. Planning applications for distributor oil storage depot improvements and expansions are generally not well received by local planning authorities.

4. In addition to the Energy NPSs, guidance in the form of a Public Planning Statement on downstream oil distribution infrastructure is therefore vital to ensure continued adequate supply of oil to end users, for which FPS seeks the support of the ECC Committee.

THE FEDERATION OF PETROLEUM SUPPLIERS
The Federation of Petroleum Suppliers (FPS) is the trade association for the oil distribution industry in the UK and the Republic of Ireland. It represents the majority of distributors in Great Britain from the small family business, which forms the greater part, to companies with UK-wide coverage. Deliveries go to domestic customers, retail forecourts, agricultural, marine, industrial and commercial sites for power, heating and transport fuel. Members of the FPS deliver almost all the domestic heating oil supplied to end users in Great Britain. Most distributors make deliveries to customers within a 30 mile radius of their depots and have storage for up to five days’ supply.

FPS members operate around 2,750 oil tankers.

COMMENTS
1. FPS welcomes the proposed Energy National Planning Statements, but is concerned that they do not address the needs of the downstream oil distribution infrastructure, which will remain within the jurisdiction of local planning authorities.
2. Oil is still a major source of energy, supplying diverse needs beyond fuelling road vehicles. Major uses include:

- Domestic property in rural locations, mostly without access to natural gas, where heating oil provides the only source of heating, hot water and cooking. According to SNP estimates, around 33% of households in Scotland do not have access to mains gas. The total number of households in Great Britain using oil heating is estimated at 1.1 million.

- Farms that require fuel not only for heating, but for off-road motive power.

- Local authority and community buildings and operations which provide residential care or services to the surrounding area, eg schools.

- The smaller emergency service depots, eg ambulance, fire and police, and the vital rural petrol forecourts.

- Smaller industrial units.

- Marine and inland vessels.

- Standby generator tanks at gas interruptible and other businesses.

3. Even though the Government is keen to transfer fossil fuel users to renewable fuels, realistically, this is a long-term project and oil will remain an important fuel source in the UK for a considerable number of years to come. This has been acknowledged in a number of reports produced for Government.

4. The Wood Mackenzie report on the UK Downstream Oil Infrastructure, produced for DECC (http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/resilience/downstream_oil/improving/improving.aspx) concludes that low returns and weak demand growth has led to a lack of discretionary investment in the UK downstream oil infrastructure and industry consolidation, with a number of terminals closing, and that limited investment by independent storage companies, as opposed to the refiners, has been largely confined to coastal import terminals rather than inland logistics.

5. As a result, the number of coastal and inland oil terminals has reduced considerably in recent years. The loss of Buncefield was a major blow and has led to a high increase in road usage as product has had to be collected by road tanker from more distant terminals. The remaining terminals are now generally overcrowded with long queues of road tankers waiting to load.

6. Of the terminals that have closed for financial or other reasons, Portland oil terminal is worth remarking upon as an example of lack of consideration of adverse secondary effects, as it was a compulsory closure by the South West Regional Development Agency in order to provide facilities for the 2012 Olympic Games, with scant regard for the consequences on oil distribution in the area. There is now no terminal along the south coast between Southampton and Plymouth.

7. To compensate for the loss of terminals, distributors are investing in their depots in efforts to increase their own storage capacity and resilience. However, this is proving difficult in the majority of cases because of the opposition of local planning departments and councils. It should be noted that distributors do not store petrol at their depots, only less hazardous middle distillates.

8. For these reasons, FPS considers it imperative that the Energy NPSs are complemented by a Public Planning Statement covering downstream oil industry infrastructure to give guidance to local planning authorities. In this, we seek the support of the ECC Committee.

January 2010

Memorandum submitted by Freight on Rail

RESPONSE TO THE ENERGY AND CLIMATE CHANGE COMMITTEE INQUIRY INTO NATIONAL POLICY STATEMENT FOR ENERGY (EN-1)

Thank you for the opportunity to contribute to the Energy and Climate Change Committee inquiry.

Freight on Rail Definition

Freight on Rail is a partnership between transport trades unions, freight operating companies, the Rail Freight Group and Campaign for Better Transport. It works to promote the economic, social and environmental benefits of rail freight both nationally and locally. It advocates policy changes that support the shift to rail and provides information and help on freight related issues to central, regional and local government.

1. Executive Summary

The Planning System sets the spatial planning framework upon which transport and planning decisions are made. It is therefore crucial that the economic, social and environmental benefits of rail freight, for transportation purposes, are full reflected in all the Energy NPS with a default for rail or water, where possible.
Freight on Rail has long campaigned for national spatial planning to set the policy framework and to give guidance to regional and local spatial planning therefore we are supportive of National Policy Statements (NPSs) in principle. DfT has confirmed that local and regional authorities will have to take material consideration of the DfT led NPSs in their planning and transport decisions and therefore this point should be made in all the NPSs.

The NPS implies that many of the sites will be the same as existing ones and presumes that there will only be the existing transport links. Just because there are no rail connections currently at a site, it does not mean that rail should not be the preferred option in the future.

The case for stronger support for rail freight in all the Energy NPSs

Rail already has a significant market share in the movement of coal to power stations from ports and from domestic mining. It also has a significant market share in moving spent nuclear waste. Rail should be used for delivering biomass which this NPS recognises as increasingly important. In the construction phases rail should be used for transporting building materials to the sites for energy projects and for the removal of industrial waste. Rail or water should be used to remove gypsum from power stations, where appropriate.

Rail freight has a crucial role in helping the Government to achieve the low carbon economy and green jobs needed.

- Carbon reduction—As DfT Department’s Logistics Perspective of December 2008 shows rail freight produces 70% less carbon dioxide emissions than the equivalent road journey.
- Road congestion relief—An average freight train can remove 50 long distance HGVs from our roads with the largest freight trains each now removing up to 160 long distance HGVs.
- This means that moving more freight to rail can also have an economical impact; considering that the DfT estimate the cost of congestion being £1 per lorry miles on the most congested roads.
- Safety—Rail freight is safer than long-distance road freight using motorway and A roads, as HGVs are over three times more likely to be involved in fatal accidents than cars due to a combination of size, lack of proper enforcement of drivers hours, vehicle overloading and differing foreign operating standards.

Government Policies support the need to reduce carbon emissions

- Climate Change Act, which commits in statute to an 80% reduction in CO2 emissions by 2050
- The DECC commitment—To contribute to sustainable development by seeking energy infrastructure development that helps reduce climate change while also minimising negative impacts on the local environment
- The DIT’s vision for Developing a Sustainable Transport System (DaSTS)

Rail freight can contribute to the DaSTS goals of supporting economic competitiveness and growth, reducing transport’s emissions, contributing to better safety security and health and improve quality of life and promote healthy natural environment.

Rail Freight volumes and potential

Rail freight, which has 11.5% of the surface transport market (rail and road), was estimated to have removed 6.7 million long distance lorry journeys from UK roads equating to 1.4 billion lorry kilometres in 2007–08. Coal moved in 2008–09 was 7.91 billion net tonne kilometres.

Rail Freight Group/Freight Transport Association forecasts of June 2008, indicate that by 2030 rail freight volumes will have more than doubled.

All these factors are backed up by a report published by the Institution of Mechanical Engineers in early 2009, which states that: “as an option for the reduction of carbon emissions, the rail freight sector is leagues ahead of all the other options available. The target should therefore be to deliver far greater levels of growth in the rail freight sector than are currently projected.”

In view of the NPSs acknowledgement of the need to reduce carbon emissions, we believe that the Energy NPSs should have stronger policy in favour of rail freight for transportation and should have a presumption of using rail and water modes, where possible.

2. Scrutiny and Consultation Process

There is a danger that the scrutiny of the Energy NPSs could be rushed as it seems odd that the Energy and Climate Change Committee sessions and evidence are being conducted before the end of the formal DECC consultation. It is therefore crucial that the written consultations to the DECC consultation are given full weight.

78 Page 8 section 10.
79 Source: Road Statistics 2008, Tables 3.2 and 5.6, Road Freight Statistics 2008 Section 5, both UK Department for Transport.
3. DETAILED RESPONSE TO DECC CONSULTATION

Detailed response to the Department’s consultation on Energy EN1 NPS

2.1.4 Transition to low carbon economy

This should include recognition of the importance of reducing the transport and construction carbon elements of power generation

Traffic and Transport impacts

4.28. We fully support the preference for water-borne or rail transport in 4.28.8 and state that this policy must be part of all the applicable energy NPSs. This should be clarified to make sure that measurement of cost effectiveness takes into account carbon, safety and congestion benefits of rail.

Mitigation

4.28.6 This provision for demand management should only apply for road infrastructure as we do not believe that demand management should be a substitute for investment in rail.

4.28.9 The IPC should also be able to make use of rail a mandatory planning condition both for the ongoing use and construction phase. Example of this was the use of rail for the construction of Terminal 5 at Heathrow.

Waste management

4.29 Rail and water should be stated as preferred waste removal modes for industrial and energy waste.

January 2010

Memorandum submitted by Friends of the Earth

EXECUTIVE SUMMARY

1. Although Friends of the Earth has expressed its strong concerns about the new IPC structure created under the 2008 Planning Act, we have always recognised that clear statements of national policy in relation to nationally significant infrastructure projects (NSIPs) can play a very important role in the transition to a low carbon economy, and in delivering other critical Government goals, such as energy security. However, the problems with the draft NPSs, and the manner in which they have been assessed, are so serious (in both legal and policy terms) that we believe that major reforms are required before the NPS can be designated. We will shortly be writing to the Secretary of State regarding our legal concerns, and will provide the Committee with a copy of that letter.

2. Our evidence below sets out our concerns and proposals for how the NPS could be amended. This is split into six sections:

— How climate change is treated in the overarching NPS:
  — Why climate change needs more comprehensive treatment.
  — Three mechanisms to do this:
    — Clearer guidance on pathways to 2050.
    — Carbon assessment.
    — Safeguards to prevent lock-in.
  — The Government’s case for need for all types of electricity generation.
  — Safety and need issues in the Nuclear NPS.
  — Inclusion of energy-from-waste plants in the Renewables NPS.
  — Strategic Environmental Assessment.
  — Consultation, Scrutiny and Examination of NPS.

SECTION 1—CLIMATE CHANGE

3. We have major concerns that the draft NPSs are taking a very blaseé approach to climate change, and that there is a significant danger of lock-in of the UK to new high-carbon infrastructure. We propose that these risks be tackled by:

— clearer guidance on carbon trajectories for the electricity sector for 2030 and 2050;
— policy safeguards to prevent lock-in; and
— requirements for developers to set out full life-cycle carbon profiles for their applications.
Overview

4. The type of new electricity generation plants built in the next two decades will have a major impact on whether the UK meets its overall climate goals. The Government’s advisory body—the Committee on Climate Change—has said that the UK’s electricity sector should be decarbonised by 2030, en route to an economy-wide 80% cut in emissions by 2050.

5. The IPC has the final decision on which applications to approve. The draft NPS set out very clearly that they intend that the IPC must make its decisions in accordance with the NPS, with a very limited set of exceptions. Therefore the content of the NPS on carbon is critical in determining the carbon profile of approved applications.

6. In this context, we could reasonably expect strong guidance from the NPS for the IPC on carbon budgets. However, the opposite is the case. The Government believes that the NPS will automatically ensure the carbon budgets are met. The Government says that because Government policies which “underlie the NPS have been set according with the low-carbon transition plan and carbon budgets, the IPC does not need to assess individual applications in terms of carbon emissions against the budgets”.

7. The first problem with this approach is that in sectors covered by the EUETS—including electricity generation—the Government measures progress towards its carbon budgets not by actual emissions in those sectors, but simply by the number of permits the UK is allocated. So, in practice, for the purposes of meeting carbon budgets it does not matter what the electricity mix is, coal or gas or renewables—the UK simply records allocated permits; real emissions are irrelevant. With this reporting system in place, it is therefore irrelevant to argue that climate change is covered because the NPS is compatible with carbon budgets, because anything and everything is compatible with carbon budgets, high carbon or not.

8. We hope the Government will close this loophole, and record actual emissions as the judge of progress towards carbon budgets. However, if it did there would still remain a further problem. This is that the Government is saying that the policies in its Low Carbon Transition Plan are sufficient to create a regulatory and market environment in which developers will bring forward a mix of proposals which would be in line with the UK’s climate goals. The critical point here is that this approach amounts to a hope that its, as yet, untested set of policies will succeed and does not provide a level of certainty appropriate to the importance and urgency of tackling climate change.

9. Such an approach is very risky. If we lock ourselves into high-carbon infrastructure with a working life of several decades, it will be very expensive to change direction later, as well as significantly increasing the risks of not meeting essential and legally binding climate targets. The Government argues that there is no “right” mix of electricity, but that many different mixes are acceptable, and that we should let the market decide. There are indeed a number of acceptable “right” approaches, however it is also true there are most definitely “wrong” mixes of electricity which do not take the UK down a fast enough decarbonisation path. At present the NPS offers no guarantees we will not get such a “wrong” mix. Indeed, there appear to be very significant risks that a “wrong” mix is quite likely. This risk is something the Committee on Climate Change warned of in strong terms in their October 2009 report—highlighting the dangers of inadequate policy leading to excessive investment in new gas-fired electricity generation at the expense of renewables.

10. The rest of this evidence sets out why we believe this to be the case, and sets out some proposals to address this situation.

Will existing guidance in the NPS deliver on the UK’s climate goals

11. We believe that the existing guidance is flawed for three reasons.

12. First, it is very short-termist—with policies being set out for delivery of carbon budgets which only go up to 2022, with a lead policy (EUETS) for which there is no policy certainty beyond 2020. In contrast, decisions taken by the IPC will affect emissions for decades. Basing the NPS solely on policies in the Low Carbon Transition Plan is not adequate, as the plan only has policies designed to meet budgets up to 2022.

13. Second, the Government appears to believe that a wide range of scenarios for generation capacity and mix are acceptable in 2030, with wildly differing levels of average carbon emissions from electricity generation in 2030, because they are all compatible with a pathway to an 80% cut in carbon emissions by 2050. We believe this is a fundamental misunderstanding of the difference between long-term targets—which are concerned with end-points—and carbon budgets—which are concerned with total cumulative emissions. It is carbon emitted over the whole period from now to 2050 that matters from a climate perspective, not the end point in 2050. This is the major point about the Government’s new carbon budgeting approach—which appears not to have made its way into all Government thinking yet. This is not a small issue—the Government’s Low Carbon Transition Plan sets out a wide range of scenarios for electricity generation to 2030, with average carbon emissions varying by a factor of 5—all of which are compatible with a pathway to 80% by 2050, but with a huge range of cumulative carbon budgets.

14. Third, there is a belief that the EUETS and other policies will be an adequate driver for electricity decarbonisation. The Government’s belief that the “right” developments will come forward is set out in a section extolling the virtues and strength of the EUETS as a driver for investment in cleaner electricity generation—the EUETS takes up ½ of the overarching NPS’ entire section on “the power sector and carbon emissions”. Other policies are later acknowledged to be important, but it is asserted that Government is
taking adequate action on these fronts. We believe this focus on the EUETS and the linked belief that the Government’s current market interventions are sufficient is a dangerously complacent attitude. The CCC have major concerns here. In their October 2009 report on UK progress they say:

15. “inclusion of the power sector in the EU ETS . . . will not automatically bring forward the low-carbon investment to deliver required emissions cuts in the 2020s and beyond. This is because the EU ETS cap to 2020 could be met through coal to gas switching without any significant new investment in lowcarbon plant, and because the cap beyond 2020 is highly uncertain” (p112). They continue:

16. “There are plausible scenarios where investors favour investment in gas-fired rather than low-carbon generation. This is likely to ensue where investors require higher returns in response to risks that are induced by the current arrangements, and/or where investments are made on the basis of prevailing carbon prices rather than an assumption of increasing carbon prices. These scenarios lead to lock-in to high-carbon assets and failure to make sufficient progress with decarbonisation by 2030, unnecessarily high system costs/prices, and loss of any security of supply benefits associated with generation from low-carbon sources rather than imported gas”. (p140)

17. This Government approach on carbon is indicative of a more general over-reliance on hoping that the market framework will deliver the right mix and levels of capacity. For example the NPS section on energy security rightly says that it is critical to have “secure and reliable sources of electricity” and that “we need...a safety margin of spare capacity”—however in the accompanying Appraisal of Sustainability (AoS), in dismissing the idea of a more directive approach to energy policy as “unreasonable”, the Government states that “Energy policy does not dictate the amount of capacity considered necessary in the UK . . . it is also for industry to determine the margin needed between peak demand and total capacity” (our emphasis, AoS, page x).

18. We also note that the policies in the Low-Carbon Transition Plan are in any case only based on an extremely weak interpretation of what is an acceptable level of UK progress on climate change. These policies are based on an insufficient target to meet a too-high chance of an unacceptable level of danger, with too many loopholes. For example:

— They are based on the “interim” 34% target (rather than the “intended” 42% target).
— The EUETS, the prime policy in the electricity generated sector, is heavily flawed because it allows carbon offsetting to capture 50% of all required emissions cuts for the EU up to 2020. These carbon offsets from outside the EU fatally compromise the global environmental integrity of the EUETS because they bring in “cuts” from uncapped nations.
— The intended target is based on a 56% to 63% chance of global temperatures exceeding two degrees, ie greater than 50:50. The UK and EU have by contrast said that the global goal is NOT to exceed two degrees—implying targets based on a far lower chance than 50:50.
— The two degrees target would itself commit the world to a colossal amount of suffering. The Chair of the G77 group at Copenhagen noted that the IPCC reports that a two degree global warming would warm Africa by 3.5 degrees, and called this “certain death for Africa, devastation for island states”.

19. In response to concerns that policies are not strong enough, the Government will argue that policies can be strengthened if too much high-carbon infrastructure is built, or if goals tighten. However, if infrastructure is built, we are locked-into it—it is expensive and politically difficult not to use it.

20. This is not some semantic discussion. As the CCC notes there is a real danger of, for example, a dominance of gas-fired power stations—which is borne out in evidence of recent approvals and applications.

Proposed reforms to NPS to address climate change mitigation

21. We propose three broad solutions to these problems:

— clearer guidance on future pathways;
— requiring carbon assessment; and
— introducing policy safeguards to prevent lock-in.

Clearer guidance

22. The Government should move away from its approach that “all scenarios are acceptable” and also broaden its coverage to look beyond 2022. The overarching energy NPS needs to set out a stronger, clearer section setting out a carbon trajectory for the electricity generation sector, and within it set a range of acceptable generating mixes, for 2020, 2030 and 2050. This section would also need to set out clearly that climate goals are very likely to get stronger in time, requiring a precautionary approach to any ranges or trajectories set. Even if the Government does not accept that two degrees is too high a target, or that a 50:50 chance is far too much risk to take, it has accepted that the interim target will need to be replaced with something tougher in future. We understand that the Government is currently looking at pathways to
2050—if this work is not fully completed by the time NPS are designated, the NPS should set out clearly where it will be found, and that the IPC should use this as its guidance when the CCC has assessed that this pathways work is compatible with the UK’s carbon budgets.

Carbon Assessment

23. The NPS explicitly tells the IPC not to consider carbon. However, even with stronger guidance and policy in the NPS series on climate change, there would still be a need for carbon assessment for the IPC to adequately fulfil their requirement to assess all the costs and benefits of a proposal (EN-1 4.1.1). We suggest:

— NPS should require applicants to set out life cycle greenhouse gas emissions. This would be linked to:
  — a requirement in NPS for the IPC to use these figures in overall project assessment of costs and benefits as set out in EN-1 section 4.1.1 (this requirement would be set out in a section on carbon mitigation alongside the existing section on carbon adaptation); and
  — the IPC should be required to inform DECC of the net greenhouse gas emissions of applications and approvals (see following section).

Safeguards to prevent lock-in

24. We believe the Government should set safeguards to prevent lock-in to high-carbon infrastructure. The new rules on coal and CCS appear to reduce the likelihood of a large number of new coal applications coming forward. Although the new rules would still allow very high emissions from post-combustion plants (as CCS only needs to operate on 300MW of capacity) and in our view require significant tightening, it is unlikely that in the short-term there would be more than the planned 4 demonstration plants, given large commercial risks for the utilities. However, there is a major risk from lock-in to large quantities of new gas-fired generation. Although gas (average 390 tCO2/GWh) is much less carbon-intensive than coal (910 tCO2/GWh), it is still far more than renewables (on average much less than 100 tCO2/GWh). The low C transition plan barely mentions gas; there is almost no mention of it in the overarching energy NPS. Given the huge amount of recent applications and approvals (see paragraphs 32–33), and the dangers the CCC outline, it is appropriate that the Government set safeguards to prevent a new dash for gas overwhelming investment in renewable energy.

25. Although the IPC’s decisions will have a major impact on the carbon emissions from the electricity sector, the IPC cannot however be expected to decide whether an individual application is compatible with the entire carbon budget system, as this would require detailed knowledge of progress and potential in other sectors of the economy. But, some mechanism is needed as a safeguard to ensure the sum of all its decisions is compatible with the UK’s carbon budgets, preventing potential lock-in to high-carbon infrastructure.

26. We suggest a five-stage mechanism to do this through the NPS:

— A requirement on applicants to set out the full life-cycle greenhouse gas emissions of its proposed development.

— The IPC is required to produce an annual report to Parliament. We suggest that this report must contain an assessment of the life-cycle greenhouse gas emissions of (i) new applications coming to the IPC in that year and (ii) applications approved by the IPC in that year.

— This assessment would be scrutinised by the CCC, who would be required to report to the IPC within six months setting out (i) whether the greenhouse gas profile of all approved applications to date was compatible with the UK’s overall carbon budget and (ii) whether applications pending (if approved) plus already approved applications would be compatible with the UK’s overall carbon budgets.

— If there is incompatibility, the CCC would be required to set out to the IPC the actions the IPC should take to ensure that the sum of future approvals bring the cumulative impact of IPC decisions within the UK carbon budgets (for example, a prohibition on more than X GW of new capacity of more than Y gCO2e/KWh).

— The IPC would then be required to implement the recommendations of the CCC in their decision-making.

Section 2—The Government’s “Need” Argument

27. The Government argue in EN-1 that there is significant need for all types of electricity generation (our emphasis) for energy security reasons. However this case has not been adequately demonstrated. There is however a need for a lot of new renewables (to meet EU legislation, UK targets and for the UK to decarbonise) and there should be safeguards to ensure that this is not compromised by large numbers of approvals from other sources. This section sets out why we believe the Government’s argument on need is not robust.

28. The overarching energy NPS states that taking into account planned closures, we need 43GW of new capacity by 2020, 26 GW renewables, and 17 GW “of other generating capacity”. By 2025 we need 60 GW (35 GW renewables, 25 GW “other”).
Table 1

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<tr>
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<th>GW new capacity</th>
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<tr>
<td></td>
<td>2020</td>
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<tr>
<td>Need</td>
<td>43</td>
</tr>
<tr>
<td>Renewables</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>&quot;Already underway&quot;</td>
<td>20.5</td>
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(this table takes into account planned closures eg due to LCPD regulations in 2016)

29. It also states that the market is responding with “over 20 GW of investment under construction or with planning consent”, and so therefore “the need for new build in the central scenario in 2020 is more than 20 GW over that which has already obtained planning consent and close to another 20 GW by 2025.”

30. It is this analysis that around 20 GW of new capacity is required by 2020, and another 20 GW by 2025 which leads the overarching energy NPS to assert that “The IPC should expect to receive applications for all types of electricity generation. It should start its assessment of them from a basis that there is a significant need for all types of generation” [our emphasis].

31. However from the above data it is clear that the generation type of the capacity “already underway” is crucial—if for example 17 GW of the 20.5 GW was “other” there would be no need for any non-renewable capacity to 2020.

32. The Government set out in December 2009 that 14.3 GW of capacity “already underway” is non-renewable capacity.

33. On top of this there are a large number of applications which have not been consented but which are in the current planning system—from DECC figures this appears to consist of at least 7 GW additional CCGT plant. These applications will not be dealt with by the IPC.

34. From these Government figures then, there is likely to be 14 + 7 = 21 GW of new capacity on the way. This appears to suggest that there is no need for new non-renewable capacity to 2020, and only 4 more GW to 2025 as well. Indeed, if the Government’s 4 coal CCS projects occur, then beyond these coal CCS projects and renewables, there would be no need for any other new capacity to 2025.

35. In addition, the Government’s assumptions of need for new capacity assume that there will only be 4 GW of small-scale electricity generation by 2020. Analysis by Poyry for DECC in 2009 suggests however that stronger design of the Government’s forthcoming feed-in-tariff would result in almost four times more energy than in the Government’s current proposals.

36. This implies that the draft NPS have not made the case that there is significant need for all types of generation. It looks as if the very large quantities of new gas power stations consented will mean there is no need for any additional non-renewable capacity, and if so this should be reflected in the overarching and other energy NPSs. We hope that the current assertion of overwhelming need for large amounts of non-renewable capacity will be rigorously scrutinised by parliamentarians and the DECC select committee.

SECTION 3—NUCLEAR NPS

37. We do not believe the Government has set out a robust case for the need for new nuclear capacity—see Section 2 of this evidence. In addition, we do not believe the Government has made an acceptable case for how it will tackle radioactive waste. As a result, we believe that on need and safety grounds the NPS should not allow new build nuclear power stations.

38. The Government states (section 3.8.1 of nuclear NPS) that before new nuclear plants can be consented, “effective arrangements exist or will exist to manage and dispose of the waste they will produce”. The NPS goes on to say that “geological disposal is the way higher activity waste will be managed in the long term . . . preceded by safe and secure interim storage”.

39. We do not believe that the Government has set out a robust case that there will be a safe geological disposal site. It accepts that it has not found a site. It accepts that worldwide “no spent fuel geological disposal facility is currently in operation”. It states that even if these issues could be overcome it would be 2130 before wastes could be put into such a facility, and that it is likely to be 160 years before high-level waste could be cool enough to put into a geological disposal facility. If geological disposal is the preferred method of waste management, 160 years seems a long time to put up with an interim solution.

40. On-site storage would be at coastal sites. The Government is saying that it will store high-level waste there for 160 years, yet the Government’s models for sea-level rise from climate change only go up to 2100—90 years from now. In this context we do not see how the Government can justify that on-site storage is safe.
41. We also note that 4 members of the first Committee on Radioactive Waste Management have written to the Secretary of State that their recommendations on waste management have been “seriously misrepresented” in the Nuclear NPS, and that “we do not consider it credible to argue that effective arrangements exist or will exist either at a generic or a site-specific level for the long-term management of highly active radioactive wastes arising from new nuclear build”.

Renewables NPS and “energy from waste”

42. We believe that “energy from waste” plants, covered in sections 2.5.3 and 2.5.8, should not be included in the renewable NPS, or permitted within the NPS series.

43. The NPS itself says that energy from waste plants contain “non-renewable sources of waste”. This proportion of “non-renewable” sources is not small, and the average CO₂e output of an energy from waste plant is more than an average gas fired power station. Energy from waste plants, although they contain some renewable fuel, are in reality fossil-fuel plants.

44. As well as their direct CO₂ emissions, energy from waste plants have an additional, and major problem, regarding climate change impacts. Energy from waste plants are in direct competition with recycling and reuse as alternatives to landfilling waste. Large energy from waste plants will require a constant feed of large quantities of “residual” waste for several decades. In addition in many cases such plants require local authorities to enter into long-term contracts—typically 25 years—guaranteeing supply of large volumes of waste This puts direct pressure on these local authorities not to improve recycling facilities and rates. Recycling and reuse is a preferred option to energy from waste in the Government’s waste hierarchy, and in addition recycling and reuse have much lower carbon impacts—because recycling prevents the need for mining, extraction and processing of virgin materials. The UK could save an extra 20 million tonnes of CO₂e by recycling materials that are currently thrown away.

45. Contrary to some assumptions the figures for municipal waste indicate that total waste arisings have either stabilised or are decreasing. Meanwhile recycling rates are set to increase still further. The obvious implication of this is that there will be a decreasing, rather than increasing, requirement for residual waste processing capacity. Defra is already predicting over-capacity in residual waste treatment.

46. We are also concerned that the inclusion of these plants in the renewables NPS will encourage developers to propose much larger energy from waste plants, exacerbating the above problems, as greater than 50MW energy from waste plants would fall under the NPS regime, which under current proposals have no requirement for assessment of either need or carbon emissions, and have heavily pared down opportunities for public participation in decision-making. Given the already high degree of controversy consistently associated with incinerator planning applications we do not envisage the public will take kindly to the combination of larger plant applications and reduced opportunity to participate in the decision-making process.

47. We are aware that the Government may make the argument that the carbon emissions from such plants are not a concern for the IPC, as these emissions are covered by the low-carbon transition plan (LCTP). However, this is not the case. The LCTP makes almost no mention of energy-from-waste plants, and no mention of their carbon emissions. In addition, the conventional Government argument that power stations don’t matter because they are covered by EUETS does not apply either, as hazardous or municipal waste incinerators are not included in the EUETS.

48. We believe that energy from waste plants should be removed from the renewables NPS. In addition, the fossil-fuels NPS should make it clear that the IPC should not approve energy-from-waste plants because of their negative climate impacts—both in direct carbon emissions, and indirectly via their suppression of recycling and reuse take-up.

Section 5—Strategic Environmental Assessment (SEA)

49. The NPSs are accompanied by a number of Appraisal of Sustainability (AoS) documents. There is one AoS for each NPS and one non-technical summary (NTS) for each of them. We refer to them numerically—for example as AoS-1 when referring to the AoS to EN-1.

50. Our overall conclusion is that the AoSs are of very poor quality and do not comply with the SEA requirements set out in law and/or guidance.

51. The AoSs all state explicitly that they are produced to comply with legal requirements on Strategic Environmental Assessment (SEA) and that they have been prepared to reflect the Government’s own SEA guidance. It is our view that they neither comply with the legal requirements of the SEA legislation nor reflect the Government’s SEA guidance. We set out a more detailed explanation of the legal compliance issues in a letter to the Secretary of State which we will forward to the Committee shortly and which we invite the Committee to consider.
52. SEA operates by requiring that an “environmental report” is prepared and issued for consultation prior to designation of the “plan or programme” (in this case the NPSs). The Report and that consultation forms central parts of the process of designating the final plan/programme and the results of the consultation must be taken into account by the decision maker.

53. It is unlawful to designate a plan or programme subject to the SEA legislation without complying with the requirements of that legislation.

Reasonable Alternatives

54. The SEA legislation requires the environmental report to include reasonable alternatives. Those “reasonable alternatives” must be described and evaluated in the same manner as the proposed option. This is a particularly important part of the SEA process and is designed to assist the authority (here DECC) to avoid or mitigate significant adverse effects by seeing whether there are other ways of achieving their objectives that are less environmentally harmful.

55. We believe that DECC has clearly not met its obligations in this regard and highlight the following points in particular:

(a) The specialist environmental consultants (ENTEC) retained by DECC to draft the AoS reports suggested a number of different “alternatives” to be evaluated by DECC. DECC refused to evaluate any of them saying that none of them were “reasonable alternatives”. Our complaint here is not that DECC evaluated those alternatives and then rejected them but that DECC refused even to evaluate them as SEA alternatives.

(b) The reasons why DECC refused to evaluate the proposed alternatives are not legitimate. In many cases (see especially AoS-1, fig 2.1) the reasons given are that the alternatives would conflict with high level Government policy. Such an approach is illogical (as well as unlawful) and can be contrasted with the approach taken in both NPS Ports and EN-6 (nuclear) in which cases the Government did set out alternatives that are inconsistent with its own policy.

(c) DECC’s approach results in the very strange situation that all 5 (non-nuclear) energy NPSs are assessed against the same three “reasonable alternatives”. In other words there are no specific “reasonable alternatives” for say, the NPSs on Renewables, Fossil Fuels or Networks. In each case the “alternatives” selected consist simply of (a) do nothing; and (b) three separate “nested policy options” (ie Generic policy only; generic plus locational criteria; or generic plus locational criteria plus mitigation guidance (see eg AoS-1, p.12). In other words there are no substantive policy alternatives. Leaving aside the legal issues we consider that their failure here represents an important missed opportunity in policy making terms.

(d) When the Government consulted its Agencies as part of a scoping exercise as to what should be in the NPSs, a number of them raised the issue of inadequate alternatives. For example the Environment Agency said “Each individual AoS should consider a wider range of alternatives. In particular the role of demand management in limiting the need for future energy infrastructure . . .” (AoS-1, Annex C, para. 32). That was good advice which the Government failed to heed.

56. Quite separately, there is a further problem with alternatives. As noted, DECC states that it considers four alternatives (see para 55(c) above). However, the “evaluation” of those alternatives (which is required to be of the same level as the evaluation given to the chosen option) is wholly inadequate. The evaluation of the effects of all four “alternatives” on all nine environmental objectives for the overarching NPS consists of half a page in table format (Table 4.1, AoS-1, p.27). Moreover, the evaluation is neither quantitative nor qualitative but impressionistic.

57. There is no evaluation of alternatives for EN-2 to EN-5 in any form at all.

Non-technical summary

58. DECC are legally required to provide a non-technical summary (NTS) of the AoSs. The purpose is to allow members of the public without detailed technical knowledge to have access to a summary of what is assumed will be a relatively technical environmental report. It is notable that in this case the NTSs (see eg AoS-2 and its NTS: compare pages xiii–xv with pages 7–9, the pattern continues) are often verbatim copies of the main report. In some cases (eg EN-2) the NTS is actually longer than the report it is intended to summarise. Such documents cannot, by definition, be non-technical summaries. However, the approach taken should perhaps mainly be seen as an indication of the non-technical (poor) quality of the main environmental reports (AoSs).

60 In AoS-1 (p 13, Table 2.1) ENTEC proposed 8 alternatives; in AoS-2 (p xxx) ENTEC proposed 1 alternative; in AoS-3 (p 5) ENTEC proposed 5 alternatives; in AoS-4 (p 6) ENTEC proposed two alternatives; in AoS-5 (p 5) ENTEC proposed one alternative. All 17 alternatives were rejected without evaluation.
Cumulative Effects

59. It is an important requirement of SEA legislation that SEA reports assess the cumulative effects of the projects falling within the scope of the plan/programme. However, DECC misunderstands this requirement and, instead of assessing the cumulative effects of different projects, simply instruct the IPC to carry out that cumulative assessment themselves (eg “IPC should consider how the accumulation of effects might affect the environment economy or community as a whole . . .”) AoS-1, para 4.3, p 37, quoting 4.2.4 of EN-1). That is both unlawful (because it fails to do what is required by the legislation) and entirely at odds with the Government’s own guidance which explains that “[cumulative effects] are very hard to deal with on a project-by-project basis through EIA. It is at the SEA level that they are most effectively identified and addressed” (ODPM Guidance on SEA). The only assessment of cumulative impacts that DECC has purported to carry out relates to cumulative impacts across NPSs and not cumulative impacts of the projects that will come forward (AoS1, Table 4.3.1).

Other environmental impacts flaws

60. The assessment of environmental impacts (which should be the heart of the Environmental Report) is extremely thin.

61. We note that the climate assessment given to the national policy statement for fossil fuels (AoS-2, p.9) consists of half a side (even less assessment of climate is given to EN-1 (AoS-1, p 29). Moreover, (and in common with the other AoSs) that “evaluation” includes no assessment of, or information about, how much CO2 will result from the implementation of EN-2. Given the importance of these NPSs to achievement of the UK’s climate objectives that is somewhat extraordinary.

62. The assessments themselves (see eg the assessment of climate at AoS-1, p.29) demonstrates a further error in DECC’s approach which is that they chose not to assess any of the policy content within the NPS but only the environmental effect of having a new process. That is both illogical and unlawful under both the SEA legislation and section 5(3) Planning Act 2008 which requires an appraisal of the sustainability of the “policy” in the statements.

SEA conclusions

63. So, what should DECC do? Our provisional view is that the approach taken by DECC to its SEA obligations is unlawful. In order to make it lawful DECC should reissue and consult on a fresh environmental report (taking account of and acting on the points above). If it does not do so it is at risk of having its NPSs quashed in Court.

SECTION 6—CONSULTATION, SCRUTINY AND EXAMINATION OF NPS

64. Following the Government’s publication of the Energy and Ports National Policy Statements on 9 November 2009, a public consultation began which will run until 22 February 2010.

65. In the Planning White Paper the Government said that:

3.22 National policy statements would therefore potentially have important and far reaching consequences, both nationally, and for the individuals and places likely to be most affected. It is therefore essential that national policy statements are authoritative, and are seen to be authoritative. In order for this to be possible, the Government is committed to ensuring thorough and effective consultation before policy statements are finalised and adopted.

3.23 Such consultation would also help the Government to ensure that its proposals for national infrastructure have been properly debated and tested, and reflect the right balance of interests and objectives.

3.25 . . . including setting out clearly the proposals on which views are sought, allowing sufficient time for responses, ensuring wide accessibility, encouraging effective stakeholder participation and ensuring that views are taken into account before final policy proposals are developed”.

66. We consider that this commitment is extremely important bearing in mind the huge significance and novelty of the NPSs. However, we do not consider that the consultation process to date has been “thorough and effective” or that it has allowed the issues to be “properly debated and tested”.

67. Proper debate and rigorous testing of the evidence is of critical importance bearing in mind the unique weight to be accorded to NPSs in determining whether nationally significant infrastructure projects should go ahead (and in what form).

68. The Committee will be aware that IPC decisions must be made in accordance with NPSs (other than in limited circumstances) and that policy set out in the NPS (including need and location) may not be re-opened in the examination process.595

69. Bearing in mind the importance of the issues and the long timescales over which the NPSs will have effect we consider that the process of testing the NPS has been inadequate in the following specific regards:

(a) The Select Committee has not in our view been given sufficient time to scrutinise these enormous documents. Time constraints means written evidence deadlines are over a month before the public
consultation closes, and its overall scrutiny period a long way short of the unambiguous Government commitment that “Committees will have at least four to six weeks after the end of the three-month consultation period to complete their work.” (HC Deb 20 May 2009 cc1533-40 Ian Wright).

(b) Given parliamentary timetabling, the Committee report will need to be published before the Easter Recess and if a debate is recommended or timetabled, this will either need to take place before Easter Recess or afterwards. It is clear that likely General Election timetables are putting a squeeze on an important process which should be given a proper amount of time for consultation, scrutiny, and examination.

(c) There are only six national events being held, three with less than a month’s notice following publication of the National Policy Statements on the 9 November. There is only an hour of a “question and answer” session as part of these events. One hour at six events does not allow the public to contribute their input in a meaningful way.

(d) The site specific events, five of which were held less than a month after the publication of the Nuclear NPS, seem to have been a facilitated public discussion after the presentation of the NPS by the Government. In most of the discussions, the issue was raised that the public awareness and publicity surrounding the events had been very poor. The effect on local communities of the site specific NPS is very considerable indeed. Yet, the level of consultation given to them on these issues is very considerably less than they would have on, for example, the production of a Local Development Framework. We note that the National Policy Statement on Nuclear was published on Monday 9 November and the consultation in Hartlepool, one of the affected sites, took place on the Thursday of the same week. That is wholly inadequate. We understand that the Government will be sending a representative to the local authority’s own “Question Time” event later this month. However, doing so cannot be a substitute for a Government run consultation event.

(e) The Planning White Paper (which led to the creation of these NPSs) refers to the document *Community involvement in Planning: the Government’s objectives* ODPM 2004. That paper states that (p 8, para 2.5) “active participation in the development of options and proposals should be at the heart of the process”. In relation to NPSs the Government chose not to involve members of the public in development of options and proposals (as it could have done) but only to consult once it has drafted its proposal and set out the options it had chosen to test.

Parliamentary Scrutiny

70. The Select Committee scrutiny process is a very important (and unusual) part of designating these nationally important policy documents which will have considerable legal weight. We consider that this process could have benefitted from taking a different format incorporating elements of different plan assessment procedures for example, those used for eg the London Plan, or an RSS. It is not necessary for these examinations to be extremely lengthy eg the London Plan examination took around seven weeks (ie, around 28 days of examination with witnesses and cross-examination employed and a chance for people to contribute orally), but time pressures will have prevented the Committee exploring or taking up these options. In the context of location specific NPSs (ie, Nuclear) that level of investigation would be entirely appropriate, particularly as the question of location cannot be opened subsequently.

71. The Planning White Paper stated that:

3.25 where national policy statements include detailed assessments of demand and capacity, or proposals for infrastructure which raise important technological or safety issues, or which may have a significant impact on climate change goals and targets, or on market development, they should be based on a thorough consideration of evidence. This may include consulting relevant experts or organisations in the drawing up of proposals for national policy, before they are published in draft.

72. The NPS, particularly the Nuclear NPS, are precisely such documents. However, it will be very hard to properly test the complicated and detailed issues underlying these documents tested through the current time-shortened Select Committee process.

Recommendations

73. The Government should give fresh consideration to ensuring that future NPSs are subject to a much higher quality of public participation and consultation. There are many stakeholders, including Friends of the Earth, who could assist the Government with developing a meaningful public participation and consultation package.

74. An effective consultation would be one that provided the public with a meaningful and fair opportunity to engage on the issues of importance. The importance of public engagement in the land-use planning system cannot be overestimated. Planning is intended to be a means of mediating between different interests and ensuring the best possible outcome for people and the environment. Meaningful public participation is crucial to ensuring that takes place.
75. It is therefore extremely important that the NPS series in general follows the following procedure for consultation:

— A proper appraisal is carried out considering alternatives.
— At least one month’s notice and a three month public consultation period with events over a number of times/days (similar to the GM national debate).
— An examination in public into NPS EN 1-5 held by the Planning Inspectorate.
— Parliamentary committee scrutiny of each NPS.
— A debate in both Houses.
— Sufficient time for the Government to consider responses.

76. For the site specific NPS, an examination in public should be held at each suggested location, under the auspices of the Planning Inspectorate (ie run by an Inspector with the skills and experience to carry out a proper inquiry).

77. We do not recommend that these NPS are designated without a) the consideration of alternatives and a proper appraisal and b) without a re-issue of an improved consultation process and examination of the NPS in an inquiry format.

January 2010

REFERENCES

1 Policies such as Renewables Obligation, CCS for coal, the Climate Change Levy, etc


iii Section 3.3.14.

iv Section 3.3.12.

v Section 3.3.15.

vi Section 3.7.1.

Parliamentary Answer, 16 Dec 2009 : Column 1335W. The figure “already underway” is now up from 20.5 GW to 21.6 GW. Of this 21.6 GW, 7.3 GW is renewable, 14.3 GW non-renewable.

https://www.og.decc.gov.uk/EIP/pages/applications.htm

ii Design of Feed-in Tariffs for sub-5MW Electricity in Great Britain, Quantitative analysis for DECC, Poyry and Element Energy, June 2009. [25 TWh electricity compared with 8 TWh, with a baseline of 2 TWh].

3 Letter of 20th Nov 2009 from Professor Andrew Blowers, Professor Gordon MacKerron, Mary Allen and Pete Wilkinson.

vi An electricity-only incinerator has far higher emissions than a gas plant, a CHP incinerator has similar emissions to a gas plant. The technical issues here are complicated but the bottom line is that energy-from-waste plants have major carbon emissions. See table 1 page 11 of www.foe.co.uk/resource/reports/changing_climate.pdf


Supplementary memorandum submitted by Friends of the Earth

Friends of the Earth are writing to raise two points regarding the treatment of climate change in the NPS which have come up since our oral evidence—we hope this is useful additional information for the committee.

The first is to correct what we believe to be a misrepresentation in regard to the oral evidence given by the IPC on 3 February. On a number of occasions the IPC answered committee questions regarding how climate change would be tackled effectively by stating that this would be dealt with because the CCC was a statutory consultee for individual applications. Although the CCC is a statutory consultee to the NPS consultation,
we do not believe that it is statutory consultee to individual applications. We have checked the official list of statutory consultees, at http://www.opsi.gov.uk/si/si2010/pdf/uksi_20100102_en.pdf which does not include the CCC, and checks to legal databases as of 11/2/2010 show no amendments to these regulations. In practice, the CCC do not appear to be consulted either—the IPC’s list of projects http://infrastructure.independent.gov.uk/wp-content/uploads/2010/02/ProgrammeofProjects-08-Feb.pdf lists three “scoping opinions” issued by the IPC, none of these scoping opinions includes the CCC in its list of consultees.

We are concerned therefore that the IPC’s answer to the committee’s questions on climate change is not accurate and does not provide reassurance that this issue will be properly tackled.

The second point is related. During evidence the IPC repeatedly stated that climate change was capable of being a significant material consideration in its decision making and that the information necessary to allow it to consider the issue would necessarily be provided because it would have to be submitted by applicants in their environmental impact assessment reports.

However, it appears that the scoping reports (from applicants) and, more importantly, the scoping opinions (from the IPC) issued so far indicate that greenhouse gas emissions are not being considered at all. For example, for the proposed energy-from-waste plant at Rookery South, the scoping report does not include any assessment of greenhouse gas emissions (which it should do), and the scoping opinion from the IPC also does not say that there should be an assessment of greenhouse gas emissions either. In this context we are very concerned that if applicants are not providing this information and the IPC are not asking for it then the IPC will not have the information it needs to be able to carry out a comprehensive assessment of the economic, social, environmental costs and benefits of each application as required in section 4.1 of the overarching energy NPS. Without full information, particularly on an issue as important as climate change, how can the IPC’s decisions be robust?

February 2010

Further supplementary memorandum submitted by Friends of the Earth

With your permission, Friends of the Earth would like to offer two brief observations on the oral evidence presented to the Energy and Climate Change Committee on Wednesday 20th January 2010, in regard to energy-from-waste plants in the Renewables NPS. In particular we focus these comments in response to Mr Asquith’s and Ms Hartnell’s answers to Question 296 (Mr Weir).

1. It may be the case that Mr Asquith’s company does have the equipment to maximise recycling and to produce a biomass-only fraction which they intend to use to produce energy. However, it is important to note that this is not the case with the mainstream incineration industry, which is the one most likely to be using the NPS process. There are already two NPS applications from Covanta to build very large incinerators of mixed waste. This mixed waste will inevitably include large amounts of fossil-fuel derived carbon, and large amounts of material that would be better recycled, and will be burnt in an inefficient incinerator with consequent CO2 emissions (see “Dirty Truths” report).81 We would therefore argue that Mr Asquith’s reply does not provide adequate reassurance that such plants would not damage reuse and recycling, the lower carbon options.

2. On the idea that incineration and high recycling go “hand in hand”, it is true that those countries that moved early in getting material out of landfill tended to focus on both of these approaches. However, many of them are now encountering a problem from incessant demand from incinerators preventing improvements in recycling. Denmark is a particularly good example, where regions with high incineration have lower recycling whilst regions with low incineration do more recycling:

<table>
<thead>
<tr>
<th>Region</th>
<th>Recycling</th>
<th>Incineration</th>
<th>Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hovedstaden</td>
<td>21%</td>
<td>77%</td>
<td>2%</td>
</tr>
<tr>
<td>Nordjylland</td>
<td>29%</td>
<td>63%</td>
<td>8%</td>
</tr>
<tr>
<td>Sjælland</td>
<td>31%</td>
<td>59%</td>
<td>10%</td>
</tr>
<tr>
<td>Midtjylland</td>
<td>40%</td>
<td>53%</td>
<td>7%</td>
</tr>
<tr>
<td>Syddanmark</td>
<td>41%</td>
<td>52%</td>
<td>6%</td>
</tr>
</tbody>
</table>

2005 data for Denmark’s household waste, from Waste Centre Denmark (Storage for incineration classified with incineration)

It’s further worth noting that Denmark’s recycling rate (41% municipal waste in 2009) is well behind levels achieved by other regions of Europe. For example Flanders in Belgium recycles more than 70% of its

municipal waste—they have achieved this over the last ten years, focussing their policies on prevention, reuse and recycling, and they have deliberately avoided creating any additional incineration capacity due to their concerns that this would impact on recycling rates.

February 2010

Memorandum submitted by Mr Nigel Gilligan

NUCLEAR NATIONAL POLICY STATEMENT EN-6

IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST (IROPI)

WHY THE JUSTIFICATION FOR IROPI IN ANNEXE A IS NOT VALID

EXECUTIVE SUMMARY

The arguments presented as a reason for the government to apply IROPI are explained in Annexe A of the Draft National Policy Statement for Nuclear Power Generation (EN-6).

It has to be questioned as to whether the arguments for justification are actually valid. The discussion below examines each general point made within Annexe A of EN-6, and concludes that the case is made that IROPI is not justified, or valid.

DISCUSSION

1. The need to move towards a low carbon economy is valid. But how to move in that direction is a matter of policy, based on political decisions. The technology of possible solutions, and the science behind climate change, do not justify the arguments presented in Annexe A.

The arguments extend over 8 pages of A4, but they can be summarised by the following three points:

— no alternatives;
— the imperative need for action; and
— “the protection of human health, and public safety, and to beneficial consequences of primary importance to the environment.”

2. No alternatives.

1. The Liberal Democrat Party believes there is an alternative.
2. The Green Party believes there is an alternative.
3. The Labour Party before 1997, and debatably up to 2007, thought there was an alternative.
4. The Zero Carbon Britain proposals by CAT are a viable alternative. These are well researched, thoroughly argued, and widely presented by CAT staff, both in the UK and abroad. These alternatives can be initiated much before any contribution by significant outputs of nuclear power.
5. The Carbon Trust awards for 2009 demonstrate a vast range of viable solutions to decarbonising the economy using green energy, not nuclear.
6. The Commission’s ruling regarding the validity of applying IROPI refers to situations where “plans or projects envisaged prove to be indispensable”. This is not the case, because there are reasonable alternatives available.

3. The imperative need for action

1. The decision to go down the nuclear route has only recently been taken, but knowledge about the likely lifetime of a nuclear power station has been known since they were constructed.
2. The need to reduce global carbon emissions has been apparent since the decisions of the Rio Earth Summit in 1992
3. Because of the in-built lag in the global climate system, reductions in carbon emissions now will have little or no impact on climate change for several decades.
4. By the same token, reductions consequent on having operational nuclear power stations may not be detectable for several decades beyond that. The calculation is 2025 + 40 = 2065.
5. To repeat the obvious, the timetable for nuclear power is too slow, and its impact on climate change may not be detectable until 2065.

1. A number of power stations are due to close by 2025. The projected interruptions to electricity supplies and consequent effects on human health can be dealt with in many different ways, by more aggressive action on reducing energy waste within the domestic and industrial sectors, by planned options from within the portfolio of clean energy alternatives, and by alternative actions at the time.

2. Climate change is likely to cause more frequent and more severe weather events, such as severe storms and floods. These will cause great stress and danger to life, disrupt transport systems, and the ability of affected communities to function. These are of greater concern, less predictable, and potentially much more damaging than any impacts due to interruptions to the electricity supply caused by known deficiencies of the electricity generation and national grid system.

3. The government’s concerns as described in Annexe A are inconsequential compared with the likely international impacts of climate change. These are tabulated in the IPCC document referenced below.5

5. Beneficial consequences of primary importance to the environment

1. These have not been defined. Annexe A does not enlarge on this important aspect of the case!

REFERENCES
1 Centre for Alternative Energy (CAT)
   Zero Carbon Britain report. See www.cat.org.uk


3 The Hadley Report. Observations and Predictions. The Hadley Centre, UK Met Office, 2004. Over the next 40 years the warming predicted for the five scenarios is similar, despite there being significant differences in the amount of greenhouse gas emissions for each case. This is because the long lifetime of atmospheric carbon dioxide and the large thermal inertia of the climate system mean that much of the change over the next few decades is already built into the climate system from present day emissions and those from the last few decades. By the same token, the climate outcome for the latter half of the 21st century will strongly depend on the emissions over the next few decades.

4 Whilst 2025 might seem an unduly pessimistic date for the average completion of a nuclear power station, the initial negative impact of a large CO2 contribution from the construction process must be included. It will probably be of the order of several years before the point where the excess emissions have been cancelled out. Added to this is the likelihood that completion will not be achieved within the timetable, so that the figure of 2025 may well be an overly optimistic one.

5 The International Panel on Climate Change

January 2010

Memorandum submitted by Greenpeace

1. INTRODUCTION

1.1 Greenpeace welcomes the opportunity to submit evidence to the Energy and Climate Change Committee hearing on the Energy National Policy Statements (NPS).

1.2 Greenpeace believes that new nuclear power is inadequate, unnecessary and dangerous. It is inadequate because it offers too little, too late in terms of climate change. It is unnecessary because we can reduce emissions and keep the lights using better technologies instead. It is dangerous because of the intractable problems of radioactive waste and nuclear weapons proliferation. But there is another danger: the danger of distraction. Renewables and energy efficiency are booming in other countries, could be the cornerstone of a green economic recovery in Britain, quickly secure our power and become a springboard for greater emission reductions in future. But despite the UK’s abundant wind, waves and engineering skill, lack of government focus and priority means Britain’s renewables industry remains tiny.

1.3 Justification for new nuclear capacity in the NPSs is based on an apparent refusal to acknowledge the significant potential for renewable electricity generation. Instead they present a hobson’s choice between either more nuclear or more gas, oil and coal: “failure to take account of the ability to develop new nuclear power stations significantly earlier than the end of 2025 will increase the risk that the UK is locked into higher CO2 emissions than would otherwise be necessary. This is because of the high-carbon nature of thermal generation capacity that might otherwise help to meet the demand for electricity.”2 It is quite wrong and deeply misleading to present the argument in this way.
2. Views on the National Policy Statements

2.1 There is a significant disconnect between government policy and the Infrastructure Planning Commission (IPC) over climate change. Under the NPSs the IPC does not have the remit to consider infrastructure projects in terms of their potential lifetime greenhouse gas (GHG) emissions. This is because climate change targets are policy issues for government and so outside the IPC’s remit. This means that the IPC effectively exists in a vacuum, deciding on major infrastructure projects that will have significant GHG emissions implications, in an economy that is attempting to decarbonise, yet unable to take into consideration the climate impacts of the projects that they are assessing.

2.2 This is a most peculiar state of affairs. It remains to be seen how the IPC can possibly green-light infrastructure projects that will meet our binding climate change targets, or severely compromise them through carbon lock-in, when they cannot consider the GHG emissions of the projects themselves.

2.3 There is also a question of whether the NPSs constitute adequate planning documents. The NPSs are supposed to allow the IPC to make considered and evidence-based decisions on whether to allow major infrastructure projects to proceed, but certainly in terms of nuclear, their considerations must be made having taken suppositions from government on issues such as radioactive waste disposal at face value. Significant concerns exist as to the practicability of safely managing new build spent fuel arisings (not least because the industry has thus far been either unwilling or unable to say exactly how they intend to deal with them), yet the Nuclear NPS instructs the IPC to unquestioningly accept promises from government and industry that arrangements for cooling, storage, conditioning, encapsulation and eventual disposal of spent fuel “exist or will exist” at some unspecified point in the future.

2.4 Given both the lack of concrete proposals that presently exist for dealing with new build spent fuel, and the nuclear industry’s dubious safety record and history of evasiveness and dishonesty, this is an extraordinary assumption to be forced to make. This makes it seem as though the sole purpose of the nuclear NPS is to allow the IPC to say “build a reactor” without any real consideration of the technical practicalities of if/how radioactive wastes arising from their construction can be dealt with. Consequently the absence of such significant information that would normally guide planners’ decisions means that under no circumstances does the nuclear NPS fulfil its stated purpose.

2.5 Will the IPC be so narrowly focused (because of the guidance in the NPS) that it will only examine site-specific issues (eg access roads) as opposed to wider issues of major public concern, such as spent fuel management? Take this theoretical position:

— EdF submit an application to the IPC for Hinkley C sometime in 2010.
— Their plans for spent fuel remain as hazy as they are today.
— The regulatory position is that the Generic Design Assessment (GDA) pre-licensing of reactors hasn’t properly assessed the acceptability of waste management proposals for the EPR reactor (GDA probably will not finish before 2012 and this issue was specifically mentioned by the Health and Safety Executive (HSE) in their 3rd Stage Assessment in November 2009).
— At the same time the Department for Energy and Climate Change (DECC) has not finalised the proposals for a Funded Decommissioning Programme (in which potential operators must clarify back-end management plans) and crucial Fixed Unit Price are not expected to do so until after 2011. The public consultations on these have not yet started.

The question is this: will the NPS allow the IPC to freeze EdF’s application until these issues are adequately resolved, or will they press on regardless?

3. The National Policy Statement Process

3.1 The amount of documentation that the public must read, understand and consider before they can be expected to make reasoned comments on the conclusions of the draft nuclear NPS by 22 February 2010 (a period of only 15 weeks including the Christmas and New Year holidays) is vast. A member of the public living near Bradwell in Essex would have to read a staggering 1,674 pages of documents to take in the bare bones of every part of the consultation, including looking at why other sites like Dungeness were not selected. This is more than Tolstoy’s War and Peace.1 Whilst our energy future is an issue that concerns each of us, given its very complex nature and some of the important conclusions the NPS reaches, and the fact that the consultation is running concurrently with the Regulatory Justification consultation (and other consultations eg CoRWM’s consultation on new build wastes), we believe the amount of data and the confusing way in which is has been presented by the Department for Energy and Climate Change have made entirely unreasonable demands on the public and local authorities.

3.2 The overall emphasis of the Energy NPSs is skewed in such a way as to paint new nuclear in an overly positive manner, to the detriment of alternative renewable technologies. For instance, there are 39 references to the term “employment” in the nuclear NPS2 but no references to the same term in the renewable NPS.3 The nuclear NPS also consistently refers to “energy” and conflates this with “electricity”, giving a further misleading appraisal of the potential for new nuclear.
4. The Need for New Nuclear

4.1 The nuclear NPS claims that new nuclear is needed because “excluding nuclear power as an option for generating electricity would make it harder and more expensive to meet our emission targets. It could also jeopardise the security of the UK’s energy supply.” Greenpeace strongly refutes this notion. We do not believe that there is an overriding national need for any new nuclear generating capacity.

4.2 Even the most optimistic estimates suggest that new nuclear will provide only a 4% emissions reduction sometime after 2020. Our binding target is a 34% cut by 2020. Nuclear is presented as a key pillar of energy strategy. It is not.

4.3 The UK can reduce emissions and keep the lights on using better technologies instead. In the next decade meeting our existing renewables and efficiency targets would safely close the “energy gap” and cut emissions, while leaving plenty of potential to expand renewables even further later.

4.4 There have been claims that nuclear power could supply 40% of the UK’s electricity beyond 2030. Greenpeace is doubtful that in a liberalised energy market the possible size of the generating fleet can be determined. What can be safely assumed, however, is that if new nuclear produces not just 10GW but anywhere up to 23GW or more this will crowd out sustainable energy alternatives. If government continues to favour nuclear power, through direct or indirect political or financial support, utilities will follow their lead, which would be to the detriment of renewable energies. A massively expanded new build fleet would also have enormous implications for the management of highly radioactive wastes, for which there is no proven solution.

5. Regulatory Justification

5.1 The UK government has yet to confirm whether the practice of operating the new Areva/EdF European Pressurised Water Reactor (EPR) and Westinghouse AP-1000 reactors is justified under EU law. Justification is a regulatory requirement under EU law that must be completed before new reactors can be built. Justification is a high level strategic assessment in which the disadvantages of a “practice” involving releases of ionising radiation (in this case new nuclear power and all associated activities eg spent fuel storage and disposal) are weighed against its potential benefits (economic, CO₂ emissions etc).

5.2 There is an on-going consultation on this issue that will not conclude until the end of February 2010. Though the government has reached a preliminary conclusion that new nuclear is justified, Greenpeace feels it is presumptuous to assume that the practice of new nuclear will certainly be signed off in the near future.

5.3 The IPC has been instructed not to consider whether the aims of the EU Directive have been or will be implemented (see NNPS 4.8.12).

6.Generic Design Assessment and Licensing

6.1 The Health and Safety Executive’s (HSE) Generic Design Assessment (GDA) process, though not legally binding, is an overarching safety assessment of the EPR and AP1000 reactors designed to avoid many of the pitfalls of past reactor programmes. Yet is it likely it will not deliver the outcome the Government hopes.

6.2 The UK nuclear industry has an appalling track record of meeting schedules and budgets and any claims that vendors or potential operators make regarding bringing new capacity online on time should be treated with utmost circumspection. The Committee should carefully consider the catalogue of delays and cost overruns bedevilling the projects at both Olkiluoto-3 in Finland and Flamanville-3 in France as we feel they illustrate the nature of the problems we are likely to face with UK new build.

6.3 Indeed, problems are already surfacing in reports from the safety regulators. It has been reported that at the end of the GDA process in around mid-2011 there will most likely be “exclusions” and “conditions” attached to the sign off on reactor designs. These issues will have to be resolved by potential builders and operators under the site-specific licensing process. Given the issues outstanding there is no guarantee either GDA or licensing will be finished to the timelines produced by government.

6.4 As an example of the problems outstanding, we refer the committee to the HSE’s recently published the 3rd Stage GDA report on the EPR. They concluded that “we have identified a significant number of issues with the safety features of the design.” This followed the HSE taking the unprecedented step of releasing a Joint Regulatory Position Statement on the EPR with their Finnish and French counterparts. The statement said, “The issue is primarily around ensuring the adequacy of the safety systems (those used to maintain control of the plant if it goes outside normal conditions), and their independence from the control systems (those used to operate the plant under normal conditions). Independence is important because, if a safety system provides protection against the failure of a control system, then they should not fail together. The EPR design, as originally proposed by the licensees and the manufacturer, AREVA, doesn’t comply with the independence principle, as there is a high degree of complexity interconnectivity between the control and safety systems. As a consequence of this, the UK nuclear safety regulator, the French nuclear regulator, and the Finnish nuclear regulator have asked the licensee and manufacturer to make improvements to the initial EPR design.” It is very worrying that EdF apparently do not agree with the HSE’s assessment. The Senior Vice President Nuclear Engineering recently said that EdF “is “confident we will qualify” the Siemens SPPA-T2000 control I&C system for use without modifications.”
6.5 The HSE GDA 3rd Stage report on the Westinghouse AP1000 was similarly scathing. It concluded that "there is significant additional work to be done by Westinghouse to satisfy our questions and to make and present an adequate safety case in the majority of the technical topic areas...In some of the areas that we have already assessed we found that there was a lack of detailed claims and arguments." But in spite of these major problems Westinghouse has not responded promptly to requests for further information about whether the reactor can stand up to things like earthquakes and aircraft crashes.

6.6 As the GDA findings show, new reactor designs proposed for the UK do not by any stretch of the imagination represent a "proven" technology as claimed in the nuclear NPS. The fact remains that any new reactor, be it an EPR or AP1000, will be first-of-a-kind and very much UK specific and as it stands operators are unable to prove that the designs meet basic reactor safety standards.

6.7 The IPC's relationship to the GDA process seems fragmented. For instance, the nuclear NPS states that the IPC "does not need to consider matters that are within the remit of the nuclear regulators, although it is to liaise with them." Instead it may seek a regulatory "letter of comfort."

6.8 Given the above it is essential that the Committee fully considers also the potential impact of an accident (or malicious act) on a reactor or spent fuel store. The probability of such an event may be low, but the potential consequences so huge they have to be thoroughly scrutinised.

6.9 One example of how Governments and industry view the real impact of an accident is in the changed international liability insurance regime that covers nuclear accidents. The UK has yet to consult on, and enact, legislation to cover the increased financial liability and expanded coverage for a nuclear accident. It has been reported that the insurance industry has refused to provide the cover necessary for existing and new reactors, potentially leaving the public exposed to even higher costs in the event of a major accident. This matter should have been discussed in the nuclear NPS as the risk of accident applies not only to reactors, but also the spent fuel stores planned for sites.

7. Climate Change: Sea Level Rise, Storm Surge and Flooding

7.1 All of the sites earmarked for new nuclear development in the NPS are in coastal areas, mainly because of the significant volume of water reactors need for cooling. However, the UK's coastal zone is, in many cases, a dynamic and shifting environment. Changes in coastal geomorphology may well become more significant in the future because one of the predicted outcomes of anthropogenic climate change is an increase in global sea levels. This in turn could have a significant detrimental impact on nuclear power stations sited in coastal regions.

7.2 Whilst the government claims it has closely assessed the potential impact of sea level rise on possible sites for new nuclear, Greenpeace would like to draw the Committee's attention to research carried out for us by the Middlesex Flood Hazard Research Centre. This found that "it is hard to escape the conclusion that the most sensible approach would be to reject all nuclear new-build within the dynamic coastal environment."

7.3 New research has suggested that loss of ice from the West Antarctic ice sheet could "contribute to a projected total sea level rise of up to 1.4 metres by 2100" at a far quicker rate than previously estimated. This figure is based on model projections of ice flow into the Southern Ocean. The increase in sea level will also affect the probability of storm surges flooding major coastal cities, such as New York and London, even with the protection offered by the Thames Barrier. The Met office recently concluded that "by 2100, storm surge heights may increase dramatically—by up to 1.7 metres in the most affected areas of Suffolk, where the Sizewell B nuclear power plant is located."

7.4 Yet in the nuclear NPS the HSE admit that it has only been able to assess sea level rise based on modelling and predictions for 100 years—even though one of the plans for spent fuel is to keep it on site for possibly up to 160 years.

8. Radioactive Waste Management

8.1 It is claimed in the nuclear NPS that arrangements to deal with wastes "will exist." The simple fact is that there is nowhere on Earth to put this waste—there is no environmentally acceptable and proven "solution" for the disposal of high level radioactive wastes and spent fuel. Such disingenuous and misleading statements mark a return to the days when real decisions on nuclear waste were habitually put off, leaving future generations to deal with the problem. The matter, for example, of where and how long spent fuel might be stored and conditioned should have been fully detailed in the NPS so that local communities (at reactor sites and the potential host community for a national geological repository) could consider the implications of the various options industry and government agencies are considering. This is essential because for as the nuclear NPS states the IPC will not be allowed to consider spent fuel and waste storage: "having considered this issue, the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider this question." It is unacceptable that both the principle and the practicalities of spent fuel management will not be discussed and all debate foreclosed by the IPC.
8.2 There are clearly differences in the approaches of the reactor vendors on the issue of spent fuel encapsulation. These are highlighted in a presentation from the Environment Agency and in HSE reports on the two reactor designs. On the EPR the HSE notes: "EDF and AREVA still need to show that the encapsulation of spent nuclear fuel for disposal is ALARP and that the environmental impacts are acceptable. I have raised a TQ requesting EDF and AREVA to provide this information." On Westinghouse’s AP1000 the HSE notes: “In the absence of any other firm agreement it must at this stage be assumed that any encapsulation will be performed at the reactor site and I have raised TQ-AP1000-329 (Ref. 10) requesting information on how the fuel will be encapsulated. A response is outstanding, but when received it will need to be considered with the “disposability” case.”

8.3 Westinghouse and Areva are already openly challenging the government’s assumptions on the proposal that spent fuel would be stored for 100 years prior to disposal. Westinghouse has written to the Nuclear Installations Inspectorate stating: “[We have] concerns over the length of time that high burnup spent fuel would have to remain on site before it could be disposed in the repository design currently envisaged for the UK. Reliable, high burnup fuel is economically and environmentally beneficial, yet the projected designs of the spent fuel encapsulation containers, combined with those of the repository cells are such that they cannot accommodate such fuel without a cooling period so long that it would make the repository unavailable for some of the spent fuel.”

8.4 There is complete uncertainty as to exactly how spent fuel may be dealt with from new nuclear reactors. Possibilities include:

- Spent fuel is to be kept on-site at reactors.
- Pending a period of on-site storage it could remain on-site or be moved to a regional or central store.
- Spent fuel may be stored for only five years (pending possible removal to a central storage facility) or 10 years, but possibly up to 50 years, or 160 years (on or off-site).
- Spent fuel will be encapsulated on-site or at a central site.
- Stores may or may not need to be replaced. Stores may be above ground or underground.
- Title and liability stays with the operator until it leaves the site or, if no geological disposal facility is built, the government/Nuclear Decommissioning Authority (NDA) take title and liability.
- There may be one or two geological disposal facilities depending on the timing of availability of a repository (ie how long it is kept open) and also the amount of wastes produced.

8.5 Whether the industry shares encapsulation costs with the NDA is an issue which should be examined in case it constitutes an indirect subsidy (depending on how costs for encapsulation facilities are allocated). In reply to an FOI request the NDA stated that: “The operator of a new build power plant will be responsible for the cost of managing their waste pending disposal, which includes the cost of packaging spent fuel (SF). This does not necessarily mean that the operators will package the SF themselves. They may do so, or they may contract with a 3rd party to encapsulate their SF. In their Funded Decommissioning Programme (FDP) the operator must set out the steps they propose to take to manage their waste and have this plan approved by the Secretary of State. These plans will be regularly reviewed and operators can submit modifications to their plans for approval. The Government might need to undertake the necessary steps to package the SF into a disposable form. The costs of encapsulation will be a cost for which the operator will have made provision in their independent Fund and in these circumstances the amounts that operators have budgeted for these costs (set out in their FDP and agreed with the Secretary of State) would pass to the Government when title to and liability for the waste transfers, to cover the costs of performing this.”

8.6 The regulations and statutory guidance on Funded Decommissioning Programmes (FDP) and the Fixed Unit Price (FUP) are not finalised and will not be until late 2010 and mid-2010 respectively, if then. The FDP and FUP is the process by which the Secretary of State will sign off on plans for site decommissioning and spent fuel storage and disposal: “The Energy Bill will require any operator of a new nuclear power station to have a Funded Decommissioning Programme, approved by the Secretary of State, in place before construction of a new nuclear power station begins and to comply with this programme thereafter” (our emphasis).

8.7 The current basis for the initial fixed unit price for geological disposal is that it will be co-disposed with legacy wastes. The timing of deciding on both an FDP and FUP, and agreeing this with reactor operators appears, to conflict with that of other key processes that need to be determined before the FUP can be decided. A crucial one of these is that the IPC, local communities and local authorities, should know exactly what the waste plans are before these are set in stone though an industry-government agreement (negotiations on the FUP will be between the operators and the Government. They will not involve the public or Parliament).
8.8 A recently published timeline shows the FDP will be finalised the same time as the first site license is agreed (immediately after the GDA process ends) and when planning is granted. The IPC process will supposedly have started over a year in advance of this, meaning firm plans will not be available for public scrutiny. Yet the regulators have said that the issue of exactly where spent fuel will be stored (and for how long) and be encapsulated will not be known until 2012–13.

8.9 No assumption can be made that disposal even of legacy wastes will take place and certainly not on the timeline proposed by the NDA. This issue is fraught with difficulties. The addition of new build waste could create many more problems. The first CoRWM noted: “We believe that future Government decisions on new build should be subject to their own public assessment process, including consideration of waste, because such decisions raise different political and ethical issues when compared with the consideration of wastes which already exist. We have noted before that the prospect of a new nuclear programme might undermine support for CoRWM from some stakeholders and citizens and make it more difficult to achieve public confidence.”

8.10 The NDA itself has gone on record as saying: “There is no guarantee that the process will succeed in Cumbria. We need to bear in mind that the community has the right of withdrawal at any time and they do not need to justify their decision.”

8.11 Concerns that Cumbria may not ultimately accept a repository prompted the government to re-issue its invite to all local authorities to reconsider applying to volunteer to host a repository. In October 2009, Energy Minister Lord Hunt had to remind “local communities about the opportunity to consider hosting a geological disposal facility.” This is because as yet only three councils in the whole country have expressed an interest, all from Cumbria: Copeland, Allerdale and Cumbria County Council.

8.12 Yet the NNPS proceeds on the basis that:

— Any potential host community will accept all legacy wastes and all new build wastes—the inventory has yet to be even discussed in Cumbria. This view contradicts any notion of true voluntarism by a community.

— That a site can be found that can accommodate all wastes—the Fixed Unit Price (based on co-disposal of legacy and new build wastes) for the first round of new reactors might set this in stone before these matters are signed off on by a community

— In the interim, a repository host community might also have to accept a central store for all spent fuel and/or an encapsulation plant (although this has not been clearly expressed, which underlines the vagueness of the spent fuel management proposals).

8.13 The concerns over disposal are more than of a political and social nature. David Smythe, Professor of geophysics at Glasgow University has stated: “There is clear evidence, after the expenditure of some £400 million, mostly directed to the Sellafield area, that West Cumbria possesses no suitable rocks in which to site such a repository . . . To choose Sellafield yet again, by way of community voluntarism, and despite the lessons that have been learned, would be wrong and possibly illegal in international law.” In addition, by depending on one (as yet undecided) community, there may be significant implications for the taxpayer. It has been reported that “the Treasury is resisting plans to invite councils to bid for the right to house the waste because it fears that only one council—the one that includes Sellafield in Cumbria—will apply. This lack of competition would leave it able to demand extra funding of more than £1 billion.”

8.14 This means the government’s plans could practically force Cumbria not only take all radioactive wastes, but possibly also take a long-term store for a new build spent fuel and an encapsulation plant.

8.15 Yet in all of this it is vital to remember there is no environmentally acceptable and proven “solution” for the disposal of high level radioactive wastes and spent fuel. There is no disposal site operational anywhere in the world for spent fuel. Indeed, as Areva has noted: “No spent fuel direct disposal facility is currently available in the world.” Government assertions that a solution exists are therefore deeply misleading. The most advanced site, Yucca Mountain in the USA, has effectively been abandoned: “Yucca Mountain has been placed in what the Department of Energy calls ‘cold standby.’ Congress cut almost $100 million from its $386 million budget this year, forcing DOE to lay off 500 of its 1,400 workers. The new Obama administration budget proposes to stop funding altogether while a ‘blue ribbon’ panel explores other alternatives for nuclear waste disposal.” It is entirely misleading for government to point to other countries’ plans for possible waste disposal as a basis for allowing the nuclear industry to create more highly radioactive wastes.

8.16 The NNPS should be able provide clear information so that the IPC can answer all of the following questions:

— Is the operator of a new reactor currently in a position to say publicly exactly what its agreed plan to deal with spent fuel from any potential new reactors on site is? If so, what are these plans?

— Post-cooling, will spent fuel be put into wet- or dry-storage?

— Will storage be sub-surface or at surface level?

— Exactly how long will spent fuel be stored on site for?

— How will spent fuel be conditioned? Where?
— How will spent fuel be encapsulated? Where?
— When will title and liability of the operator’s spent fuel arisings pass to the government?
— Where will final disposal of new build spent fuel arisings eventually take place? When?

8.17 Greenpeace strongly recommends that the Committee read a recent article by Professor Gordon MacKerron, former Chair of CoRWM, on the issue of waste disposal and the nuclear NPS. It is attached in Appendix 1 of this submission.

9. Non-nuclear issues

9.1 It is clear from current investment forecasts that gas will remain a fundamental part of the UK energy mix for at least the next decade, whichever transition pathway is ultimately pursued. Given this fact, Greenpeace believes there is insufficient detail within the existing NPS regarding the pathway to bring about the decarbonisation of UK gas use, particularly in gas-fired power stations. There is no equivalent to the coal CCS demonstration programme announced last year by the government, despite the fact gas is and will remain a more significant source of the UK’s primary energy consumption than coal. Without the inclusion of the recommendation by the Committee on Climate Change to reduce emissions from the electricity sector by 2030, The NPS fails to provide sufficient certainty regarding the future CCS requirements for gas to either utilities looking to construct new gas capacity or to those concerned about the carbon implications of new gas capacity. The current requirement of Carbon Capture Readiness outlined in the NPS is largely a restatement of the existing conditions contained within section 36 of the Electricity Act 1989, and adds little to outlining the pathway from readiness to deployment, which remains a significant gap in the government’s energy and climate change policy.

10. Recommendations

— The Committee asks the reactor vendor companies and potential new build operators to provide detailed plans on spent fuel during storage and encapsulation.
— The Committee should ask the HSE and Environment Agency EA for their views on these plans.
— That the timelines on the local authority/IPC planning processes, the FDP/Fixed Unit Price processes and licensing run sequentially so that discussions and decisions take place in a progressive rather than conflicting manner.
— That the Committee recommends extending further the time for the consultation, particularly given that none of the NPSs will be designated before the expected general election.
— The NPS should contain a map and timeline for all energy infrastructure projects (plant, transmission etc), showing what order the government believe they have to come on-line to meet the government’s stated objectives.

APPENDIX 1

A key nuclear question that government shrugs off as a waste of time
Gordon MacKerron, Parliamentary Brief, 7th January 2010
http://www.parliamentarybrief.com/articles/1/new/mag/77/1038/a-key-nuclear.html

The British government is now firmly committed to helping the private sector build several new nuclear power stations. It has issued a “Draft National Policy Statement for Nuclear Power Generation” and given precise instructions to the new Infrastructure Planning Commission (IPC) on the issues it should consider when examining prospects for named potential sites. These instructions are lengthy and detailed—including questions such as amenity, cultural heritage and landscape value—but rather unlikely to cause any major upset, especially as the great bulk of named sites already have nuclear histories.

But there is one conspicuous absence from the list of IPC responsibilities. Government has specifically told the IPC that it “need not consider” the question of whether or not “effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations” as it is “satisfied that effective arrangements will exist”.

This sits slightly oddly with the fact that government is also consulting on the same question. However, the rather definite instruction to the IPC suggests that government is somewhat unlikely to change its “preliminary view” (this subtly different language being employed in the consultation section of the multiple documentation) that satisfactory waste arrangements will exist.

In another subtle linguistic shift, government, which previously talked of whether satisfactory arrangements “exist or will exist” now, with welcome attention to reality, only uses the future tense.

So how reasonable is it to suppose that satisfactory waste management arrangements will exist, with the corollary that waste will not prove to be an issue as we move towards specific nuclear investment proposals?

There are two questions to consider: national policy towards legacy waste and new build waste, and some important site-specific considerations.
NATIONAL ISSUES

The Committee on Radioactive Waste Management (CoRWM) in 2006 recommended that legacy waste—waste to which the UK is already committed as a result of past decisions—should best be disposed, eventually, in a geological repository.

CoRWM also made clear that while technical issues surrounding waste from new-build would be similar to those affecting the legacy, the political, social and ethical questions would be different. Specifically, while there was a need only to find “least-worst” solutions for legacy waste the calculus is different for new-build, where choice exists. The choice could be to opt for non-nuclear technologies if political social or ethical considerations—in all of which waste is deeply implicated—pointed that way.

Government readily accepted the legacy waste recommendation. But all subsequent official discussion about new-build waste has talked only of the technical similarities between managing legacy and new-build waste, and has ignored the wider political questions. Ignoring the CoRWM distinction between the two waste categories, government has insisted that geological disposal will be a satisfactory end-point for new-build waste.

While an earlier white paper did acknowledge that ethical argument might play a role, it said that ethical considerations “did not rule out” new nuclear power—government has never discussed the ethical issues at all. There is still a need for debate about the deliberate decision to create more waste in much wider terms than the technical—this debate would not necessarily preclude new nuclear construction, but it is important that arguments on both sides of the issue are publicly aired and resolved.

As for the issue of whether satisfactory waste arrangements “will exist”, a functioning geological repository is still a very long way off. Expressions of interest in hosting a repository have come from the Sellafield area but the Nuclear Decommissioning Authority, the responsible agency, believes that the earliest a repository is likely to be available is 2040.

Asking people in the current consultation whether or not they believe that satisfactory waste arrangements will exist is therefore asking for a rather highly developed capacity to forecast the long-term future. The only credible answer is that no-one really has any idea.

LOCAL ISSUES

In the probable (but regrettable) absence of the wider national and essentially political debate about the waste-related issues surrounding new-build, waste issues will in practice be aired at local planning inquiries.

Through the National Policy Statement process and its instructions to the IPC, government expects that the local planning inquiries into individual proposals for new build will deal in purely local, site-related issues. This may be a vain hope: in the late 1980s the Hinkley Point public inquiry into a (never built) reactor was expressly charged with dealing only in local issues and ended up taking just as long—over two years— as the earlier Sizewell inquiry, which had been supposed to resolve the national level issues once and for all.

But even if future inquiries do succeed in covering only the local issues, waste has now squarely become local. Operators of future nuclear stations are being required to develop long-term on-site storage for spent fuel—over 99% of the radioactivity produced by reactors. This is in contrast to the past practice at virtually all nuclear sites, where spent fuel was always shipped to Sellafield for reprocessing after a short cooling period. But government assumes (correctly) that in future private sector operators will find reprocessing uneconomic and in the absence of any other national facilities for higher-activity waste, spent fuel will need to be stored on-site. The surprise to many people is the length of the period over which this storage will be needed at local sites—160 years or thereabouts.

Why is this so elongated a time-scale? The logic has two parts.

First there is timeline that starts with a repository opening by 2040, disposing of legacy intermediate-level waste till 2075. Then legacy high-level waste will go in until 2130 and only then would new-build spent fuel start to be disposed.

Second there is the expectation that fuel in future would have a higher “burn-up” of the fissile uranium, making the fuel much hotter in radioactivity terms than current fuel, and necessitating a longer cooling period on site before it can be treated for disposal. So even if a repository did become available for new-build waste earlier than currently expected, disposal would be many decades into the future.

So, partly because of the history of poor past management of waste in the UK, new-build wastes will have to be stored on site for around 160 years into the future, and maybe longer—given the lack of certainty that a centralised repository will be built.

This could be a very large issue for local planning inquiries. Local residents will now be asked not only to accept a new reactor, they will also be asked to accept that they will become host to a very long-term radioactive waste storage site.
This is a radically new situation. Even at Sizewell B, the one place currently storing spent fuel on site, there was an expectation that sooner or later spent fuel would go to Sellafield. No such expectation will exist for future sites. The waste issue, apparently resolved by government’s instruction to the IPC and its conflation of legacy waste with new-build waste, may yet prove to be the most serious problem to resolve before new reactors can be built.

January 2010

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Supplementary memorandum submitted by Greenpeace

ENERGY NATIONAL POLICY STATEMENTS—POTENTIAL COMPLICATIONS AROUND THE SALE OF EdF LAND AND THE OUTCOME OF ANY PLANNING PERMISSION FOR NEW BUILD AT A VARIETY OF SITES

1. INTRODUCTION

1.1 In its oral evidence to the Energy and Climate Change Committee, Greenpeace mentioned the problem of dealing with the many decisions, consultations and processes which overlap or foreshadow crucial decisions in relation to proposed new nuclear power stations. One such agreement which may have implications for the proposed NPS and the remit of the IPC is the government agreement reached with EdF when it took over British Energy. In our view the agreement is clearly of relevance to a national policy statement which is site specific. Greenpeace offered to submit further evidence on this point to the Committee (evidence, response to Q 243).

2. EDF GOVERNMENT AGREEMENT DEAL ON LAND SALES

2.1 In September 2008 the Government agreed to the takeover of British Energy (BE) by EdF. The agreement contained undertakings on land sales by EdF. The undertakings were linked to planning consent for two EPRs each at Sizewell and Hinkley. The relationship between the EdF/government agreement, the NNPS and the IPC’s work has not been mentioned or discussed in the NNPS or other relevant documents. There is no discussion on how delays or refusals on applications for Sizewell and Hinkley may have an impact on potential development at other proposed new build sites because of the terms of the agreement. The most relevant paragraph of deal between EdF and government is set out below (further paragraphs are set out at Appendix 1):

3.2.3

— In particular, EdF will only be obliged to sell the land at Wylfa detailed in paragraph 3.2.1 if it is reasonably satisfied that it will be able to build two EPRs at each of Sizewell and Hinkley Point.
— EdF will be obliged to sell the land at Bradwell detailed in paragraph 3.2.1 above only if it goes on to secure planning consent for two EPRs at Sizewell.
— If EdF then goes on to secure planning consent for two EPRs at Hinkley Point, it will be obliged to sell land identified as potentially suitable for New Nuclear Build at either Heysham or Dungeness (HM Government will select which plot is to be sold) to a party chosen by EdF (provided that party is a credible nuclear operator). (emphasis added)
2.2 Wylfa—Sizewell and Hinkley and Bradwell

2.2.1 From 3.2.3 above: In particular, EDF will only be obliged to sell the land at Wylfa detailed in paragraph 3.2.1 if it is reasonably satisfied that it will be able to build two EPRs at each of Sizewell and Hinkley Point.

2.2.2 It is not known what EDF considers to be “reasonably satisfied”? Does its definition of “reasonably satisfied” cover planning consent for EPRs (and associated facilities eg spent fuel stores) at Sizewell and Hinkley, and does it also extend to essential associated infrastructure such as new transmission lines? For a map on this see New Civil Engineer.¹ It has been reported in a respected industry journal (see Appendix 2) that the ownership of EDF land next to NDA land is already causing delay in the NDA receiving monies from the sale of its land—that’s because the sale of the Wylfa land is dependent on EDF getting permission to build two reactors at Hinkley and Sizewell. The article also states the sale of Wylfa is dependent on there been no legal challenges to the NPS covering Sizewell, Hinkley and Bradwell.

2.3 Sizewell and Bradwell

2.3.1 From 3.2.3 above: EDF will be obliged to sell the land at Bradwell detailed in paragraph 3.2.1 above only if it goes on to secure planning consent for two EPRs at Sizewell.

2.3.2 It is not known precisely what EDF considers “secure planning consent” for two EPRs at Sizewell (this is different from “reasonably satisfied” as per the agreement on Wylfa). Questions arise as to whether, even if the IPC gives planning permission for reactors at Sizewell, if EDF will accept that as a firm basis for the sale of Bradwell even if it might not have secured planning consent on associated infrastructure eg for new grid transmission? EDF bought the NDA land at Bradwell during the NDA’s first round of land sales. It now wholly owns the area for potential new build.

2.4 Hinkley—Heysham and Dungeness

2.4.1 From 3.2.3 above: If EDF then goes on to secure planning consent for two EPRs at Hinkley Point, it will be obliged to sell land identified as potentially suitable for New Nuclear Build at either Heysham or Dungeness (HM Government will select which plot is to be sold) to a party chosen by EDF (provided that party is a credible nuclear operator).

2.4.2 This condition now no longer applies as the EU Competition Commission, in clearing the BE/EDF deal, has as one of its conditions that EDF is to “unconditionally divest a site potentially suitable for building a new nuclear power station located at either Dungeness or Heysham in the UK at the purchaser’s choice and to end one of the merged entity’s three grid connection agreements with the National Grid at Hinkley Point in the UK.”³ There are question marks over whether Dungeness, not currently recommended as a new build site in the draft list in the Nuclear NPS, has effectively been ruled out as a site attractive to other potential new build developers.

3. IPC List of Projects for Consideration

3.1 The original IPC list of 12 projects for consideration included only the applications for new nuclear reactors at Sizewell and Hinkley. The original IPC list and its granting of applications based on the Sizewell and Hinkley alone may have allowed everything to run subsequently and “free up” sites as per the EdF/government deal. However, the joint RWE-E.On venture, Horizon Nuclear Power, has added Oldbury and Wylfa to the list of projects the IPC might/should also begin considering from the start of its operations on 1st March 2010. The most recent IPC list of projects for submission of applications shows that the timing of the applications for some of the reactors looks to be delayed eg some may not happen until Nov 2011.⁴ ⁵

4. Questions for the Committee to Consider

— Has government had discussions with EDF over the potential implication for any delays to its plans at Sizewell and Hinkley and how these might impact on the sale of land as per the agreement with EDF?

— Has government had discussions with Horizon over the potential implications for any delays in planning consent at Sizewell and Hinkley and how these might impact on its plans at Wylfa?

— Does the EdF/government agreement effectively pre-empt and possibly invalidate the whole NNPS and associated NPSs (ie Overarching Energy and Electricity Networks)?

— Which government Minister will make the decision on matters relating to the agreement with EdF?

— If changes are made to the IPC’s powers, and it is left to make recommendations to the Secretary of State, who will then make final decisions on applications and what will the position be if the Secretary of State has to:
  — Designate the sites list (under the NNPS)?
  — Make the final planning decisions on sites?

— What are the likely knock-on effects at other sites if Sizewell and/or Hinkley applications are not granted?
— Given government policy on new build and the potential direction from a designated NPS, what powers will the IPC really have if it chooses to turn down an application at Sizewell or Hinkley—particularly as there is already an agreement for EPRs to be built at these sites?

— What is the potential impact on the government if:
  — The IPC decides against an application for new build at Sizewell or Hinkley?
  — If the relevant SECRETARY OF STATE decides against an application for new build at Sizewell or Hinkley?
  — How long can EdF delay in selling Heysham or Dungeness and not fall foul of its obligations under the EU Competition Commission clearance for its takeover of BE?
  — Does the EdF/government agreement pre-empt and override the powers of the regulators in forcing them to license EPRs at Sizewell and Hinkley?
  — What are the implications if, for some reason, the regulators delay approving the EPR but sign off on the AP1000?
  — What if the AP1000 design is approved ahead at other sites before the EPR is approved?
  — If EdF cannot build EPRs is it still obliged to undertake the land sales as per the agreement? Could sites sales be held up because of the reactor technology failing to be licensed in time?

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APPENDIX 1

LAND SALES EdF/GOVERNMENT AGREEMENT

3.2 SITES UNDERTAKING

3.2.1 EDF and HM Government have entered into an agreement conditional on the Acquisition becoming wholly unconditional which requires EDF to dispose of (at various stages): (i) the land EDCL owns at Wylfa to the extent that it is not required to do so pursuant to the Simultaneous Marketing Agreement; (ii) land currently owned by British Energy at Bradwell and any land at Bradwell that EDF or any member of the EDF Group may acquire under the Auction; and (iii) land adjacent to existing stations at Heysham or Dungeness (at the election of the Secretary of State) which is currently owned by British Energy and which adjoin existing stations operated by British Energy.

3.2.2 These disposals are subject to the satisfaction of various conditions intended to ensure that EDF will (by virtue of land it already owns or may acquire under the process outlined in paragraph 3.1 above and land it will acquire on the Acquisition Effective Date) following the Acquisition Effective Date, have access to sites suitable for the construction of four EPRs in the UK.

3.2.3 In particular, EDF will only be obliged to sell the land at Wylfa detailed in paragraph 3.2.1 if it is reasonably satisfied that it will be able to build two EPRs at each of Sizewell and Hinkley Point. EDF will be obliged to sell the land at Bradwell detailed in paragraph 3.2.1 above only if it goes on to secure planning consent for two EPRs at Sizewell. If EDF then goes on to secure planning consent for two EPRs at Hinkley Point, it will be obliged to sell land identified as potentially suitable for New Nuclear Build at either Heysham or Dungeness (HM Government will select which plot is to be sold) to a party chosen by EDF (provided that party is a credible nuclear operator).

3.2.4 EDF has agreed to procure that the relevant members of the British Energy Group will enter into an agreement for shared services to enable any purchaser of such land at Heysham or Dungeness (as applicable) to develop and operate the site.

3.2.5 EDF has agreed that EDF and British Energy shall be subject to a number of obligations in relation to the conduct of their business including so as to enable (and not to prejudice) Heysham and Dungeness to receive the necessary planning consents for nuclear new build as soon as possible.

3.2.6 EDF is required to grant credible nuclear operators access to the Bradwell, Heysham, Dungeness and Wylfa sites (including for the purposes of carrying out site surveys and investigations) and to provide information in respect of those sites to credible nuclear operators.
APPENDIX 2

NDA HAS RECEIVED $343.8 MILLION FROM LAND SALES FOR NEW REACTORS

Please see highlighted section in article below:

NDA has received $343.8 million from land sales for new reactors
Nucleonics Week Volume 50, Number 46, 19 November 2009

The UK Nuclear Decommissioning Authority has received GBP206.3 million (US$343.8 million) so far from sales of surplus NDA land at four sites earmarked for new nuclear power stations, according to information provided to Platts in a 9 November reply to a Freedom of Information, or FOI, request.

NDA said last month the sale of land at those sites would bring in GBP450 million. NDA's FOI response did not say how much money it expects to receive for each of three of the sites, but it did disclose details about the reasons for the total GBP243.7 outstanding and the terms for some of the deals.

The sale to EDF Energy of land at the Bradwell site in Essex accounts for GBP185 million of the GBP206.3 million received. Sales of land at Wylfa in Wales and Oldbury in Gloucestershire have brought in deposits of GBP13.8 million and GBP7.5 million, respectively. The Wylfa and Oldbury lands were sold to a joint venture of E.On UK and RWE Npower called Horizon Nuclear Power. All of those sales were announced in April. At that time, NDA spokesman Bill Hamilton said the total amount for the three sales was GBP387 million.

On 28 October, NDA announced it had sold a fourth piece of surplus land—190 hectares (470 acres) at the Sellafield site in Cumbria for “at least GBP70 million” to a consortium of Iberdrola, GDF Suez and Scottish & Southern Energy.

In its reply to the FOI request, NDA said it has received no money yet for the Sellafield land and that the sale was actually an option to buy the lease on part of the site (NW, 12 Nov, 9).

In the FOI response, the NDA refused to identify which companies participated in the NDA's “market engagement” for the land at Sellafield, citing commercial confidentiality. It said “several parties came forward” during the market engagement phase and that one company other than the Iberdrola/GDF Suez consortium “progressed to the discussion-of-terms stage.” The NDA’s 9 November answer to the FOI request did not say whether the GBP185 million it has received from the Bradwell sale was the total expected and Hamilton would not elaborate.

In May, Hamilton said the bids on Oldbury, Wylfa and Bradwell were based on “lump sum, upfront payments,” not payments contingent on or deferred to the beginning of construction (NW, 7 May, 4).

In an interview November 10, Hamilton said his earlier statement was correct but that there were “two small issues remaining as to why we have not received full payment” on sites at Oldbury and Wylfa.

On the Oldbury land, there is a “small corner of the site sold that is actually part of the existing licensed site at Oldbury,” Hamilton said. Magnox North operates two Magnox reactors at the site on behalf of the NDA on land adjacent to the land leased.

“That corner almost certainly won’t be needed to be used by the buyer, but we sold it just in case,” Hamilton said. “If they do need this corner of the site, Magnox North would have to de-license it first, but the buyer hasn’t decided yet whether they need it. That’s the reason E.On hasn’t paid all the money yet,” he said.

Hamilton said he didn’t know how big the “corner” of the property was; only that it was “very, very small. I don’t believe the new owner would need the corner, but they’re still looking at the detailed designs,” he said.

He said the amount of money to be paid for the site, which he declined to disclose, wouldn’t change whether the corner is taken or not.

With regard to the Wylfa land, Hamilton said the delay in payment is because part of the land sold is owned by EDF Energy.

The NDA and adjoining EDF plots were sold under longterm leases together, but the deal is complicated by an agreement EDF secured with the British government during its deal to buy British Energy. Under that agreement, EDF would release its part of the Wylfa plot only if it were allowed to build its four planned EPRs on other sites. Sizewell, Hinkley Point and Bradwell were included in the government’s nuclear National Policy Statement as locations for potential new nuclear units (NW, 12 Nov., 1).

The NDA's 26 November 2008 request for expressions of interest document governing the land sales said EDF’s release of its hold on its share of the Wylfa plot was also conditioned on whether there are any legal challenges to the finalized National Policy Statement covering Sizewell, Hinkley Point or Bradwell.

The statement, published 9 November, named 10 UK sites as potential locations for new nuclear units (NW, 12 Nov, 1). The final nuclear statement, along with others on energy policy, is not expected to be approved until spring 2010. Hamilton said November 10 the Wylfa sale won’t be completed until the National Policy Statement is finalized.
Memorandum submitted by Hastings Borough Council

CONSULTATION RESPONSE TO DRAFT NPS EN-1 and EN-6 ON NUCLEAR ENERGY WITH PARTICULAR REFERENCE TO THE EXCLUSION OF DUNGENESS

INTRODUCTION

1. The nominated site at Dungeness has been excluded from the draft Nuclear NPS on the basis that it did not meet discretionary criterion D6. It was concluded that given the nature of the habitat and potential difficulties in mitigating the impacts on the shingle system, the building of a new nuclear power station would cause an adverse effect on the integrity of the Special Area of Conservation that might not be avoided or mitigated. There were also concerns under criterion D2, but it was concluded that Dungeness should not be ruled out against this criterion at this stage.

2. The Government has specifically invited views as part of its consultation on its preliminary conclusion about the suitability of Dungeness.

EXECUTIVE SUMMARY

1. Dungeness Power Station currently employs over 1,000 people. It is a major local employer and has significant benefits for the local economy. It is considered that future socio-economic benefits, within the travel-to-work area (approx 25–30 miles) which includes Shepway, Rother and Hastings districts, have not been given sufficient weight in the decision making process to exclude Dungeness.

2. Hastings Borough Council believes that there is no evidence at this stage to conclude that a combination of avoidance, mitigating and compensating measures will not counter the adverse environmental impact on the internationally designated ecologically important site.

3. Hastings Borough Council therefore believes that the Government’s preliminary conclusion about Dungeness is premature, and urges that this site be included in the final Nuclear NPS. Continued exclusion of Dungeness would preclude full public consultation and a comprehensive consideration of the merits and disadvantages of this site, which we believe is of national strategic importance in terms of reducing the gap between energy supply and demand and reducing carbon emissions well before 2025.

COMMENTS

1. There are several imperative reasons of overriding public interest which argue for the inclusion of Dungeness on the list of sites within the Nuclear NPS.

2. The construction of a facility at Dungeness can be carried out relatively quickly and the site will have a nuclear grid connection available from 2016, enabling rapid connection of the new facility. Early deployment of nuclear power stations is in the public interest because it will maximise carbon emission savings.

3. The siting of a new nuclear facility at Dungeness will offset the negative impact that the decommissioning of Dungeness A and B has on the production of non-carbon based energy in the southeast, and will help reduce the rapidly growing gap between electricity production (supply) and demand in this region.

4. The Dungeness site can make a meaningful contribution to the UK’s non-renewable capacity well before 2025. It cannot be assumed that development of the other sites would be sufficient to meet the national target in this respect.

5. It is premature to conclude that the direct loss of vegetated shingle habitat from the Special Area of Conservation cannot be adequately compensated for. There is no compelling evidence that a combination of measures including avoidance, mitigation and compensation is not viable.
6. In the absence of more detailed consideration of the environmental issues, it can be argued that the biodiversity action plans and other mitigation measures that would accompany the development and operation of a new nuclear facility could help to further protect the internationally designated ecology site at Dungeness from coastal erosion.

7. Section 4.1.1.iii of the Draft Overarching National Policy Statement for Energy (EN-1) states that when examining and determining applications for energy infrastructure that the Infrastructure Planning Commission (IPC) should take into account adverse environmental, social and economic impacts. This principle in relation to socio-economic impacts was not applied in the Strategic Siting Assessment process, and therefore, the exclusion of Dungeness on the basis of nature conservation is intrinsically flawed and precludes a balanced assessment of whether identified adverse impacts outweigh the benefits, taking into account measures to avoid, reduce or compensate for adverse impacts.

8. There are compelling arguments for the inclusion of Dungeness on socio-economic and regenerative grounds, and these should be given more weight.

9. The presence of a nuclear power station at Dungeness is a major driver for growth and prosperity, providing significant employment for local people in an area where there is significant deprivation. Shepway is the fifth most deprived area of those sites nominated (123rd on the IMD rankings) and is thus significantly more economically dependent on Dungeness than other included nominated sites are on nuclear facilities in their areas.

10. Nearby Hastings (pop 85,000) is a source of employees for Dungeness. Hastings is in the most deprived 10% of local authority areas nationally (IMD 2007), with some wards in the most deprived 2%. It is the most deprived town in the South-East and is the country’s second most deprived coastal resort town after Blackpool. Unemployment at 6.2% is well above the national average of 4.1%, and Hastings is an unemployment “hotspot” according to the DWP’s official definition.

11. The construction of Dungeness A and B provided employment to a large number of local people in the surrounding area including Hastings, primarily in construction and technical trades. It is anticipated that the building and operation of a new site at Dungeness would create hundreds of new local employment opportunities and significantly contribute to the economic profile of the area, and bring renewed economic uplift.

12. Dungeness A and B currently employ over 1,000 people. Some Dungeness employees reside within Hastings, and a larger number live within the “travel to spend” area. Thus, Dungeness is an important contributor to the Hastings’ economy. Furthermore, the site attracts professional working age incomers, thereby improving the overall economic profile of the area. The Dungeness wage bill contributes in excess of £30 million annually to the local economy. It is likely that a new facility at Dungeness would increase this by an order of magnitude, providing long-term wealth generation in an area with no alternative major employment locations of a similar scale.

13. The siting of a new nuclear facility at Dungeness will help offset the negative impact that the decommissioning of Dungeness A and B will have on the production of non-carbon based energy in the southeast, and will help reduce the rapidly growing gap between electricity production (supply) and demand in this region.

14. Sussex Coast College Hastings is now an approved “PAA/VQ/SET” centre for the delivery of Awareness of Nuclear Engineering, Radiation Protection and NVQs 2 and 3 in Nuclear Decommissioning. Working in partnership with the University of Brighton, the College will be offering a new Foundation Degree in Nuclear Engineering. Both Sussex Coast College Hastings and University Centre Hastings are optimistic that they would build from this strong base to provide skills and qualifications to enable Hastings residents to take up opportunities in the construction and operational phases of a new nuclear facility at Dungeness.

15. Two key features of the Hastings economy are the low skills and educational base and the number of small, low value employers supplying a local market. The contribution that a nuclear facility at Dungeness makes to providing stable, higher quality employment is a significant factor in the regeneration of the area.

16. Hastings Borough Council strongly objects to exclusion of Dungeness and urges that it be included in the final Nuclear NPS to enable fuller consideration and public consultation on a site which is of national, regional and local strategic importance.

January 2010

Memorandum submitted by Jenny Hawkes

There appear to be 4 consultation exercises taking place between November 2009 and February 2010 relating to energy and climate change that members of the public should be consulted on, but know little about. Public engagement has been badly handled, with 4 separate consultations to different bodies about linked issues, all taking place at the same time. It has been difficult to find out about the consultation
exercises and what to put into each submission. So I have had to combine my responses into one document. The public consultation processes are so flawed and confusing that the law may have been breached and will need to be tested through judicial reviews.

I have undertaken a lot of independent research and now believe that expanding the nuclear industry in the UK will have a huge long term detrimental effect on the economy, jobs, skills, local and regional business. By focussing most economic and business interests on one main source of power production it will deprive other types of industry of investment for many years; it will stifle diversity and has the potential to destroy the environment in and around the Lake District. Also, there is no justification for the Secretary of State to approve applications to build and operate two new types of nuclear reactor in the UK. My reasons for such views relate to:

1. Un tended and flawed public consultation.
2. Economic Assessment.
3. Stifle diversity.
4. Safety and timescales.
5. Environmental issues.
6. Infrastructure.

1. Un tended and Flawed Public Consultation

1.1 I do not agree with the Secretary of State’s views in relation to the proposed expansion of nuclear power in the UK including West Cumbria (at Braystones, Sellafield and Kirksanton) or his statement to the house on 9 November 2009 in which he stated that the production of nuclear power is cost effective, safe and reliable because of a lack of reliable, objective evidence from DECC. The public consultation processes around the National Policy Statements and the justification process are totally unacceptable and do not comply with the government’s own consultation criteria for formal consultation set out in the revised Government Code of Practice on Consultation (July 2008).

1.2 There has been no legitimate or effective consultation with the public about the NPS or Regulatory Justification process. The public have not been given the opportunity or time to respond effectively to the Secretary of State’s decisions on the proposals on the Regulatory Justification of the new nuclear power station designs. They have not been given access to the needs based evidence on which those decisions were based, the opportunity to challenge those decisions, or to raise any other matters which they believe are relevant. It appears that decisions about future energy production have been made on market based evidence from energy producers rather than a detailed joint needs assessment.

1.3 The National Policy Statement framework and the Regulatory Justification consultations are not transparent, responsive or accessible. The key issues of health, need, location and safety cannot be discussed by the public through the NPS framework which means that significant matters of public interest have been excluded from consultation processes.

1.4 There is no clarity about what is being proposed, or evidence of what the impact of the proposal are likely to be. There is no evidence based information to the public on the expected costs and benefits of the proposals or what scope the public have to influence the processes. Nor have the public been involved early enough in the planning process to modify or change proposals when there is still time to do so.

1.5 The law may have been breached in relation to the lack of comprehensive public consultation and engagement in other ways too. The short duration of public consultation about one of the most significant and complex planning decisions to be made this century renders the whole approach unacceptable and open to legal challenge. In the revised government code of practice on consultation (July 2008), Criterion 2 states that consultation should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible. For example, NPS site specific consultation with the public at Braystones in West Cumbria took place over a four day period at the end of the consultation period with the main consultation meeting with the public taking place on 16 January. In essence there has been no valid public consultation and engagement. The public were not offered a longer timescale.

1.6 The public consultation processes are not easy to understand or to access and are clearly targeted at major national organisations and bodies including the nuclear industry. Local communities who will be affected by the proposals set out in the Secretary of State’s proposals have been given minimal access to genuine consultation. There is a wide range of consultation techniques that DECC could have used to explain the very complex issues under debate but these have not been offered and people who do not have access to a computer have struggled to obtain information.

1.7 Nor has the general public been given easy access to the relevant evidence or government information in order to bring rigour to challenge the decisions being made. I have had to apply for a range of relevant information on the development of nuclear industries through the Freedom of Information Act.
1.8 Since April 2009 I have repeatedly written to Mr Miliband asking for information from DECC relating to costs, safety, reliability and environmental issues in relation to the evidence for his statements to the House advocating the nuclear energy developments. In particular I asked for evidence that led to his view that nuclear is a low-cost, low-carbon form of electricity generation which can yield economic benefits to the UK.

1.9 I have received no acknowledgement or response from Mr Miliband, so, in November 2009 and again in December 2009, I wrote to Gordon Brown saying that as an ordinary member of the public I felt unable to make accurate comment on the serious issue of new nuclear power based on evidence from DECC. I had had no answers to the questions that I have posed to Mr Miliband. I also pointed out that time is now of the essence if members of the public are to be encouraged to respond to the NW Select Committee in the North West or the government’s consultations. I was very disappointed that Mr Brown was prevented from seeing my brief correspondence by civil servants at the Direct Communications Unit at number 10. Whilst I understand that Mr Brown receives thousands of letters each week and is unable to respond personally to all of them. By simply forwarding the letter to DECC, about whose lack of response I was complaining, adds to my concerns about the flawed consultation processes. I copied all the correspondence to my own MP, Lady Ann Winterton who has also asked for a response from Mr Miliband. To date neither she nor I have even received even an acknowledgement from Mr Miliband or DECC.

1.10 As a result of my research I can find no justification for the Secretary of State to approve applications to build and operate two types of nuclear reactor in the UK.

2. Economic Assessment

2.1 I strongly disagree with the Secretary of State’s view that nuclear is a low cost form of electricity generation which can yield economic benefits to the UK. Mr Miliband has failed to provide evidence on the comparative costs between the main sources of future power production, in particular renewables, fossil fuels and nuclear power production. It is unclear how the overall costs of nuclear power production have been determined by DECC. These costs do not appear to include the total cost of nuclear power production cycle which is huge and could lead to fuel poverty in this country. Massive costs range from the mining and transportation of uranium to this country; transporting fuel and spent fuel across England and Wales (Scotland has already said no to nuclear); production of nuclear fuel from the raw materials; building and running nuclear power plants and ancillary non-nuclear power plant; de-commissioning of nuclear-related plants; dealing with increased toxic waste from new types of nuclear reactors (7x greater than existing reactors); legacy nuclear waste (50 years worth of highly toxic waste sitting in ponds at Sellafield that no one knows what to do with) and taxpayers’ underwriting of the safety aspects of nuclear power. In early summer 2009, in a government debate on additional funding for nuclear reprocessing at Sellafield, Jamie Reed, MP reported that £1.3 billion per year is currently being spent on legacy nuclear waste at Sellafield. My research based on detailed evidence shows that nuclear power is not financially viable or sustainable and has the highest cost of all energy production methods.

2.2 Mr Miliband has failed to explain where the substantial financial investment is to come from or how the government can be assured that companies will be able to fund and build any new nuclear power stations or that there will be no future burden on the tax payer. He provides no evidence for his statements that “there are unlikely to be any economic dis-benefits arising from new nuclear power stations or that there are benefits to the fuel poor from limiting increases in the cost of electricity generation from nuclear power.”

2.3 There are many sources of strong evidence which set out the reasons why the UK should not pursue the further development of the nuclear option. 3 key pieces of evidence that should be considered by the Select Committee are:

(i) The evidence from France shows that the French, who have adopted nuclear power on a large scale, are still importing energy as they cannot afford nuclear power and 25% of people in France are living in power poverty. Their oil imports have not been diminished, their nuclear safety record is very poor.

(ii) The most detailed, independent, recent analysis of the comparative costs of nuclear power come from Citigroup Global Markets Inc. research and analysis paper of 9 November 2009 “New Nuclear—The Economics Say No”. It explains in detail why there should be no investment in nuclear new build. There is no similar independent evidence from DECC.

(iii) In November 2009 the Guardian newspaper reported that Sellafield Ltd admitted its £1.8 billion nuclear reprocessing plant may not be able to meet NII orders for operation, as a result of continuing technical problems. Two of the plants have been breaking down repeatedly, and the third has been closed after a rise in radiation levels. Work has started on a new £100 million evaporator, but it is behind schedule, and probably won’t come on stream before 2013. Germany may sue if spent fuel is not returned reprocessed. Closure of the plant would slow decommissioning of British nuclear plants, and remove much of the £70bn needed for that process, which reprocessing at Thorp was supposed to raise a good deal of, meaning another drain on the British public’s taxes.
3. **Stifle Diversity**

3.1 When Mr Miliband launched the consultation at the Houses of Parliament on 9 November 2009, he made no mention of how the taxpayers would pay for this nuclear gamble, nor the cost to other developing energy technologies of putting all our eggs in the nuclear basket. For example, there is a wide range of developing energy technologies and higher education opportunities across the whole of the north west of England that are being deprived of investment because of the impact of concentrating all available funding on the expanding the nuclear industry. One of the simplest, cheapest, quickest and viable ways of maximising potential benefits for the public and businesses communities across the region is not to choose nuclear but to improve our energy efficiency. Everyone can be involved, we can do it now, safely and it won’t cost the earth.

4. **Safety and Timescales**

4.1 The costs of producing power from nuclear sources are prohibitive; also there is no way that the new nuclear reactors could be built in time. The government already subsidises the nuclear industry and there have also been proposals to add a tariff to consumer bills to pay for the excess costs of nuclear power. Two new types of nuclear reactors are being proposed for plants in this country. One of a type proposed for the reactors in West Cumbria is being built by a French company called Areva at the Olkiluto plant in Finland and at Flamanville in France. Both building programmes have fallen far behind schedule because of design problems and are way over budget. The French company is involved in a legal battle in Finland with the end user utility company about the overruns. The new American Westinghouse design is also running behind schedule. Both designs have serious flaws.

4.2 The HSE has to approve the safety of any new designs before they can be built in the UK. Kevin Allars, director of new nuclear build at the HSE, admitted frustration that the design assessment process of the new nuclear reactors being proposed for this country is already behind schedule owing to insufficient information from the companies promoting the reactors and to the lack of enough trained staff in his own directorate to do the work. In a report published on 26 November 2009, the HSE said that it is too early to say yet if issues relating to the structural integrity of the design of the AFAA EPR can be resolved simply or whether it may result in design modifications being necessary. An alternative nuclear reactor design being proposed for the UK is the new American Westinghouse design. This design was owned by BNFL prior to Labour selling it off to Westinghouse, is now owned by Toshiba of Japan. It too, is running significantly behind schedule and has also been criticised by the HSE. Their report questions aspects of the civil and mechanical engineering plans as well as the structural integrity of the Westinghouse design.

4.3 Nuclear technology is not robust, safe or environmentally friendly. There were 1,767 leaks, breakdowns, or other safety “events” at British nuclear plants between 2001 and 2008. A recent Nuclear Installations Inspectorate (NII) report says about half were serious enough “to have had the potential to challenge a nuclear safety system”. A radioactive leak, undiscovered for 14 months, was found at Sellafield just before a visit by the prime minister in February last year. A board of inquiry concluded the leak went unnoticed because “managerial controls over the line were insufficient and there was inadequate inspection”. Meanwhile, elsewhere on the site two containers of highly radioactive material went missing. The operator said it was most likely that “the anomaly lies within the accounting procedures”.

4.4 Since September 2009 there have been four fires at nuclear power stations, three in France in September and November, and one at Dungeness B in Kent last month. A spate of nuclear leaks last year forced the French government to address public fears by ordering drilling into, and sampling, of the groundwater under all 58 French nuclear reactors. Last July, a heatwave shut a third of French reactors, because rivers became too hot to act as coolant. France was forced to import electricity from the UK.

4.5 Should there be any judicial reviews as a result of the flawed consultation processes, the timescales could run significantly behind schedule.

5. **Environmental Issues**

5.1 Mr Miliband also stated that nuclear power is proven and reliable—it is not. Nuclear technology is not robust, safe or environmentally friendly. The Government is proposing to sit three new nuclear power stations between Workington and Ulverston on the West Cumbrian coast—in the very area which has suffered, and regularly suffers, from unpredictable extensive flooding. Worse still, DECC is considering burying nuclear waste, that they don’t otherwise know what to do with, in the same areas Mr. Brown visited when he spoke to the flood victims. There is no proven, safe or reliable way anywhere in the world of disposing of nuclear waste so why bury it on a flood plain in West Cumbria? There are concerns about water contamination from the Yucca Mountain Project where America buries its nuclear waste, in an area where the annual rainfall is 9.5" per annum. Cumbria averages 35.84" rainfall per annum, even without the current exceptional storms. In December 2009, Dr John Ashton, Director of Public Health in West Cumbria raised concerns about water contamination with the flood victims in West Cumbria, how much worse could it be for local people if flood water became contaminated with radio-active waste?
5.2 My research shows that nuclear energy is not CO₂ free. The only part of the nuclear power production cycle that seems to be carbon neutral is the actual running of the nuclear power plants; the government also appears to be overlooking the fact that nuclear power plants produce many other toxic emissions, far more damaging to the environment than CO₂. It’s interesting that Sellafield’s nuclear reprocessing plant has to have its own reliable gas fired power plant which burned £30 million of gas last year.

6. INFRASTRUCTURE

West Cumbria Issues

6.1 There has been no mention of how the regional infrastructure in West Cumbria will need to be developed during and post any construction phases or who is to fund it. Local networks such as road, rail, power supplies, drainage, sewers and telecommunication connections are currently overloaded and insubstantial. For example, there have been no discussions with Network Rail about any development of the coastal railway line which is already prone to flooding and needs continuing significant work to maintain the single track. Access by road to West Cumbria is difficult with only one main A road, the A595 which, when closed for any reason, results in long detours across mountain roads. Road access to the villages of Braystones and Kirkstones is very poor because of the topography of the area. Extensive and robust flood defences will need to be installed before any of the construction work begins around the proposed sites at Braystones, Kirkstone and Sellafield because of river and coastal erosion, and the area is crossed with rivers which regularly flood. RWE has proposed building a marine offloading facility at Braystones to bring in construction supplies by sea including the nuclear reactors. They have taken no account of the lack of draught available even at high tide or the need to dig out the sea bed which is heavily contaminated with plutonium.

7. HEALTH MATTERS

7.1 The Committee on Medical Aspects of Radiation in the Environment (COMARE) will only pronounce on the health aspects of nuclear power after the closing dates for the consultation on the Energy NPS and your response submission dates.

7.2 Nor can I find any evidence based health information from the local PCTs on health matters in relation to public health and nuclear power, of the possible radiological health detriment to the people of West Cumbria from Sellafield or the potential health detriment arising from three new nuclear power plants. There is no mention of the potential health detriment arising from the management and disposal of nuclear waste in and around West Cumbria, the continuing toxic emissions into the atmosphere or ongoing discharges into the Irish Sea.

7.3 I had assumed that, as the most authoritative health body in West Cumbria, NHS Cumbria would be submitting a response to the NW Select Committee and to the governments’ consultation on Nuclear Power, regarding the possible radiological health detriment to the people of West Cumbria from Sellafield or the potential health detriment arising from three new nuclear power plants at Braystones, Kirkstone and Sellafield. In the light of repeated flooding in Cumbria over recent years the Public Health response should give a detailed assessment of the potential health detriment arising from the management and disposal of nuclear waste in and around West Cumbria. Also I expected that such a response would take account of the Redfern Inquiry into human tissue analysis in UK nuclear facilities. Under the Freedom of Information Act I asked if Dr John Ashton could send me a timely copy of the response and asked him if he intended to publish it in the national and local press. To date I have not received any acknowledgment of my request or a copy of his response.

7.4 The most informative evidence based health research I can find is from the German KiKK study which has been accepted by the German Government and shows increased cancer incidences near all 16 German nuclear reactors and a 2.2 x increase in child leukemias which both have proven strong links to living near and working in nuclear reactors.

January 2010

Memorandum submitted by the Health and Safety Executive

SUMMARY

The Health & Safety Executive (HSE) welcomes the opportunity to provide written evidence to the Energy and Climate Change Committee in relation to the draft nuclear National Policy Statement (NPS), and matters relating to the regulation of new nuclear power stations by HSE’s Nuclear Directorate (ND).  

HSE welcomes the development of the system of national policy statements and the new planning regime which we believe has the potential for reducing the disproportionate burden placed on HSE and other regulators compared with the previous regime of extensive and long-running planning inquiries.

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62 HSE Nuclear Directorate includes HM Nuclear Installations Inspectorate (NII) which regulates the safety of all nuclear licensed sites in Great Britain, and the Office for Civil Nuclear Security (OCNS) which regulates security at all civil nuclear sites.
While we support the identification in the draft nuclear NPS of strategically suitable sites for nuclear generation, it will only be following detailed assessment of a specific development proposal that HSE will be able to determine whether a particular site is acceptable from the point of view of nuclear safety and security.

Along with the Environment Agency,\(^{83}\) we are continuing to undertake Generic Design Assessment of two potential nuclear power station designs. In parallel with this we are preparing to begin assessment, later this year, of an application for a nuclear site licence for a power station development at Hinkley Point based on one of the designs undergoing GDA. Granting of a licence, which is not dependent on the completion of GDA, provides HSE with regulatory powers and controls over activities which have the potential to affect the safety of the power station, for example the procurement of nuclear safety related components. HSE will liaise closely with the Infrastructure Planning Commission to ensure a mutual understanding of our respective assessment regimes and an effective working interface.

1. INTRODUCTION

1.1 In August 2007 HSE and the Environment Agency jointly began their newly-developed process of Generic Design Assessment (GDA) of four nuclear power station designs proposed as candidates for construction in the UK. Since then, two of the vendor companies have withdrawn or suspended their designs from GDA, with assessment work continuing on the Areva/EdF UK European Pressurised Water Reactor (EPR) and the Westinghouse AP1000 reactor design. Both are latest generation pressurised water reactors. Versions of EPR are currently under construction in France, Finland and China. The AP1000 design is currently under construction in China.

1.2 In November 2009, HSE published a suite of reports on Step 3 of its four step GDA process for the EPR and AP1000 designs. Those reports summarised progress to date and highlighted issues to be resolved during the remaining, most detailed assessment stage of GDA, which is currently underway.

1.3 The GDA process enables the HSE and the Environment Agency to assess new nuclear power station designs before construction commences at a time when they can have most influence over the design. Following its step 3 assessment, HSE continues to consider that both designs could be suitable for construction in the UK, subject to satisfactory progress being made in a number of technical areas.

1.4 The HSE step 3 reports\(^{84}\) were, in effect, mid-point progress reports on our assessment of both designs. Despite some initial resource shortages in some technical areas, we have made good progress on our assessment and we have identified issues that require further work. Since last November we have been engaged in discussion with the design companies, who are putting in place robust plans to resolve the identified issues.

1.5 Some complex technical issues relating to both the EPR and the AP1000 remain to be resolved, for instance the way the reactor control and protection systems are arranged for the EPR and the construction methodology proposed for the AP1000. These are issues that other international regulators are also picking up and ND is working closely with them. One of the added benefits of working closely with other international regulators is that it allows us share information and promote a shared understanding of international standards. This not only improves levels of nuclear safety across international borders, but also promotes greater harmonisation of regulatory standards.

1.6 Once ND is content with its detailed examination of the evidence given by the GDA safety analysis, it will issue a “Design Acceptance Confirmation” (DAC). This will go on to form the basis for a site-specific regulatory assessment. We will set out our conclusions about the acceptability of the designs for eventual construction in the UK, in reports that, again, will be made public. In the interim, HSE and the Environment Agency continue to publish joint GDA progress reports every quarter on HSE’s website.

2. LICENSING PROCESS FOR NEW NUCLEAR POWER STATIONS

2.1 A potential nuclear power station operator requires a site licence to be granted by the HSE’s Nuclear Directorate to use the selected site and, under conditions attached to that licence, to obtain HSE’s permission to begin construction of the nuclear safety related parts of the plant. It is planned that a GDA DAC will underpin our regulatory permissions for the construction of a series of reactors that will be identical, apart for any changes to account for the specific site or operator’s preferences.

2.2 Before granting a licence, we need to be sufficiently assured, amongst other things, about the proposed management arrangements, resourcing of the licence applicant, siting aspects, and the overall safety of the proposed type of activities to be conducted on the site. The information needed to support the application for a site will be much less than that needed to secure the GDA DAC.

\(^{83}\) The Environment Agency regulates radioactive discharges to the environment and radioactive waste disposal in England and Wales.

\(^{84}\) The step 3 public summary reports on each design are supported by a series of detailed technical reports. In all we published 35 reports as part of HSE’s commitment to openness and transparency throughout the GDA process. These and earlier GDA reports can be viewed at www.hse.gov.uk/newreactors.
2.3 The site licensing process can overlap the last stages of GDA and is expected to take HSE between 6–12 months to complete. If granted, the licence and the attached standard licence conditions would apply throughout the lifetime of a nuclear installation. This period covers on-site construction, nuclear component manufacture and installation, commissioning, operation, modification and eventual decommissioning of both the nuclear generating plant, and any interim radioactive waste or spent fuel stores. We may grant a nuclear site licence before we have completed assessment of all of the features of the proposed development. This would not constitute our regulatory “approval” of the proposal, and design changes could be required before permission was given for the start of construction of nuclear safety related plant under licence conditions. The grant of a licence would provide us with regulatory powers and controls over the licensee’s activities which have potential to affect the safety of the proposed power station, for example the procurement of nuclear safety related components intended for installation at the plant.

3. HSE/ND ENGAGEMENT WITH THE DEVELOPMENT CONSENT PROCESS FOR NEW NUCLEAR POWER STATIONS

3.1 The Sizewell B and Hinkley Point C planning inquiries in the 1980s were extensive and long-running. For Sizewell B, design safety and HSE’s regulatory role and processes occupied almost a third of the 340 Inquiry’s sitting days, which necessitated the diversion of a significant fraction of HSE’s small nuclear specialist resource to address that demand. Nuclear safety and its regulation again featured highly in the considerations of the Hinkley Point C inquiry with a smaller but still significant demand on HSE’s specialist resource. There has been no really substantial change to the nuclear regulatory system since, and the Governments’ various policy papers and consultative documents in this area confirm the robustness of the UK nuclear regulatory regime. Furthermore, the IAEA has concluded two international peer reviews of the UK’s system and nuclear regulatory arrangements during the last four years.

3.2 HSE notes the statements in the draft nuclear NPS that the IPC should make its decisions in relation to a development consent application on the basis that:

— the relevant licensing and permitting regimes will be properly applied and enforced;
— it does not need to consider matters within the remit of the nuclear regulators; and
— it should not review or revisit any regulatory decision that has already been made in relation to the proposed development.

3.3 The draft nuclear NPS acknowledges, however, that where the regulatory approvals processes in relation to a design or a site specific application are incomplete at the time that the IPC is considering its decision on a development consent, then the IPC may need to seek a “letter of comfort” from the regulators on the anticipated timing of regulatory approvals and any conditions that may be attached to such approvals. The draft nuclear NPS also suggests that there will be need for the IPC to liaise with the regulators before granting development consent to ensure that any conditions which the IPC intends to add do not undermine the regulatory approvals process.

3.4 HSE agrees that understanding of the mutual expectations of the regulators and the IPC is important, and we will work with the IPC to ensure that our regulatory regime and the development consent process can work effectively and efficiently together.

3.5 The new planning consent process does not mean that nuclear regulatory matters are subjected to any less public scrutiny than they were previously. Since the 1980s, HSE has adopted a policy of increasing openness and transparency in all its workings and a great deal of information relating to its regulatory processes and decision making is now made publicly available. This should help to underpin our independence from government and from the nuclear industry and to reassure the public that the safety and security implications of the designs are properly considered. The Government’s publications and IAEA reviews referred to above emphasise this.

3.6 With regard to new nuclear power stations, the GDA process was designed to be open and transparent from the outset, and decisions were taken early on to encourage the vendor companies to publish their safety, security and environmental submissions and to invite comments from the public on those. This led to an unprecedented amount of nuclear power station design and safety case information being published on the vendor companies’ websites. Summaries of the public comments received on that design information are published by HSE in reports on the public involvement process at the end of each step of the GDA process.

3.7 As well as publishing general information and our GDA guidance and technical assessment reports, we have started publishing a range of other documents, including quarterly reports that summarise our progress and highlight the key challenges we face going forward, and the regulatory issues we have raised against each of the designs we are assessing. We also make ourselves available to speak at regional, national

85 “Vendor Companies” used in this note is the same as the “Requesting Parties” referred to elsewhere in descriptions of the GDA process.
and international events, and have organised seminars for key stakeholders. During GDA step 3, this included two events for non-governmental organisations (NGOs) and two for potential operators. This engagement will continue throughout the GDA process.

4. Specific Issues Raised in Evidence to the Committee

4.1 Certain of the issues raised in written and oral evidence provided to this inquiry of the Energy and Climate Change Committee, relate to matters which are within HSE/ND’s area of regulatory interest. As with any other relevant stakeholder comments, we will take note of these and where appropriate take them into account in our regulatory assessment. However, in order to assist the Committee, we provide below a commentary on the issues that have been raised with it most frequently during this inquiry.

(i) Radioactive waste and Spent Fuel Storage

4.2 In GDA we place less emphasis on the specific design details, and more on the vendor’s evidence that the assumed storage/encapsulation/disposal concept is viable and suitable. However, the design detail we require at the GDA stage needs to be enough to demonstrate credibility of the storage options proposed, including robust estimates of the required capacity and identification of knowledge gaps and any necessary R&D. We concluded last November in our step 3 reports that there was sufficient evidence to show that credible storage options exist for both nuclear power station designs.

4.3 Some evidence to the Committee has questioned whether spent fuel encapsulation will take place on- or off-site. For the purposes of the Generic Design Assessment, the vendor companies have been asked to assume that all spent fuel will be encapsulated on-site prior to transport to a disposal facility. With regard to waste and fuel storage lifetimes, we require the vendor companies to provide sufficient evidence to demonstrate that the stores can be adequately monitored and maintained throughout their anticipated lifetime, and where necessary that the stores can be refurbished or rebuilt.

4.4 At the site stage, potential site operators will wish to optimise their proposals for interim storage and encapsulation which could lead to alternative proposals to those in GDA. These details will need to form part of the site specific safety case submitted to HSE.

(ii) Vulnerability to terrorist air attack

4.5 We examine both accidental and non-accidental impact of aircraft onto nuclear facilities as part of our assessment work. Our assessment of the risk of accidental impact of aircraft onto nuclear facilities is undertaken using established procedures and processes. These take account of recent statistics on air crash rates, proximity to airfield operations, airways and military tactical training areas. For such considerations the normal risk standards can be readily applied.

4.6 For non-accidental aircraft impact, the use of statistical data is unsuitable, given the inherent uncertainties. Each of the vendor companies has given clear assurances that their designs can accommodate the direct and indirect threats posed by impact from modern commercial airliners. As part of the assessment under GDA, ND will examine these claims and reach a view on their validity, and ensure that the residual risks posed are as low as reasonably practicable. The threat assessments used as the input to the development of the Site Security Plans are subject to regular review by various Government agencies and co-ordinated by JTAC (the Joint Terrorist Assessment Centre). JTAC has access to information generated by different governments around the world.

(iii) Protection from Climate Change consequences

4.7 Although, as some witnesses have commented, climate predictions beyond 100 years are inherently less reliable, HSE/ND has no reason to assume there will be a sudden acceleration in effects beyond 100 years. The periodic safety review process, required as a condition of every UK nuclear site licence, ensures that every 10 years a comprehensive review of the flood hazard is undertaken and assessed by HSE and necessary improvements undertaken. The initial licensing of a nuclear power station site will consider an extreme flood event (1 in 10,000 years), as well as the consequences of levels beyond this to ensure that there is no disproportionate increase in risk. In addition, the adaptability of the flood defences will be reviewed as part of a future proofing of the site.

(iv) Strategic Site Assessments

4.8 Some witnesses have questioned the validity of some of the strategic siting assessments of the sites listed in the draft nuclear NPS. With regard to matters on which DECC consulted HSE during their strategic assessment process (demographics, proximity to hazardous installations, flooding and coastal processes, size of site to accommodate operation) we are satisfied that the draft nuclear NPS conclusions accurately reflect our advice. On other matters in which we have a regulatory interest (eg the seismic risk posed to the site and

Encapsulation means the removal of the spent fuel from on-site storage and sealing it inside a metal canister of a form suitable for disposal in a geological disposal facility.
the practicability of off-site emergency planning) which DECC has designated as “flag for local consideration”, we will consider each of these in undertaking our regulatory assessment of the acceptability of any site specific development applications which may come forward.

HSE

15 February 2010

Memorandum submitted by Professor Dieter Helm, University of Oxford

1. INTRODUCTION

NPSs are part of a new framework of planning which attempts to integrate energy and climate change policy into the planning process. The government’s policies are set in white papers; these are then translated through the “Overarching National Policy Statement for Energy” as the framework for the Infrastructure Planning Commission (IPC), and then a series of NPSs deal with each of the dimensions and technologies of the energy sector.

It is a necessary condition for the NPSs to meet the public interest that the overall energy policy framework is coherent, consistent and deliverable. The NPSs themselves must be clear, and the NPSs need to be capable of covering conditions for some time to come in a sector where assets tend to be very long lived and capital intensive.

This memorandum deals with three aspects of the NPSs:

— the coherence of the overall framework and the Overarching NPS;
— the process for revisions and replacements; and
— the coverage of the NPSs.

2. THE COHERENCE OF THE OVERALL FRAMEWORK

2.1 The NPSs are intended to provide a key linkage in the delivery of energy policy objectives: they translate the overall framework into guidance on planning decisions, to be taken by a non-elected new public body—the IPC. The democratic content is limited to energy and climate change legislation, and some elements of Parliamentary scrutiny. The NPSs can also be easily changed so that where investments are complimentary, there can be no certainty that associated infrastructure will continue to be required (see section 3 below).

2.2 From the perspective of the NPSs, the two core concepts here are “need” and “complimentarity”. “Need” is what the NPSs are supposed to provide a statement of, instead of the under the old regime where need was established as part of the planning process. The government tells the IPC what is needed, and the IPC takes this as given. Thus the government of the day—with perhaps as little as 36% of the popular vote, defines in the NPSs what is required without a vote in Parliament.

2.3 Complimentarity relates to the interdependency of investment decisions. Energy provision is via a system: the need for any particular component depends upon the rest of the system. In a dynamic context, need depends on other investments actually being made. The new planning framework tries to achieve this by providing the Overarching NPS. If this is inconsistent, incomplete or simply not credible, the rest of the edifice falls.

2.4 The NPSs are therefore only as good as the overall framework—it is a basic assumption of the NPSs that this is well worked out, coherent and deliverable. Unfortunately this is not the case: the Government’s energy policy is neither capable of achieving its climate change objectives nor ensuring security of supply. The most recent White Paper, The UK Low Carbon Transition Plan and the associated documentation includes a host of different policies for different technologies. In particular, the renewables target derived from the EU Renewables Directive is widely agreed to be unachievable. There is no provision for strategic storage of gas, and the EU ETS provides a short term, volatile and low price of carbon. As has been recognised by the Climate Change Committee, the main impacts on UK carbon emissions have happened independent of government policy. (Indeed the economic depression has proved to date the most successful mechanism for reducing emissions). On security of supply, there is no capacity market, and hence the market is ill designed to deliver the required capacity margin.

2.5 Of particular relevance for the NPSs, the renewables target is the one that most exposes the implications of a non-credible overarching policy. To achieve around 30% wind by 2020 requires a host of ancillary infrastructure to support the individual wind farms. Yet if the target is not delivered, some of this infrastructure may be redundant. There is no provision in the regulatory regime to recover the transmission costs in the event that there is such redundancy. But if not, then the incentives to apply to the IPC for planning permission will be limited. And if this is the case, then the wind developers will worry about the lack of transmission. The point here is that “need” depends on what other investments are being made—it is not exogenous.
2.6 In the absence of a coherent energy policy, the “need” is at best ambiguous. It is rather like trying to define how many aircraft, vehicles and helmets an army might need, without defining the overall objectives and strategies in a coherent and deliverable way. Thus the NPSs are likely to be changed, and indeed the new planning regime makes changing the NPS very easy.

3. THE PROCESS OF REVISIONS AND REPLACEMENTS

3.1 It is stated that “The Secretary of State must review National Policy Statements, either in whole or in part, whenever they think it appropriate” (the Government’s English). There must be a significant change in any circumstance, and account must be taken of whether this could have been anticipated at the time. The Secretary of State can suspend an existing NPS, and it will be treated as if it is withdrawn.

3.2 It is important to recognise the consequences in a context in which the NPSs have not been supported by a Parliamentary vote. At any time the Secretary of State can decide that there has been a “significant change of any circumstance”. Thus, a government might introduce a new white paper, or simply decide that different approaches should be taken to the main instruments of policy as detailed in the Overarching NPS. This indeed is very likely. Examples include: a requirement of strategic gas storage, a floor price of carbon, a capacity market, a greater emphasis on coal CCS, a downgrading of the renewables targets (probably at the EU and the UK levels), an acceleration of the nuclear programme, changes to the demand side through energy efficiency, changes to the smart metering programme, a reform of Ofgem, and a different approach to the roll out of electric cars and the associated networks.

3.3 It might be argued that a strength of the new regime is that a government has the speed and flexibility to change policy precisely because the NPSs are open to being withdrawn, revised and restated without a Parliamentary vote. But this is an illusion: complimentarity matters, and by being able to change the content with ease, the predictability of energy policy and the planning regime becomes all the weaker. Faced with for example a public backlash against rising consumer bills as a result of the dash-for-wind, the process can be halted quickly. Then the technology-specific supporting infrastructure might be stranded. The NPSs try to take the politics out of energy policy, but what they in fact achieve is reinforcing the political discretion of ministers.

4. THE COVERAGE OF THE NPSs

4.1 The NPSs represent a plan for the planners. The government’s priorities are set very much with 2020 in mind—for the overarching EU target and the UK own climate change objectives, and for the EU Renewables Directive. It is therefore not surprising that the focus is on the planning issues in respect of this timetable.

4.2 Climate change and energy security are however longer term, as are the supporting investment requirements. Before 2020, most of the capital stock is fixed, and emphasis falls on building gas CCGT’s and wind. After 2020, the priorities are on the electrification of transport (and all its implications for energy systems and storage), nuclear, coal CCS and second generation renewables.

4.3 “Need” depends upon energy systems, and it is already apparent that the choice between a variety of technology routes mandates very different infrastructures. For example, if the UK were to pursue a French-style approach to nuclear (in the French case 80% of capacity), a centralised grid would be the “need”. But if the future was to be based on wind and small scale technologies, then a decentralised grid would be the “need”.

4.4 The NPSs avoid making these sorts of choices, by pursuing all the main technologies currently deployable. This is consistent with the choice of technology being left to the market—it is up to private companies to decide what they want to build and to apply for permission. Yet the government is in fact specifying technologies—for wind, nuclear and CCS—leaving only CCGTs to the “market”.

4.5 Given this specification of technologies, there is a surprising lack of an overarching “plan” as to how the bits fit together, and this leads to a number of omissions within the NPSs. Noteable is the absence of a “need” for the supporting infrastructure for CCS and a consideration of the implications of an electrification of transport.

4.6 In the CCS case, there are two broad options for the development of this technology: a bottom up plant-by-plant, power station-driven set of investments; and a top down development of a new infrastructure along the lines of the earlier building out of the natural gas infrastructure. The absence of an overarching framework for CCS leaves a vacuum at the individual NPS level.

4.7 The electrification of transport is perhaps the most radical midterm development to the energy system. It has impacts on the overall demand for energy and its composition, the networks themselves, and to storage. As with CCS it can be encouraged to develop in a piecemeal fashion, or it can be built out as a system. And as with CCS, there is a complimentarity issue: investing in developing electric cars depends upon there being a battery-charging network in place—and vice versa.
5. **Conclusions and Recommendations**

5.1 The major advantages of the new planning system are that it speeds up decisions, and it forces government to state the “needs”. The former could however have been achieved within the existing planning system. The latter requires that there is a coherent overarching energy policy within which the needs are defined. The current energy policy framework does not meet this requirement—it has a set of overlapping and technology-specific targets and instruments, which lack coherence and credibility.

5.2 As a result, the key NPS—the Overarching NPS—tries to translate into the planning process a framework which is unlikely to be delivered and which is wide open to revision. As energy becomes increasingly important as a political issue, it is possible that it may come to experience the attention that health has received over the past decade, and it is possible that there may be up to one Bill per year on energy and climate change matters for the foreseeable future. Each change in legislation potentially changes the Overarching NPS.

5.3 Given the lack of Parliamentary votes on major infrastructure decisions, the revision process of the NPSs is easy—and as result the intention to produce a more predictable planning regime is unlikely to be achieved.

5.4 The new planning regime and the NPSs are only as good as the policy framework. Unfortunately it is inadequate to the task, and given that energy is a system (and climate change and security of supply are system properties), complementarity is an integral part of meeting the overarching objectives and the economic attractiveness of particular projects. Knowing that the regime can be changed easily undermines the economics of particular investments. The needs will change, and so will the NPSs. However well crafted the individual NPSs, they are only from a public interest perspective as good as the Overarching NPS, and that in turn is only as good as the energy policy framework. Unfortunately, it is not that good.

5.5 In part reflecting the weaknesses of the energy policy upon which the NPSs rest, there are a number of key aspects which are not sufficiently incorporated into the NPSs. Most notable are the implications of the electrification of transport and the CCS networks—both of which have radical implications for the energy infrastructure.

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**Memorandum submitted by Horizon Nuclear Power**

**Introduction**

1. Horizon Nuclear Power (HNP) welcomes the opportunity to submit evidence to the Energy and Climate Change Select Committee’s Inquiry into the Proposals for National Policy Statements on Energy. We note that the Committee has indicated that a specific focus will be on whether the draft energy National Policy Statements (NPSs) provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications for energy infrastructure.

2. HNP is a joint venture between E.ON UK and RWE npower. We aim to develop and construct around 6GW of new nuclear power station capacity in the UK and have already acquired interests in land at Oldbury in Gloucestershire and Wylfa on Anglesey in Wales. We have also concluded grid connection agreements for both sites.

3. Both the Oldbury and Wylfa sites were nominated into the Government’s Strategic Siting Assessment (SSA) and we are pleased that both have subsequently been identified in the draft Nuclear NPS as potentially suitable sites for nuclear power station development.

4. We recognise the importance of reading the technology specific NPSs in conjunction with the draft Overarching Energy Infrastructure NPS (EN-1). We have, therefore, commented as appropriate on EN-1 and taken into account aspects of other NPSs including the electricity networks NPS (EN-5). In this evidence we have, however, focussed primarily on the draft Nuclear NPS (EN-6) and its associated documentation and, in terms of site specific matters, on our two sites at Oldbury and Wylfa, recognising that our shareholder companies will more properly consider other technology specific NPSs in their own submissions to the Committee.

**The National Policy Statements**

5. The publication of the draft NPS documentation is an important step in the creation of a planning policy framework for nationally important energy infrastructure projects. In particular, EN-1 establishes the national need for new low carbon generating capacity. We believe that all available low carbon technologies will be required if the UK is to meet its energy policy objectives of achieving environmentally sustainable, secure and affordable supplies of energy.

6. As potential investors in new nuclear capacity, we are pleased to see that the scale of new capacity identified as being required in the draft NPSs means that there is scope for a significant amount of new nuclear build, allowing society to enjoy the accompanying benefits of low carbon and secure electricity supplies. This would involve substantial capital investments and it is important that the planning framework
is both predictable and reliable. We believe that the designated Nuclear NPS should also acknowledge that nuclear power provides added fuel security benefits not only through increasing fuel diversity, but also through the industry’s ability to store fuel and to continue generating electricity over a long period of time without refuelling if required.

7. The NPSs are, therefore, a vital element in an overall planning framework that should:

— ensure energy companies interested in promoting new, large energy projects can develop their projects in the context of a stable, agreed strategic need for new energy infrastructure to maintain and develop a diverse fuel mix for electricity generation;
— once designated, avoid the need to repeat consideration of this strategic need when the IPC is examining planning applications for specific nuclear and other power generation projects;
— define the criteria, including technology specific aspects, which companies and the IPC must take into account; and
— provide appropriate opportunities for public consultation and involvement.

8. We therefore support the formal designation of the NPSs as part of an integrated approach which will be essential in promoting investment in a diverse fuel mix for electricity generation.

GUIDANCE TO THE INFRASTRUCTURE PLANNING COMMISSION

9. Some specific observations on the guidance offered to the IPC by the draft NPSs, focussing on the draft Nuclear NPS and its associated documentation, are offered below.

STRATEGIC NEED FOR NEW NUCLEAR

10. EN-1 sets out the urgent national need for new electricity generating capacity. The draft Nuclear NPS and its Annex A “Imperative Reasons of Overriding Public Interest (IROPI)” reiterate this need. The draft nuclear NPS sets out the benefits offered by new nuclear capacity as a source of safe, secure, reliable and affordable form of low carbon electricity generation with the ability to make a significant contribution to security of supply. We agree that new nuclear build is one of the key technologies capable of being deployed within the timescales required to help meet the UK’s emissions targets and assist in decarbonising the economy.

11. We also welcome the identification of specific sites that are potentially suitable for deployment by 2025. This is underpinned by very detailed sustainability and ecological assessments—the Appraisals of Sustainability (AoS) and Habitats Regulations Assessments (HRAs) both for the NPS as a whole and the specific sites identified as potentially suitable for development.

12. Establishing the strategic need and planning criteria for new nuclear build will assist all participants in the planning process and remove the potential for delays in decision-making caused by a lack of clarity about national policy.

PROJECT ASSESSMENT CRITERIA

13. The generic project assessment criteria for nationally significant energy projects are set out in EN-1 (the Overarching Energy NPS) and include the aspects of project development that we would expect to address in any planning application and associated documentation. EN-6 sets out the appropriate specific criteria that the IPC should take into account for new nuclear power stations. We therefore believe that, taken together, EN-1 and 6 give strong guidance to the IPC with respect to project assessment criteria.

14. In our opinion, the draft Nuclear NPS appropriately covers in strategic terms the impacts of new nuclear power stations and potential options to mitigate those impacts. Mitigation measures will be developed and refined iteratively as part of the development of proposals. We consider their further assessment in the project level Environmental Impact Assessment (EIA) to be appropriate. The inclusion of environmental management plans in the Environmental Statement (ES) accompanying the application for development consent is also appropriate.

15. The wider, generic societal benefits and detriments are being considered separately through the Regulatory Justification process. Generic and site specific aspects of the candidate designs are being or will be considered through the generic design assessment and site licensing processes respectively.

16. It is important that a clear division between the regimes for planning and regulation of the nuclear industry is maintained. We would also emphasise that the IPC should not review or revisit any regulatory decision that has already been made in relation to the proposed development and that it need not consider matters which are within the remit of the nuclear regulators.

SUITABILITY OF SITES

17. We consider the Government’s preliminary conclusion on the suitability of Oldbury and the Wylfa sites as outlined in the draft Nuclear NPS to be valid. The overall findings from the AoS and HRA reports for the draft Nuclear NPS are also considered to be appropriate both for the document as a whole and with respect to the site specific AoS and HRA assessments of Oldbury and Wylfa. Furthermore, we feel the
potential positive and negative impacts of developing at Oldbury and Wylfa have been set out in clear terms in EN-6 and its accompanying documentation, along with the potential for dealing with those impacts appropriately.

18. We have no specific site-related comments with regards to the suitability of the other potential sites included in the draft Nuclear NPS. However, we do welcome the preliminary conclusion that a number of sites may be potentially suitable for the development of new nuclear power stations. As the Government recognises in the draft NPS, it is by no means certain that every candidate site would eventually achieve development consent. We therefore agree that it is appropriate that sufficient sites are included in the designated Nuclear NPS to enable new nuclear to fulfil its potential role as a major contributor to carbon emissions abatement and to the security of electricity supplies.

19. We have no specific comments to offer on the Government’s considerations of alternative sites. We do however have confidence that the NPS process to date, including the SSA process and rigorous sustainability and habitats regulations assessments, has led to the identification of a list of suitable potential sites deployable by 2025. As noted earlier, and building on the need case set out in EN-1, EN-6 is also further underpinned by Annex A which sets out the Imperative Reasons of Overriding Public Interest (IROPI) for concluding that the sites identified as potentially suitable should be available for development according to IROPI.

CLIMATE CHANGE ADAPTATION

20. We recognise that climate change adaptation will be a particular priority for consenting and developing new nuclear infrastructure and welcome the Government’s advice regarding climate predictions and emission scenarios set out in the draft Nuclear NPS. We also support the opportunity for developers to provide evidence that further adaptation measures could be provided should the need arise, rather than solely at the outset of development.

RADIOACTIVE WASTE MANAGEMENT

21. We have carefully reviewed Annex G to EN-6 on the “management and disposal of waste from new nuclear power stations”, and the associated paper on “The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence” published by DECC in November 2009. We believe that these provide a thorough and detailed review of available information on spent fuel, intermediate and low level waste, non-radioactive hazardous waste and radioactive discharges.\(^\text{87}\) Waste and decommissioning issues associated with nuclear power generation have been successfully resolved around the world using well-established procedures and technologies.

ASSOCIATED INFRASTRUCTURE

22. We are particularly concerned that the consideration of applications for critical infrastructure associated with a new nuclear generating station should fall within the IPC’s remit and authority. The designated Nuclear NPS should make it clear that the boundary of the nominated site is not definitive and development of a generating station with some facilities connected with the plant, associated development and ancillary development (for example, cooling water works, marine offloading facility and transport infrastructure) outside that boundary is supported by government policy. Clearly, in the IPC process, the application will need to be the subject of suitable detailed assessment, particularly in respect of relevant Environmental Impact Assessment and Habitats Regulations.

23. If new nuclear power stations are to make a timely contribution to meeting demand it will be vital that grid connections including new lines and any required transmission infrastructure reinforcements are available on the same timescales. It follows that applicants for new power stations and associated transmission infrastructure should be encouraged by the IPC to submit their applications to it on a timescale that is appropriate to permit a new nuclear generating station to be deployed in accordance with the timescales indicated by the Government.

CONCLUSION

24. HNP supports the designation of the draft NPSs and believes this is an essential element in creating certainty for investors, which will be fundamental for the delivery of the Government’s energy policy objectives. In the context of these objectives and our own development sites, we welcome the recognition that there is a strategic need for new nuclear capacity and that the Oldbury and Wylfa sites have been

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\(^\text{87}\) They draw together information from the Nuclear Decommissioning Authority (NDA), the UK nuclear regulators, nuclear waste producers, prospective operators such as HNP and the Committee on Radioactive Waste Management (CoRWM). International guidance and experience from IAEA, NEA and the EU has been used to support the arguments together with experience from Canada, USA, Sweden, Finland, Switzerland, France and Germany.
included on the list of potentially suitable sites for new nuclear power stations. We believe the criteria set out in the draft Overarching (EN-1) and Nuclear (EN-6) NPSs are those that are appropriate for applicants for new nuclear stations and the IPC to consider in preparing and assessing planning applications respectively.

January 2010

Memorandum submitted by the Infrastructure Planning Commission

INTRODUCTION

1. The IPC was established on the 1st October 2009, under the Planning Act 2008, to examine applications for development consent for Nationally Significant Infrastructure Projects (NSIPs), including energy infrastructure developments above the thresholds specified in the Act. Once the National Policy Statements (NPSs) have been designated by the Secretary of State, the IPC will have the power to decide such applications, and must do so in accordance with the relevant NPSs.

2. An important feature of the new infrastructure planning regime is the separation of policy making from decision making. Government sets the policy and the IPC is the planning authority which determines applications in accordance with it, taking account of other factors as set out in statute. It follows from this separation of powers that it would be wrong for the IPC to comment in any way on the policy of the Government. Our comments in both written and oral evidence to the Committee will therefore be restricted to the clarity with which policy is set out in the NPSs and other aspects of their fitness for purpose.

3. The IPC considers that the Appraisals of Sustainability, Strategic Sites Assessments and Alternative Sites Study associated with the NPSs lie behind the policy, rather than forming any part of the NPSs themselves, and it would not therefore be appropriate for us to pass any comment on these documents at all.

Overall fitness for purpose

4. The IPC considers that the draft NPSs on Energy are all fit for purpose. The NPSs provide a sufficiently clear statement of Government policy and appropriate guidance to applicants and interested parties. They give the IPC sufficient guidance on how various aspects of policy should be considered in determining applications.

AREAS FOR IMPROVEMENT

5. We have identified some areas in which we believe there is scope to improve the clarity and fitness for purpose of the whole suite of Energy NPSs, and some specific opportunities to add clarity to individual components of the suite. Addressing the issues with the current draft in these areas, before the NPSs are designated by the Secretary of State, would offer significant benefits for Commissioners and all other parties who need a clear understanding of Government policy in relation to energy NSIPs. Some further observations on the drafting have been set out directly in correspondence with Government lawyers.

6. The cross-cutting issues are as follows:

(a) Summarising policy separately from contextual discussion. The Energy NPS suite is a set of lengthy documents, and while policy is clearly stated within them, it is not always as clearly highlighted as it might be. Distinguishing statements of policy from contextual discussion, perhaps by means of a highlighted text box in each chapter or major section, would help accessibility for all users of the NPSs. This is particularly the case for EN-2, EN-3, EN-4 and EN-5.

(b) Use of language which risks creating tensions with statutory provisions. At certain points in the text (for example, EN-1 paragraph 4.1.1) the drafts run the risk of appearing to restate provisions of the Act in their own terms. This has no value as the terms of the statute obviously take precedence. Moreover, while we fully accept that it is not the Government’s intention, the use of very directive language (eg “the IPC must”) may be seen as running contrary to the statutory requirement for Commissioners to take account of all evidence before them in reaching their decision.

(c) Inconsistency of language. It is perhaps inevitable that in such a long and complex suite of documents there will be some inconsistencies of language. This by no means renders the NPSs unfit for purpose, but it may help to limit unproductive debate about the nuances of meaning in different turns of phrase if the department was able to introduce a greater degree of consistency. We might suggest that a simple, neutral formulation such as “the IPC should take into account” (EN-1 para 4.1.1) might be used as a standard, replacing many instances of more complex forms of words including “the IPC should have regard to the possibility that” (EN-1 para 4.4.3); “it should/may be reasonable for the IPC to” (EN-1 para 4.4.3); “these [considerations] should not be used in themselves to refuse consent” (EN-1 paras 4.18.13, 4.24.10, 4.24.11, 4.28.9).

(d) Status of evidence cited in the NPSs. The IPC expects that applicants and interested parties will submit a diversity of expert evidence on some issues where it is the responsibility of Commissioners to weigh benefits against adverse impacts. Examples of such issues include (but of course are not
limited to) the extent of shadow flicker and noise from onshore wind farms, and the implications of undergrounding electricity transmission lines. The NPSs draw attention to evidence relating to issues of this nature and in some instances appear to suggest that the evidence cited is conclusive. Commissioners will, however, wish to consider all evidence presented to them, and it might be appropriate for the wording of the NPSs to acknowledge this more explicitly.

(e) Carbon footprint. Consideration of climate change impacts is likely to form an important part of the IPC’s examination of proposed energy NSIPs, and Commissioners must consider all relevant evidence submitted. The National Policy Statements make clear (EN-1 paragraph 2.1.5) that the IPC “does not need to assess individual applications in terms of carbon emissions against the [carbon] budgets”. However, it is assumed that the wider carbon footprint of an NSIP, including impacts along the supply chain and over the whole life of the installation, would be a relevant factor in IPC decision making. Further clarification in the NPSs, on this area would be welcome.

(f) Role of the applicant. There is an occasional appearance of confusion between the role of the applicant and the role of the IPC. In all cases the onus for ensuring a high-quality and compliant application lies with the applicant. For example, in EN-1 paragraph 4.18.15, it is for the applicant to maximise opportunities for biodiversity in their application.

(g) Design. The NPSs refer in a number of places to the importance of good design. Given the policy significance thus attached to good design, it would be helpful for the NPSs to set out a clearer high-level framework for the consideration of design issues, indicating more explicitly what components of good design the Government considers applicants should be incorporating into their proposals, and referring to the most relevant consultees.

(h) Devolved administrations. The IPC has a different and more limited role in Wales, and a very limited role in Scotland. While these differences are appropriately acknowledged at different points in the NPSs (notably EN-3 section 2.2), it would be helpful for there to be a single analysis—perhaps extending the discussion of geographical coverage in EN-1 section 1.4—of how the policy framework differs between England and the devolved administrations.

(i) Security. In EN-1 section 4.15, the role of the IPC in relation to security matters is left unclear. The IPC has already asked the Government to clarify its position in this regard with respect to all National Policy Statements.

7. Issues relating to individual National Policy Statements are as follows:

(a) EN-1 paragraph 4.27.6. It would be helpful if the NPS could spell out rather more substantively the Government’s policy on socio-economic impacts. It is self-evident that the IPC will give little weight to unsupported assertions in this or in any other matter.

(b) EN-3 paragraph 2.5.32. The policy on development in the green belt set out here is not explicit. Any renewable energy project will provide wider environmental benefits, and the policy articulated here does not enable the IPC to determine in any way whether these should normally or only rarely be deemed to outweigh the harm of inappropriate development.

(c) EN-5 paragraph 2.9.15. The decision tree as currently presented detracts from the clarity of the NPS. Its implications are not identical to the draft text and need to be spelled out explicitly in the text. For example the implied expectation of optimal phasing is much stronger in the diagram than it is in the text (paragraph 2.9.12), where it is simply identified as common good practice. If the decision tree is to be retained at all, the assessment criteria it presents must correspond fully with the text.

January 2010

Supplementary memorandum submitted by the Infrastructure Planning Commission

FOLLOW UP TO IPC ORAL EVIDENCE ON THE ENERGY SUITE NPS

Thank you for inviting the Infrastructure Planning Commission to give evidence to the Committee on 3rd February. We undertook to write to the Committee on one question which we were not able to answer at the time. It might also be helpful if we took this opportunity to clarify two other matters which were covered in our oral evidence.

CCR AT GAS-FIRED POWER STATIONS—ECONOMIC VIABILITY REQUIREMENT

At the Select Committee, the subject of carbon capture and storage for fossil fuel power stations was raised with us and other witnesses. In particular, the Committee asked for our view on the question of whether the wording of the draft National Policy Statement requiring promoters of gas-fired power stations to demonstrate the economic viability of CCS would have the effect of preventing any successful application for development consent.
Our general position is, as Dr Lane explained in oral evidence, that the economic viability of individual proposed projects is initially primarily a matter for the promoter. We would welcome any further clarification of the specific issue which the department is able to provide. In examining any applications where there was a requirement for applicants to demonstrate the viability of CCS, we would look both to the latest policy issued by Government as well as to the evidence of the applicant, statutory consultees and others to inform our view.

**Carbon Emissions**

The subject of cumulative carbon emissions from Nationally Significant Infrastructure Projects (NSIPs) for which the IPC grants development consent was discussed extensively with us and with a number of other witnesses. Our position is as we set it out to you, that we are firmly of the view that the IPC cannot be responsible for reckoning cumulative carbon emissions against the carbon budgets, both because there will be carbon-emitting infrastructure developments which fall outside the IPC’s remit and because the infrastructure planning system is only one part of the overall picture.

Climate change impacts will nevertheless be an important aspect of our examination of NSIP applications. We will expect applicants to address them appropriately, and we will welcome evidence from statutory consultees and other interested parties, including the Committee on Climate Change, on this point. We will also address climate change impacts in our Annual Report to Parliament.

We have written to Tim Yeo on these matters in response to a report of the Environmental Audit Committee, and I enclose a copy of our letter to him.

**Proposed Nuclear Power Stations at Locations not Specified in EN-6**

We indicated to you that the IPC would not consider applications for proposed nuclear power stations at locations not specified in EN-6. Were the current draft to be designated without alteration, the IPC could not determine such an application but would have a duty to consider it and make a recommendation to the Secretary of State. It is our view that if the Government wishes the IPC to effectively consider sites through this process, it would be beneficial for the NPS to make more explicit to potential applicants the steps the Government would expect them to have undertaken before bringing forward any such application. We understand the Government is considering this matter further.

_February 2010_

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**Memorandum submitted by the Institution of Civil Engineers**

1. **National Infrastructure Policy**

   1.1 ICE has consistently argued for UK infrastructure development to be placed on a long term, strategic footing. As a nation, it is estimated that we will require infrastructure investment in excess of £400B in the coming decades to meet a range of policy goals including improved energy security and the transition to a low carbon economy. The UK needs political structures that provide stability, clarity and certainty if investors and clients are to fund and the supply side develop the capacity to deliver new and refurbished infrastructure on this scale. In addition as spelt out clearly in recent reports by ICE, and the Council for Science and Technology, the nation’s infrastructure networks are increasingly interdependent and the risk of systemic failures or capacity constraints needs to be managed. Energy supply is at the heart of this interdependency.

   1.2 ICE has therefore been supportive of the provisions in the Planning Act 2008 relating to Nationally Significant Infrastructure Projects including the creation of National Policy Statements (NPS) for. We believe that NPSs also have the potential to reinforce the benefits of other recent reforms. The newly formed Infrastructure UK (I-UK) has a remit to assess the UK’s long term infrastructure needs and facilitate their delivery. Government has also appointed a Chief Construction Advisor, a role we believe can help improve the flow of information on future needs to the construction and civil engineering industries. Taken together this provides an opportunity to create a strategic framework which successive governments could develop and a series of institutions for improving delivery.

   1.3 The Energy National Policy Statements can establish the broad need for new infrastructure at a national level and explain how facilities will contribute to policy goals including targets for renewable energy generation and carbon dioxide reduction. This is very welcome as it will remove a major source of uncertainty, delay and cost. However it is unfortunate that the Infrastructure Policy Commission has no role in assessing the impact of the sum of its decisions. In relation to CO2 emissions, government’s position is that the operation of the European Emissions Trading Scheme will allow the UK to manage the risk of the market delivering new energy infrastructure that would result in higher than desirable emissions. However there remains a task of managing other risks, such as long term resilience and cross network

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interdependencies. Similarly there are a number of areas where individual nationally significant infrastructure assets will require considerable amounts of associated infrastructure, for example road and rail links to major power stations and pipelines for Combined Heat and Power and CCS fitted fossil fuel plants. There is a danger that these requirements may fall between NPSs or between the Nationally Significant Infrastructure process and the Town and Country Planning Act. We believe that Infrastructure UK has the potential to help address these problems by working alongside the IPC to assess the impact of its decisions on the long term health and “fit for purpose” status of energy and other networks.

2. Electricity, Heating and Transport

2.1 The Energy NPS do a good job in clarifying electricity generation capacity requirements for the period to 2025, including broad direction on the desired mix between renewable and non-renewable sources. However we believe government does need to come forward with more detailed policy for the heat and transport sectors. In this context the Committee should note that heat accounts for 49% of all primary energy consumed in the UK, the majority of which is derived from gas.

2.2 A transition to a low carbon economy implies a large scale shift to electrification of heat and transport. This has significant implications for infrastructure for both generation and transmission and this does need to be better reflected in National Policy Statements.

3. Subjective Elements of NPSs

3.1 A number of terms that are open to a wide degree of interpretation including “good design” and ‘economically and technically viable’ are used in the energy NPSs. We would welcome clarity on how they will be used in the decision making processes of the Infrastructure Planning Commission (IPC).

4. Initial Comments on Individual Categories of Energy Infrastructure

4.1 Combined Heat and Power: We welcome the requirement to consider the inclusion of Combined Heat and Power as a planning consideration for proposals for new power generation stations. ICE’s recent report, Why Waste Heat identified significant potential for capturing heat lost during electricity production for use in residential and commercial heating.91

4.2 Carbon Capture and Storage: We welcome the inclusion of a requirement for Carbon Capture Readiness (CCR) for future fossil fuel power stations. However we note that there are still many unknowns around Carbon Capture and Storage (CCS) technology which will only be resolved through the ongoing demonstration plant process. Minister may therefore need to be willing to amend NPSs as the demonstrator programme advances to avoid unnecessary delays in deployment.

4.3 Biomass and Waste Combustion: We welcome the inclusion of waste and biomass in the Renewable National Policy Statements. Recovery of energy from waste materials will need to be a consideration in the development of any long term energy policy.

January 2010

Supplementary memorandum submitted by the Institution of Civil Engineers

EVIDENCE FOLLOWING 4 JANUARY ORAL EVIDENCE HEARINGS

1. Supporting Infrastructure

1.1 A weakness of the draft National Policy Statements is that they do not in all cases cover the supporting infrastructure required to support nationally significant infrastructure assets.

1.2 This creates a danger that aspects of what is essentially the same project will fall under both the IPC (Infrastructure Planning Commission) and TCPA (Town and Country Planning Act) regimes. This will add complexity, cost and uncertainty to the process and is contrary to the goal of the Planning Act to create a “one stop shop” for developers of nationally significant infrastructure.

1.3 ICE therefore believes that the energy NPS’s could be improved if they encompassed supporting infrastructure for Carbon Capture and Storage (CCS) and Combined Heat and Power (CHP). We acknowledge that care will need to be taken over the definition of supporting infrastructure to avoid alienating affected communities.

2. WIDER SPATIAL IMPLICATIONS

2.1 More widely, we believe the current drafting is indicative of a failure of the NPS's to instruct the IPC to fully engage in the wider spatial planning implications of its decisions.

2.2 CHP and CCS facilities will both require extensive pipe networks to transfer heat or carbon to its point of use or storage. These facilities will require planning consent but their siting will also have implications for subsequent development.

3. CHP

3.1 At present the overarching energy NPS advises that developers of new thermal generating stations should consider the opportunities for CHP from the very earliest point and it should be adopted as a locational criterion. Developers are then expected to be able to demonstrate to the IPC that discussions have taken place with potential customers for heat. However, whilst this will drive uptake from customers with an existing demand for heat, power stations built today power stations could be operating in 2050. In addition the potential extent of the heat network will grow as development takes place in the surrounding area. ICE would therefore like to see:

— Local Authorities map current and potential future heat demand in a local spatial plan.

— The creation of memorandums of understanding between the IPC and the local planning authority, establishing conditional approval for expansion of the heat network. Consideration of the detail of any expansion could then be handled by the Local Authority under the Town and Country Planning Act).

4. CCS

4.1 In granting consent for new fossil fuelled power stations, the IPC is required to ensure that space is kept available for CCS equipment and that applicants retain the ability to develop that equipment. In the case of new coal fired stations it is also instructed to place conditions on any consent requiring developers to provide evidence that all necessary consents are in place for construction of the CCS chain including consents for pipelines and CO2 storage.

4.2 The IPC therefore has a role to check that activity has taken place, but no role in assessing the spatial implications of CCS beyond the footprint of the fossil fuel plant.

4.3 CCS facilities can only function as part of a wider network which will have major spatial implications. As a primary goal of the planning system is to mediate on competing demands for the use of land this is an oversight. At present there is no organisation with oversight, coordination or spatial understanding of the UK’s future energy system, although the new Infrastructure UK may be given a role in this area.

4.4 As we explained in our verbal evidence, we would not necessarily wish to add more tasks to the IPC’s core activity. However we do believe that if the IPC is to fulfil its potential it will need to maintain a continuous dialogue with other bodies national and local. In this particular context we believe that IPC should be instructed to seek views on the wider spatial implications of individual nationally significant projects from relevant bodies.

5. ENHANCED ROLE FOR SECRETARY OF STATE AND COMMITTEE FOR CLIMATE CHANGE

5.1 It would also be advantageous if the Secretary of State and the Committee for Climate Change, were required to regularly review the forward programme of applications to IPC in their totality and advise on the spatial implications and CO2 implications. If nothing else this would enhance democratic accountability and provide early warning of any potential conflict and could trigger amendments to the relevant NPS.

6. THE CASE FOR A STAND ALONE CARBON CAPTURE AND STORAGE NPS

6.1 We also believe there is a case for government to indicate that it will bring forward a stand alone NPS for Carbon Capture and Storage in the event of the demonstration projects proceeding satisfactorily. At present the most appropriate first choices for storage sites for captured carbon are depleted North Sea oil and gas fields. The wide geographical distribution of power stations will create a need for many miles of pipelines to move carbon to its final storage site. Other options, such as saline aquifers, require further technical appraisal. To exploit such facilities will require a significant new national infrastructure network entailing a major investment in both storage facilities and pipelines to support carbon capture equipment fitted to fossil fuel energy plants.

6.2 This new network will cross the boundaries of many local planning authorities adding to complexity and risk for developers. In addition clustering of electricity generation and CCS infrastructure has the potential to reduce the energy required to transport carbon to storage sites and this should be strongly encouraged.
6.3 To facilitate this investment an NPS would enable government to provide strategic level clarity thereby reducing uncertainty and speeding the delivery process.

January 2010

Memorandum submitted by the Institute of Environmental Management & Assessment

CONSULTATION ON THE DRAFT NATIONAL POLICY STATEMENTS FOR ENERGY (EN-1 TO 5) AND THEIR ASSOCIATED APPRAISAL OF SUSTAINABILITY

1. INTRODUCTION

The Institute of Environmental Management and Assessment (IEMA) is providing this key issues response to the Department for Energy and Climate Change (DECC) consultation on the draft National Policy Statement on Energy (NPS EN1to5). A key issues response is being provided, at this time, to ensure the Energy and Climate Change (ECC) Select Committee is able to consider the views of the UK’s largest body for environmental professionals. Our response has therefore focussed on three areas that we believe DECC and the ECC Select Committee should give due consideration in relation to the draft Energy NPSs. The key issues are:

(i) Draft NPSs EN-1&2 fail to set out an effective framework that will ensure decisions made, in relation to Nationally Significant Infrastructure Projects (NSIP) related to fossil fuel generating capacity, do not have adverse impacts on the UK’s long-term carbon budget.

(ii) The current format of draft NPSs EN1to5 is overly long and their current content could pose risks to the effective operation of the Environmental Impact Assessment (EIA) process required for the majority of applications to the IPC.

(iii) The Appraisal of Sustainability process, undertaken for EN1-5, is considered to carry risk related to compliance with the SEA Directive (2001/42/EC), if realised these risks would lead to a lack of certainty and delays to decisions related to energy infrastructure needed to allow the UK to transition to a low carbon economy.

As a result of focussing on the key issues set out above this response does not follow a format of responding to the consultation questions set out within draft NPS EN1. Appendix 1 of the response does, however, indicate where text is relevant to specific consultation questions in order to aid its consideration by DECC.

IEMA would like to highlight that it supports the introduction of the Planning Act (2008), the development of NPS and the operation of the IPC. We have been actively involved in the development of this new system since the Barker Review providing consultation responses and advice to Government on the developing process. We recognise the need for considerable development of new infrastructure across the UK and the essential role this will play in providing the basis for the UK’s transition to a low carbon economy. We aim to ensure that the approach taken to developing NPS considers sustainable development over the long-term and that the adopted NPS provide the IPC with an effective context within which to make decisions related to NSIP development consent.

2. FAILURE TO SET A CLEAR FRAMEWORK THAT ALIGNS WITH THE UK’S LONG-TERM CARBON BUDGETS

The Issue:

Draft NPSs EN1&2 fail to set out an effective framework that will ensure decisions made, in relation to Nationally Significant Infrastructure Projects (NSIP) related to fossil fuel generating capacity, do not have adverse impacts on the UK’s long-term carbon budget.

Evidence:

NPS EN1&2 set out the framework within which the Infrastructure Planning Commission will make development consent decisions in relation to fossil-fuel generation capacity. Section 2.1.5 of draft NPS EN-1 indicates that:

“Given that the Government policies that underlie NPSs have been set in accordance with the Transition Plan and carbon budgets the IPC does not need to assess individual applications in terms of carbon emissions against the budgets.”

It would appear that the consideration of climate change mitigation in the rest of draft NPS EN-1 has therefore focussed on Carbon Capture Readiness or Storage (CCR/CCS) related to fossil-fuel generation. IEMA has concerns that the draft overarching NPS for Energy does not appear to include any expectation that the IPC should give consideration to the anticipated levels of embodied carbon related to the construction, operation, and decommissioning of Energy NSIP applications. However, our greater concern is that NPS EN1&2 fail to set out any indication of limitations on the future proportion of UK electricity supply that should be supplied through fossil-fuel generating stations.
This is a major concern because there is no certainty that CCS will be proved to be technically and financially feasible at the scale required to mitigate emissions on the scale of fossil-fuel generating stations. As such there is no guarantee that fossil fuel generating capacity consented prior to the Government's review of CCS in 2018 (Section 4.7. 14 of draft NPS EN-1) will be able to have its carbon emissions reduced in the future.

 Whilst it is arguable that the failure of the market to secure technical and financially feasible CCS within the next 10–15 years is a low probability, the economic, social and environmental consequence of such a failure would be significantly adverse. The Planning Act (2008) requires the Secretary of State developing an NPS to do so “with the objective of contributing to sustainable development” (Part 2, Section 10, paragraph 2) with this section going on to make specific reference to climate change mitigation. Given that the operational design-life of fossil fuel generating station would be well over 25 years, and that draft NPSs EN1&2 do not set limits on the total amount of MW of generation capacity the IPC can consent in relation to fossil-fuel generating stations, a failure to deliver CCS on this generation capacity would lead to significant problems in achieving the UK's long-term legally binding carbon reduction commitments.

As indicated above, draft NPS EN1 indicates that the Government will review progress with CCS in 2018. It would therefore appear that during the eight years of IPC operation before this review is completed the UK will not have a mechanism to monitor the potential cumulative effect of IPC consented fossil-fuel generating stations on our legally binding carbon reduction targets. Further, should it be considered necessary, there is currently no clear mechanism to allow the Government to rapidly control the amount of new fossil-fuel generation capacity consented by the IPC. Given that sustainable development must be considered over the long-term, and that the Planning Act requires DECC to specifically have regard to mitigating climate change in developing its NPS, it is not clear to IEMA that they have fully met their obligations under the Act.

IEMA Recommendations:

(i) DECC consider whether the draft NPSs EN1&2 currently provide sufficient protection for the UK’s long-term carbon reduction targets should CCS be found to be substantially delayed or technically/financially infeasible by the 2018 review.

(ii) If the current drafts are found to be ineffective, in this area, then the text in NPS EN1 and/or EN2 must be enhanced, before they are adopted, to provide sufficient protection.

(iii) DECC consider whether a mechanism is needed to monitor the cumulative implications of all fossil-fuel NSIP development consents orders on the UK’s long-term carbon reduction targets.

(iv) Any such monitoring be made publicly available and that the information is discussed with the Committee on Climate Change to determine any necessary remedial actions.

(v) A mechanism be established that would allow the Government to take appropriate action to ensure the IPC’s decisions, as a whole, do not have unintended negative consequences for the UK’s long-term carbon targets.

3. RISKS POSED TO THE TRANSPARENCY OF THE NPS AND THE EFFECTIVE APPLICATION OF EIA

The Issue:

The current format of draft NPSs EN1to5 is overly long and their current content could pose risks to the effective operation of the EIA process required for the majority of applications to the IPC.

Evidence:

The draft Overarching NPS on Energy (EN-1) includes information, Part 4, on the consideration of general impacts related to all energy infrastructure projects. Further to this Part 2 of draft NPSs EN2-5 include information related to the assessment of certain environmental topics for specific energy infrastructure applications. This information is, in part, appropriate for inclusion within a national policy statement as it is prescribed that it must or may be included within an NPS by Part 2, Section 5, paragraphs (5) and (6) of the Planning Act 2008.

It is IEMA's view that the draft NPSs on Energy (EN1-5) include information—in the form of guidance—that the Act did not anticipate would be included as national policy. Further, it is our view that if this guidance is adopted within NPSs EN1-5 it could have the following implications:

(i) Constrain the IPC—The IPC’s advice on what is to be considered within the scope of a NSIP EIA should be based on the specific environmental risks and opportunities related to the NSIP applications, this could be constrained if Government guidance becomes policy.

(ii) Clarity of NPS—The inclusion of this guidance reduces the clarity of the Energy NPSs as the overall length and transparency of NPS EN1–5 is considerably extended through the inclusion of this information.

(iii) Focus of EIA—The approach has the potential to undermine the quality of the EIA process applied to NSIP applications, which should be based on the judgement of environmental assessment professionals in agreement with key stakeholders, including the IPC, and the public.
(iv) **Updating difficulties**—The ability to update this advice to ensure it remains in-line with evolving good practice related to each of these forms of assessment will be limited to the formal review process for the NPSs.

In terms of constraints on the IPC the current format of the NPS would see generic high-level guidance related to environmental topics relevant to EIA become inappropriately codified as national policy. If the NPS were to be finalised in their current format the EIA process related to NSIP applications could be required to assess environmental issues that may not be relevant to specific applications, or require assessments to contain a level of detail that may not be considered necessary by the IPC. Decisions on what environmental issues must be assessed in relation to a NSIP application should be left to those involved with the details of each individual application (eg the IPC, applicant, EIA consultants, public, etc). IEMA is not against the Government providing its view on what may need to be considered, but this should be in the form of a separate guidance document, rather than being included within NPSs EN1-5.

IEMA would like to highlight that many of its members work in the environmental assessment profession and that it will be these professionals who will undertake the EIA work related to NSIP applications. Good practice in UK EIA has, for many years, recognised that that those leading the assessment, in consultation with key stakeholders (as set out in Regulations 10 of the NSIP EIA Regulations (SI 2263/2009)), are best placed to identify topics that require assessment and to define the most effective approach to undertake that assessment. Further, in line with the EIA Directive (85/337/EEC as amended) the EIA Regulations related to NSIP applications allow the applicant to seek a scoping opinion from the IPC. In making this opinion the IPC is required to consult a large number of environmental stakeholders, including bodies such as the Environment Agency. A scoping opinion will provide a NSIP applicant with information specifically related to the proposed development and the environmental sensitivities of the location where it is proposed.

It is IEMA’s view that it would be more effective to provide this information as accompanying guidance. This would also ensure that the guidance could be updated without the need to undertake a formal review of one or more of the Energy NPSs. If the guidance is retained in the adopted text of NPS EN1-5 the ability to amend it to refer to developments in good practice as a result of learning from future energy NSIP applications would be limited to the formal review of each NPS. A separate guidance document would still ensure that the IPC and those undertaking the EIA are aware of the Government’s view on the type of environmental issues that should be considered. Any such guidance document should be publicly available to ensure it can be referred to by all parties, where appropriate, during the EIA process related to a NSIP application.

As can be seen from Table 1, below, the overall length of NPS’s EN1-5 could be halved if the advisory text on general impacts (EN-1) and the topic specific assessment principles (EN2-5) were removed. In total over 120 pages of guidance on environmental assessment would be removed with the potential for it to be presented in a more effective form—as Government guidance. This would not only enhance the readability of the Energy NPSs, but also improve the transparency of the documents ensuring that they focus on policy relevant to energy, and on criteria related to site selection and good design, as envisaged by the Planning Act (2008).

Table 1

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<th>Number of Pages</th>
<th>Total Pages in NPS</th>
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<td>EN5</td>
<td>2.6 to 2.9.17</td>
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IEMA Recommends that:

(i) The sections of draft NPS EN1-5 set out in Table 1 are removed from the NPS and instead included as a separate guidance document (ie Assessment Guidance for Energy NSIP).

(ii) That the proposed guidance be regularly reviewed to ensure that it remains current and promotes up-to-date good practice in relation to both EIA and specialist environmental topic assessments.
(iii) An advisory panel be established, made up of representatives from appropriate professional bodies, to provide all Government departments involved in the production of NPS with advice, on developments in good practice EIA and specific environmental topic assessments, to ensure guidance in this area remains up-to-date.

4. **Ineffective Consideration of Alternatives in the Appraisal of Sustainability Process**

**The Issue:**

The Appraisal of Sustainability process, undertaken for EN1-5, is considered to carry risk related to compliance with the SEA Directive (2001/42/EC), if realised these risks would lead to a lack of certainty and delays to decisions related to energy infrastructure needed to allow the UK to transition to a low carbon economy.

**Evidence:**

Each of the AoS Reports related to EN1-5 has assessed the same four alternatives, see below, which focus on the format of the documentation rather than substantive issues related to the sustainability effects of the energy policy set out within them. The AoS Reports indicate that the consultants commissioned to undertake the appraisal of the draft NPSs EN1-5 identified a number of other potential alternatives (Table 1.1 in each of the Reports). However, these tables also indicate that DECC did not accept such alternatives were reasonable and thus chose not to assess any alternatives beyond consideration of the format of the documentation. As a result the only alternatives that are considered within the AoS of draft NPSs EN1-5 are:

1. No NPS—“business as usual” scenario.
2. A NPS that only set out high level Government energy policy.
3. A NPS that a) set out high level Government energy policy and b) defined, through generic criteria, types of location which are unlikely (and/or likely) to be suitable for energy developments.
4. A NPS that a) set out high level Government energy policy and b) defined, through generic criteria, types of location which are unlikely (and/or likely) to be suitable for energy developments and c) set out guidance on how impacts of energy developments could be avoided or mitigated.

Our initial concerns relate to the first option (No NPS—“business as usual” scenario) and whether it can be considered to be a reasonable alternative, particularly as the AoS process is required to comply with the SEA Directive (2001/42/EC). Article 5(1) of this Directive indicates that: “an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.”

Whilst Part 2, Section 5 of the Planning Act (2008) does not require the Government to produce NPS related to Energy the existence of the Act and actions in relation to its implementation clearly indicate that they plan to designate an Energy NPSs. As such, following the adoption of the Planning Act in November 2008 it would be more appropriate to consider the Government’s intention to designate Energy NPSs as the “business as usual” scenario. This is because the approach aligns with the existing legal framework and the Government’s stated position regards NPS.

If Option 1 is not considered to be reasonable then the AoS process has only considered alternatives related to the inclusion of information within an NPS document. Given that the majority of the energy policy and sustainability requirements repeat existing Government policy or enacted EU or UK law it is unclear the degree to which Options 2, 3 and 4 are substantively different. For example, the inclusion of information within NPS EN-1 on the Habitats Directive or NPS EN-2 on the Waste Incineration Directive will not affect the requirement that a NSIP application will be required to comply with the legal framework established within these Directives.

It is unclear how the preferred option (Option 4), assessed in each of the AoS reports, can be considered to set the framework for development consent in a manner that is substantially different than that presented within Option 3. The difference between the two options is the inclusion of generic high-level guidance in Option 4 (for further information on this guidance see Section 2 of this response). Options 3 and 4 should therefore be the same in terms of policy framework. As a result it is debatable as to whether the difference between these options would be considered to make them “reasonable” in terms of compliance with the SEA Directive.

The alternatives proposed by the AoS team (Table 1.1 of each AoS) are considered to include substantive alternatives in relation to Government energy policy that will set the framework for development consent of energy NSIP. IEMA believes that as a minimum the AoS of draft NPS EN-1 should have included an appraisal of the environmental, social and economic effects related to alternatives around the following issues:

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Alternative views on the mix of different forms of production that make up the UK’s energy mix. The NPS sets the context for the IPC to make decisions for all forms of generation capacity (50MW onshore and 100MW offshore). However, the environmental consequences in a small variation in
the percentage of the energy mix being derived from different forms of production could have substantially different environmental consequences. For example, a greater proportion from onshore wind would have effects on the landscape over a considerably larger spatial scale than most other forms of onshore generation capacity. This issue could have been considered in the AoS.

— Demand management. Section 3.3 of draft NPS EN-1 includes a discussion on the need case for new electricity generation capacity. This section includes consideration of alternatives to new large scale electricity generation (Section 3.3.16–21 EN-1). It is therefore somewhat surprising that, whilst the overarching NPS on energy included discussion related to such alternatives, there is no equivalent assessment included within the AoS. It would appear reasonable that topics discussed with the draft NPS EN1 be open to assessment with its AoS.

It is IEMA’s view that if the AoS had included appraisal of some of the options proposed to the Government by their consultants there would have been considerably greater evidence that the AoS had considered reasonable alternatives. As a result of our concerns over the approach to alternatives within the AoS process we believe there remains a risk that the documents could be challenged in terms of compliance with the SEA Directive. Given that one of the aims of the new planning system, established by the Planning Act (2008), is to provide greater certainty around infrastructure developments and reduce the time taken to make development consent decisions carrying such a risk forward would appear to be incompatible with these goals. Whilst the period of challenge related to an adopted NPS is limited to 6 weeks within the Planning Act (Part 2, Section 13) a challenge related to compliance with the SEA Directive via the European Court of Justice may not be limited by this timescale. Given that a successful challenge related to the SEA Directive is likely to lead to the NPS being found to be unlawful, risks related to non-compliance of this Directive should be minimised wherever possible. If it is found to be the case that an NPS could be challenged at the European level beyond the 6 week limit set out in the Planning Act in relation to potential failure to comply with the SEA Directive this risk should be mitigated.

It is IEMA’s view that, whilst DECC are confident that they have complied with the requirements of the SEA Directive the Government should be seen to be beyond reproach in terms of compliance with key environmental protection legislation, particularly given the urgent need for new Energy infrastructure and its role in achieving the objectives of the Low Carbon Transition Plan. Further, it could be argued that ensuring compliance with relevant environmental legislation was a necessity in order to comply with the sustainable development requirements related to NPS set out in the Planning Act 2008 (Part 2, Section 10).

IEMA Recommends that:

(i) DECC reconsider the risks associated with the current AoS of NPS EN1-5 from a potential challenge to them on the grounds of compliance to the SEA Directive requirements related to their consideration of alternatives.

(ii) If DECC concludes that there is a risk of a successful challenge then appropriate action is taken to enhance the relevant aspects of the AoS before the NPS EN1-5 are adopted.

(iii) In the future all Government departments ensure that the approach taken to the AoS of draft NPS is undertaken in a manner that leaves the appraisal beyond reproach in terms of questions of compliance to the SEA Directive.

5. Future Progress

IEMA believes that more must be done to ensure that all NPS, particularly those related to Energy, provide the IPC with effective advice on making decisions that do not place long-term constraints on the UK’s carbon budgets and economic development. Without an effective mechanism to allow DECC to monitor the implications of the cumulative effect of the IPC’s decisions on the UK’s carbon budget the country’s approach to its transition to a low carbon economy are likely to be constrained.

IEMA’s recommendations are set out in Sections 2, 3 and 4 of the document.

January 2010

APPENDIX 1

RELEVANCE OF THE SECTIONS OF THIS RESPONSE TO DECC’S DRAFT NPS CONSULTATION QUESTIONS

<table>
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<th>Consultation Questions within DECC’s draft NPSs on Energy (EN1-5)</th>
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Note: IEMA has not made a formal response to the following Consultation Questions at this time: 4, 5, 7, 9, 11, 14–27, 29

Memorandum submitted by Kirksanton Action Group/Kirksanton Residents

EXECUTIVE SUMMARY

The purpose of this document is to review the DECC engagement and consultation process in relation to the proposed new nuclear build on the Greenfield site of Layriggs within the village of Kirksanton West Cumbria. There is a need for careful review of the original Screening and subsequent Strategic Siting Assessment documentation regarding this Greenfield site.

What are the implications:

(i) First knowledge of potential Greenfield site nomination was broadcast by Radio Cumbria at 0730 on 26 February 2009. This was a “Shock” announcement to those Kirksanton residents that received the radio programme.

(ii) It is our understanding from documents including Kate Barker’s report that “Nominations must not be a shock to a local community” noting not all residents heard the report the actual nomination was then made public via residents who had received the transmission. Question Define Local Community?

(iii) Following a local newspaper headline dated Monday 2 March “Tell us the site” RWEpower response was that no actual site decision had yet been taken.

(iv) A hand delivered letter to the Kirksanton residents arrived Tuesday 3 March detailing a potential nomination and subsequent meeting opportunities.

(v) Following the aftershock residents of Kirksanton tried to follow through the original siting process but as a naïve community the only tool we had was intuition. Our limited review and subsequent understanding of the Jackson report on nuclear siting was that an assumption for new build would be on or adjacent to existing sites. From outputs of SSA consultees and stakeholder meetings it appears also to have been an assumption.

(vi) It was not until the published Towards a Nuclear National Policy Statement in January 2009—introduction section 3) “Whilst the white paper on nuclear power expected that applications for building new nuclear power stations were likely to focus on areas in the vicinity of existing nuclear facilities anyone can nominate a site and all nominated sites will need to be assessed under the strategic siting Assessment (SSA). Was this the first time the government announced it was changing its widely held view that all new build would in the first instance be on or near existing nuclear power stations? Was this position clear when consulting on the SSA in July of 2008?

(vii) It is understood that these changes took place following industry challenge that any site could be nominated; perhaps industry could see financial opportunity afforded and the importance of Greenfield sites. Who would have expected a Greenfield site some 21 miles south of an existing infrastructure facility, namely Sellafield, to have been chosen?

(viii) We cannot find reference to differentiated process between Greenfield and Brownfield sites in the current SSA. Once established that Greenfield sites were allowed into the process did DECC consider requesting any inputs into the SSA to accommodate Greenfield sites being entered into the equation?

Our own differential analyses of Greenfield vs. Brownfield have shown a number of anomalies; Greenfield would be rural DECC must be aware that a rural site away from established developments and infrastructure would pose particular problems rural proofing being one example. A differential analysis (based on statistical analysis) would be evacuation of site. Existing sites have well rehearsed plans. Sizewell enquiry wanted the evacuation plan days 54–60 based an establishment.
If a Tool Kit is created that deals with a Greenfield site that has been delineated from the process and use this as a site specific measure, not as a sub regional AoS as has been done, it shows that you would need an understanding of site specifics and its immediate surroundings in our case Millom. RWEnpower would be looking to evacuate 4–5km from site boundary therefore trying to evacuate the only population in a 100sqkm for which there is no where to go.

DECC say there are no other sites in the country yet RWEnpower took a helicopter ride North and South of Sellafield to find Kirksanton and Braystones is this credible to put to the British public where Atkins could not find sites?

Would this then suggest the process is duly flawed in relation to this site?

(ix) First Public Information Meeting.

A public information meeting was made available on 24 March 2009 Site Maps were made available with documentation quoting 180 acres (also noted on RWEnpower web site). It was clear to local residents that the “Site Map” showed a considerably larger area than 180 acres indeed it is over 300 acres.

The evening Q&A session (Kirksanton Village Hall) was attended by 140 people who arrived to find the Head of Copeland Borough Council in the Chair along with a Senior Manager representing West Lakes Renaissance, RWE were in attendance to the side of the room. More importantly the village hall does not allow seating for such numbers, fire exits blocked, public refused admittance an appalling lack of duty of care to attendees and to Health and Safety.

A question was this meeting part of the process? Whose meeting?

(x) Prior to the meeting, 8 March 2009, one resident sent an email to RWEnpower with a 4 page attachment requesting specific information however, RWEnpower did not respond until March 24 2009 @ 22.40 we feel this is significant as the meeting ended at 22.00 hours it is in our considered opinion that RWEnpower withheld sending this information until after the meeting ended.

(xi) We understand this to be a serious allegation to be making however when the law lords state: “whether or not consultation of interested parties and the public is a legal requirement, if it is embarked upon it must be carried out properly”

(xii) A number of other characteristics occur to do with the monitoring and policing of this process and we say “DECC may not have understood their role as facilitators” an example at the recent Heysham DECC event Q&A Mr P McDonald stated “Citi Group did not understand the complicated set of NPs documents that had been released”. If DECC know this and there is a problem of understanding what has been done to help communities understand?

We finally draw your attention to EN6 page 168 5.11.8. And offer the following statement from Cumbria Vision and a reminder of current site usage:

Nuclear renaissance across the world offers us significant incremental business opportunities, and is certainly highlighted in our strategy. We are however agnostic as to where any new developments will be sited, as those decisions will be made in line with the process dictated by Government, and ultimately local communities through local democracy. The Sellafield site, recently purchased by the Iberdrola/Scottish/GDFSuez consortium currently satisfy those conditions and are supported. I would also like to make clear this is the site put forward for nomination under the Britain’s Energy Coast initiative. The RWE Npower nominations for Kirksanton and Braystones have been separately submitted by the company.

Simon Sjenitzer—Strategy Director Cumbria Vision . . . Leading on Economic Development in Cumbria

WE CONCLUDE

Kirksanton is home to one of the oldest wind turbine farms in the country generating renewable energy along with this we house HMP Haverigg who also wish to further develop turbine development we then appear to have a conflict of energy generation interests and await your review of this document.

January 2010

Supplementary memorandum submitted by Kirksanton Action Group/Kirksanton Residents

Agreement for Layriggs Farm 180 acres signed 28 November 2008
Option Period 28 November 2008 to 30 June 2009
Option sum £25,000 pounds
Purchase Price £3.75 million pounds
Consultation for Strategic Siting Assessment ended beginning of November 2008
RWEnpower sent letters to land owners dated 23 March 2009
RWEnpower informed local residents of intention to nominate 24 March 2009
RWEnpower met some local councillors at a closed session meeting of 25 March 2009
RWEnpower nominated 26 March 2009 (this has still not been confirmed by DECC)
The letters that were sent to Land Owners were dated 23 March we do not know what date they were sent out and when local landowners received them.
The Government has issued an edict that companies should use best practice.
The Law Lords have said that “where a government department has issued an edict of how it our companies should behave this must be honoured unless there is good reason not to do so”.
This behaviour may or may not be legal? It is not best practice and if this is part of the argument you are putting to the British public it is barely credible.

February 2010

Memorandum submitted by the Law Society of England and Wales

1. The Law Society is the representative body of over 100,000 solicitors in England and Wales. The Society negotiates on behalf of the profession and lobbies regulators, governments and others. This consultation response has been prepared by members of the Law Society’s Planning & Environmental Law Committee. The Committee comprises of 20 practitioners expert in these areas of law from a cross section of the profession, both public and private sectors, and from across the UK nations.

2. Our concern is for good law, and that means in this context having clear comprehensible policy. The Infrastructure Planning Commission (IPC) is required to decide applications in accordance with the relevant National Policy Statement (NPS) unless that would be unlawful or adverse impact would outweigh benefits. The NPSs are therefore crucial. They are written by the Secretary of State. As the IPC is an appointed body, with no electoral accountability, the only opportunity for input from a democratically elected body is now. Many say there is a democratic deficit in this system and we agree with that. Parliament and this Select Committee are the only real opportunity for democratic involvement in this decision making process. That is the background to our evidence and we hope that the Select Committee will approach its task with this in mind.

3. The new system is quite contrary to the way we normally do things in this country, and we suspect that much of the general public has not engaged with the NPSs and their decisive nature. The ad hoc discussions of the members of our Committee with clients and consultants support this conclusion. This concerns us and heightens the role of the Select Committee as we see a risk of serious public concern when it comes to the construction of the projects. Will there be a repeat of the protests we saw at Twyford Down, the Newbury By-pass and Batheaston By-pass in the 1990s? Those schemes went through a consenting process with far more public involvement than the new system and of course a public inquiry.

4. These energy NPSs fall into three categories. First the overarching NPS (EN-1). Then the nuclear NPS (EN-6) which is site specific. Then the non-site specific NPSs (EN 2—EN5). We will concentrate on EN-1 and EN-6.

5.

5.1. We found it difficult to see any actual policy in EN-1. It is largely argument, background and information. There is a place for that, but we do think that it would be helpful for actual policy to be highlighted in some way. Otherwise it becomes difficult to separate policy from explanation. We find it difficult to believe that every word of the NPS is policy and that every word has to be followed by the IPC.

We see however that later in EN-6 (para 3.1.1) it is claimed that EN-1 part 4 sets out policy on how the assessment of applications should take place. We had read those sections as background and guidance. Indeed to take an example, section 4.30 on environmental assessment of water quality and resources does no more than set out the obvious. But surely it for the IPC to decide how to assess applications, in accordance with the law.

5.2. The NPSs are meant to be statements of policy. However the drafts seek to explain quite a lot of law, and then compound the difficulty by not actually stating that that is what they are doing. The problem with this is that the explanations may not be correct and the law will inevitably move on. There is a recent practical example of this difficulty in the Government’s long standing policy circular on planning conditions. This says that conditions should not require section 106 agreements. That is a statement of law, but it is being interpreted as policy, thus stopping innovative solutions to new problems on large development sites. These explanations are often unnecessary and simply lengthen the document.

92 Circular 11/95.
5.3. The NPSs state that they may be a material consideration in application for planning permission in the non-IPC regime. This is undoubtedly true. However the Government goes on to say that the policies in the NPSs should apply to non-IPC cases wherever practicable. This suggests that NPSs should trump all planning policies, carefully worked out in local development frameworks, drafted by local councils and exposed to public scrutiny and rigorous testing in independent examinations by the Planning Inspectorate. There may be specific policies that ought to be applied in this way but those ought to be called out specifically. Similar considerations apply to applications to be determined by the Marine Management Organisation (when up and running).

5.4. The nuclear NPS (EN-6) identifies ten suitable sites and says that all ten sites are needed. In practice therefore the locations are chosen. If it would be unlawful to grant consent for any of them the IPC cannot do so; that is accepted by the Government and the Planning Act 2008 says this. In practice however, it is rarely unlawful to grant a consent. Planning just does not operate that way. The main exception to this is the Habitats Directive. So assuming compliance with that Directive, the sites can only be rejected if adverse effects outweigh benefits.

This puts onto the IPC a huge weight of responsibility. If they reject a site, the country will not have enough generating capacity on the Government’s need figures. The decision on numbers and siting will effectively have been taken if this NPS comes into effect. That is the result of a site specific NPS and the new legislative framework.

It is not for the Law Society to have a view on whether those numbers and sites are correct. Others will submit evidence on those issues. But we draw attention to this issue because the combined effect of EN–6 as a site specific NPS and the legislative framework is almost to determine that these power stations can be built in these locations and we think it is important that the Select Committee and Parliament understand the position as they consider these NPSs.

5.5. There is considerable repetition of existing policies. We are not sure what this achieves, or why it is done. The NPSs are paramount and the law sets out how the IPC is to approach its task. What is being achieved by the repetition? EN-1 para 4.1.2 does not really help.

5.6 The new system and these policies are in broad terms good news for promoters. They make it much harder for those who would oppose the schemes however. But that decision has been taken by the passing of the Planning Act 2008.

January 2010

Memorandum submitted by the LGA Group

INTRODUCTION

The LGA Group is made up of six organisations: the Local Government Association (LGA); the Improvement and Development Agency (IDEA); Local Government Employers (LGE); Local Authorities Co-ordinators of Regulatory Services (LACORS); Local Partnerships and the Leadership Centre for Local Government.

Our shared ambition is to make an outstanding contribution to the success of local government. Together we work with and on behalf of councils to lobby for changes in policy and legislation, build a strong and positive reputation for local government and support them and their partnerships to continuously improve and be innovative.

We provide services at the national level which support and are complementary to the regional and local support provided to councils, as well as the work councils themselves undertake. We work with authorities across England and in some activities across Wales, Northern Ireland and Scotland too.

The 424 authorities who make up the LGA Group cover every part of England and Wales. Together they represent over 50 million people and spend around £113 billion a year on local services. They include county councils, metropolitan district councils, English unitary authorities, London boroughs, shire district councils and Welsh unitary authorities, along with fire authorities, police authorities, national park authorities and passenger transport authorities.

EXECUTIVE SUMMARY

The LGA is supportive of the new planning regime. However local authorities are concerned that the arrangements for resourcing them to undertake their functions at each stage of the new regime are inadequate and we have several suggestions as to how these arrangements could be improved.

— Far more emphasis needs to be placed on Local Development Plans and local land usage.
— There should be guidance on where energy developments might be encouraged or supported.
— The NPSs could give more weight to the cumulative impacts that could result from proposed developments in a single area.
— It is important that community scale renewable generation is promoted.
Written Evidence

1. The Local Government Association is providing oral evidence to the Committee on 3 February 2010.

2. The LGA is supportive of the new planning regime and the need to improve the decision making for nationally significant infrastructure projects. The new arrangements give councils key roles at each stage of the planning process. In particular, the Local Impact Report(s) will be an important source of evidence and insight for the Infrastructure Planning Commission’s examination of applications.

3. We recognise the national importance of modernising our energy infrastructure to replace existing power stations as they are de-commissioned and to introduce low carbon energy generation.

4. We are however very concerned about the inadequate arrangements for resourcing councils to discharge their responsibilities at each stage of the new planning regime: pre-application, examination and decision, consent and enforcement. This places new burdens on local government for which they need to be resourced by developers.

5. We have a number of key points to make about the ways in which the national policy statements on energy could be improved.

6. The National Policy Statements need to give more weight to Local Development Plans and local land uses.

7. Development plans are statutory documents prepared in accordance with statutory procedures. They are required to address all types of development and infrastructure to ensure that the vision for an area can be fulfilled and desirable development brought successfully to delivery. This requires close collaboration between the local planning authority and developers (including energy infrastructure providers) to ensure that their intentions are properly reflected. This should include addressing the implications of major infrastructure projects for the wider area including matters such as additional housing need and waste management requirements, both strategically through the Regional Spatial Strategy and locally through the Local Development Framework.

8. The development plan is expected (among other things) to set out the amount of development of different types to be provided for, the planned disposition of the various types of land use, and how they are to be connected to roads and other communications. Where a plan has been developed through a proper process of engagement, including with energy infrastructure providers, it will be a key factor in decisions on other types of development proposals, and should also be a significant consideration in relation to nationally significant energy infrastructure projects.

9. It will be important for the Infrastructure Planning Commission in considering a proposal for energy infrastructure, to ask whether the proposal would cause harm to the delivery of other objectives for the area addressed in the development plan. Examples of possible harm might be that the proposal would reduce the amount of land available for other important types of development, or physically prevent or inhibit such development, or change the market situation locally (including the effect of environmental conditions) to the detriment of the commercial viability of other desirable development. Conversely, the proposal might assist the achievement of other objectives for the area, which should work in its favour.

10. There should be guidance on where energy developments might be encouraged or supported—these decisions are left entirely to developers except in the case of the nuclear NPS where the government has decided on specific sites, following consultation. We see a need for a more strategic approach that considers proximity to the transmission network, economic development and integration with other major infrastructure.

11. To illustrate this point, a possible consequence of leaving decisions to developers could be a proliferation of proposals for new energy generating capacity on the coast (in addition to the ten nuclear sites), to take advantage of readily available cooling water and the entry points for fossil fuel. The discussion of the potential nuclear sites demonstrates the potential harm to the landscape and important ecological interests that could be caused by such developments. Moreover, there would be significant cumulative impacts if a number of different installations came forward in the same general area. These could include the need for new transmission lines affecting sensitive landscapes and wider impacts upon nature conservation, tourism, the fishing industry and other matters of considerable public interest. Whilst this example is speculative, it does illustrate one outcome which could arise in the absence of strategic guidance on location in the NPSs.

12. The NPSs could give more weight to the cumulative impacts that could result from proposed developments in a single area. To illustrate this point new generating stations, particularly if they are clustered in a particular location, may need new transmission infrastructure—a new transmission line to connect to the station could be one of the most significant impacts, with local concerns about the route of the grid lines. This ought to be considered at the time of the application for the generating station.
13. Whilst the energy NPSs relate to large scale energy generation, it is equally important that community scale renewable generation is promoted. We welcome the coverage of combined heat and power in the statements. But there are further ways in which renewable generation can be encouraged—for example, through the use of renewable energy sources in other major infrastructure developments, in particular airports and ports.

14. Although the NPS covers environmental impacts, it could give more weight to the economic and social impacts which will be important to local people.

15. Finally, the LGA is meeting with councils impacted by proposed new nuclear build on 22 January at which we will discuss the nuclear NPS. We would be happy to send the committee a supplementary note after that meeting or cover our key points on that national policy statement in our oral evidence.

January 2010

Memorandum submitted by Maritime UK

NATIONAL POLICY STATEMENT FOR RENEWABLE ENERGY INFRASTRUCTURE (EN-3)

Maritime UK brings together the shipping, ports and maritime business services sectors in the UK on key strategic and practical issues of joint interest. This collective approach creates a stronger, louder voice for the maritime services sector, and is already helping to improve links with Government and other audiences. As a group, the Maritime UK sectors contribute £25 billion to the UK’s GDP in total and support 500,000 jobs.

In responding to the draft National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3), Maritime UK would first like to emphasise that its partners support the Government’s climate change policy by growing the percentage of UK energy provided by renewable sources and recognise the role that offshore wind has to play in the delivery of that policy. We also believe that, aside from sound environmental and strategic energy considerations, this policy offers many of our members a significant market opportunity both initially in the UK and later through “first mover” expertise elsewhere in the world. Maritime sectors that may see business opportunities include the ports, survey vessels, offshore construction vessels, jack-up rigs, maintenance vessels and cable layers. Our comments below should therefore be seen as offering positive suggestions that, if acted upon, will help the UK Government both in the effective and sustainable delivery of this significant area of government policy and in economic terms.

This memorandum also highlights a number of principles which should also be adopted for consenting other large-scale offshore renewable structures involving wave and tidal energy.

Maritime UK is pleased to note that the NPS gives detailed consideration to the impact on navigation and shipping from the proposed expansion of offshore wind and takes full account of the key recommendations on navigation and shipping in the Offshore Energy Strategic Environmental Assessment post-public consultation report. Clearly, efforts have been made to address the sometimes competing needs of the different users of the sea but, while the suggested processes and ameliorative measures are undoubtedly well-intentioned, we believe there are a number of areas where they could be strengthened, in order to provide the necessary balance that we detect the draft NPS seeks to achieve and to ensure the orderly consideration of development opportunities.

Our primary concern relates to the consultation procedures. At present, the NPS requires developers to consult with the stakeholders but does so without limit and without a defined process. Experience of previous windfarm developments has shown that, too often, shipping is not taken account of or consulted until after the sites have been designed—on the basis of only the developer’s economic and environmental assessments. By this time, a substantial sum of money has already been spent by the developers who naturally are defensive of the proposed sites and less receptive to changes or suggestions that the site is unsuitable, even if it would compromise maritime safety or have a negative economic impact on the shipping or other industries. We believe that it is imperative that the NPS make explicit the need for safety of navigation and any potential impact on shipping routes to be considered at as early a stage as possible when identifying and deciding on future wind farm sites.

It is also important that early consultation is mandatory, to ensure that sites are progressed in a proper fashion and that shipping, ports and other stakeholders are not unduly burdened by having to respond at a late stage to thinly-presented proposals and—in their consultation responses—do not become effectively a “free consultancy” for developers. The sheer scale of the proposed expansion of offshore wind installations—in the light particularly of the projections for Round 3—is placing a fast-growing and significant administrative burden upon industry. We believe that a number of simple measures could be included in the NPS which would serve both to reduce this unnecessary work and to speed up the consultation process and is in line with the BIS approach in the better regulation programme “Simplification 2010–15: Call for Evidence”.
Firstly, the Crown Estate is relatively “responsibility free”—at least in relation to navigation and shipping—in its decisions to offer areas of the sea bed to developers. This is, in part, compounded by the fact that the Crown Estate also has a clear financial incentive for making available as many sites and as large an area as possible to wind farm developers. We believe strongly that the process could be rationalised to the benefit of all by the Crown Estate being required to engage in the discussion on what areas of the sea are or are not suitable for development before the areas are offered to the market. This could be done either area by area, or through a central Government holistic review involving all stakeholders of current and future needs, either for all or relevant potential parts of the UK’s coastline. We suggest that this would enable and encourage the Crown Estate to offer from the start areas that are, as far as possible, free from associated navigational risks and negative economic impact.

Secondly, we believe that the consultation process could be speeded up and the administrative requirement substantially reduced if the Government were to codify its recognition of shipping lanes and shipping “clearways”, perhaps taking into account the process adopted during the “rush for gas” in the 1970s. Considerable work has already been done on this in an earlier context within the Department for Transport, which could serve as a starting point. It is clearly in the national interest that access to deep-sea routes should be maintained and short-sea/coastal shipping facilitated. Any assessment of recognised shipping lanes should not only take into account existing routes but be future-proofed, so that Government can respond to the policy need of new routes becoming available. We therefore recommend that the Central Government should initiate a discussion involving different departments and bodies (inter alia DfT/MCA, DEFRA/ MMO, BIS, and Crown Estate) to identify current and future routes that are considered essential and of commercial significance. There is an urgent need for a system that would keep this under review as an ongoing process. This should be conducted with input from our industries and the results owned by the DfT as their sponsoring ministry.

Thirdly, while developers do have to undertake a navigational risk assessment (NRA), the validity of this has to be assessed by the industry. To reduce this burden, we believe that the existing guidance53 to developers (which is currently fragmented and in several different places) should be brought together in one document and that the NPS should specify that all NRAs should meet that guidance and present information in a clear and unambiguous manner. Any NRA which contravenes that guidance should have to make a specific case as to why consent for the site in question should be granted.

Developers should also be required to provide the key stakeholders with all relevant data54 prior to the start of the formal consultation process.

In addition, and given the significant workload involved in assessing these NRAs, consideration should be given to requiring wind farm developers to reimburse the costs of those representative organisations that are, practically if not formally, compelled to perform such actions on behalf of the shipping industry as a whole, both national and international. Similarly, the initial work that will also be undertaken by the General Lighthouse Authorities in assessing the NRAs should also be identified and compensated, so that the shipping industry (which funds those organisations through the payment of light dues) does not also end up paying for this activity.

Finally on the “process” of consultation—and given the volume of applications anticipated and their potentially significant impact on shipping and navigation—Maritime UK considers it pernicious that, should major stakeholders inadvertently miss the first stages of consultation, their views will not be taken into consideration at a later stage in the process. We seek greater flexibility in setting consultation deadlines. Instead of limiting deadlines to a rigid period of 12 weeks as is currently proposed, the time allocated for responses to a particular consultation should be extended to take account of the number of submissions running at any one time.

In addition to the “process” of the consultation exercises, we also believe that their scope should be widened to take into consideration economic impacts and any consequent need for financial compensation. We note that, as presently drafted, the NPS contains a clear presumption in favour of future windfarm development and that, even where “strategic routes essential to regional, national and international trade” are, practically if not formally, compelled to perform such actions on behalf of the shipping industry as a whole, both national and international. Similarly, the initial work that will also be undertaken by the General Lighthouse Authorities in assessing the NRAs should also be identified and compensated, so that the shipping industry (which funds those organisations through the payment of light dues) does not also end up paying for this activity.

In addition to the “process” of the consultation exercises, we also believe that their scope should be widened to take into consideration economic impacts and any consequent need for financial compensation. We note that, as presently drafted, the NPS contains a clear presumption in favour of future windfarm development and that, even where “strategic routes essential to regional, national and international trade” are, practically if not formally, compelled to perform such actions on behalf of the shipping industry as a whole, both national and international. Similarly, the initial work that will also be undertaken by the General Lighthouse Authorities in assessing the NRAs should also be identified and compensated, so that the shipping industry (which funds those organisations through the payment of light dues) does not also end up paying for this activity.

53 MGN 371, MGN 372, Future Offshore—A Strategic Framework for the Offshore Wind Industry, DECC’s—Offshore Energy SEA Post consultation report, DTI Guidance Notes—Offshore Wind Farm Consents Process, DECC’s—A Prevailing Wind—Advancing UK Offshore Wind Deployment, Energy Act 2004—Section 99, Section 36B—under which it states “Duties in relation to navigation”—In which it is clearly stated that a consent cannot be granted for an OREI which is likely to interfere with the use of “recognised sea lanes essential to international navigation” as defined in UNCLOS—Article 60(7), Coastal Protection Act 1949—Section 34.

54 Prospective developers should be able to present the following information in relation to navigational impact assessments:

— Clear co-ordinates and details of the size, shape and location of the Lease Option Area (and in due course the Demonstration and/or Commercial Site as appropriate);

— A clear description of any navigational risks, and how they intend to comply with existing guidance/regulations. Developers are expected to be familiar with current guidance for the development Offshore Renewable Energy Installations before approaching The Chamber of Shipping, these include inter alia;

— Where it is shown (the developer having done the research) that shipping lanes cross (or come close to) a marine energy site, an assessment by the developer of the impact (close quarters, diversions, cumulative effect etc) of the site and proactive proposals to alleviate the impact offering mitigation measures (whatever those measures may be).
economic impacts on other users of the sea to be considered sufficient grounds for the IPC to reject an application and that the NPS should make this explicit in a manner similar to that of the “unacceptable risks to navigational safety” described in para 2.6.153. We are unsure as to the IPC’s approach or the options it has available, if the developers fail to mitigate or overcome key concerns during the consultation stage. We therefore suggest setting up of a pre-scrutiny panel to review responses and decide whether or not the proposals should progress to the application stage. Obviously, arbitration in such a case will be the last resort, but the onus should be on the developers to prove that they have applied due diligence in preparing their case, in accordance with the stipulated guidelines and key stake-holders’ views.

It is only right that, where an existing business is commercially disadvantaged by the (Government-sanctioned) creation of another business, compensation should be payable. While we concede that, for practical reasons, it is not possible to compensate shipping in any generic sense, in those instances where a regular trade is materially disrupted by the creation of an offshore wind farm, then those additional costs should be assessed and mitigated. A number of useful lessons should be drawn from the experience of the consenting of the West of Duddon Sands wind farm, where failing to take account of practical evidence has led to lengthy and costly legal wrangles. While the principle of compensation has been recognised for the fishing industry in the associated guidance for wind farms affecting fishing grounds, no parallel arrangements exist for costs arising from changes to commercial shipping routes or ports businesses. We would ask that the NPS be amended to reflect this principle for shipping and ports, so that developers are aware of all likely associated costs prior to making an application.

Lastly, Maritime UK would also like to make a number of detailed comments regarding the draft NPS, which we hope you also find constructive and conducive to improving the consenting regime for future offshore wind farms.

**Detailed/Techical Comments**

— Paragraphs 2.6.160 and 163 mention a number of bodies whose views should “underpin” consultation. As other associations are mentioned by name, we feel that the Chamber of Shipping and Maritime UK should be mentioned explicitly in these paragraphs as it would make clear to developers that they must consult those organisations.

— We are unclear as to what para 2.6.158 is intended to add to the NPS. We do not see that this para adds anything to that contained in para 2.6.156 and it should be deleted.

— Paragraph 2.6.168 defines a recognised sea lane essential to international navigation. We would question whether the NPS might make reference to this when it discusses “major commercial navigation routes” and “strategically important” routes in paras 2.6.169 and 2.6.170. If this definition is not to be taken, it would be helpful for the NPS to determine what these terms mean, how the definition has been developed and who has been consulted during that process.

— We note that in paragraphs 2.6.163, 2.6.166, 2.6.169, 2.6.170 and 2.6.171 the Maritime & Coastguard Agency is tasked with advising both applicants and the IPC on an NRA, but apparently it has not been given a statutory status. Given the pressure on resources already experienced by MCA, we would consider it appropriate for it to be provided with additional resource to perform these assessments (possibly paid for by the developers).

— In that context, we are aware that the Government does have two Committees already in existence which are concerned with the safety of navigation and offshore renewables (the Nautical and Offshore Renewables Energy Liaison Group—NOREL and; the United Kingdom Safety of Navigation Committee—UKSON). In our experience, however, we have found that neither of these have proven to be a forum that allows an in-depth analysis of the concerns of the maritime sector with regards to site specific wind farm applications.

— We note that in paras 2.6.173–177 the IPC is tasked with evaluating risks, mitigation measures and the overall effect of developments before taking a decision. In order to do so in a professional and responsible manner it is surely essential that the IPC has access to sufficient and truly independent navigational expertise so that objective decisions can be made. In addition, we feel that financial compensation should be added as a form of ‘mitigation’ in addition to other measures that have already been suggested in the draft.

— It is questionable whether and to what extent it is permissible for HMG to close off areas of sea or to inhibit passage of shipping as envisaged in para 2.6.178.

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95 NOREL is essentially an information exchange which deals with associated navigational matters once a decision to proceed has already been taken. It does not have a remit to prevent an application from progressing if navigational safety concerns are not addressed.

96 UKSON, has a full agenda dealing with all navigational safety matters for the UK and OREIs form only one agenda item. Consequently, there is insufficient time for UKSON to properly assess potential OREI sites and, again, by the time discussions reach UKSON a development is usually well under way with considerable sums already invested. Indeed, the need for early engagement of stakeholders was one of the key recommendations in DECC’s post-Strategic Environmental Assessment (SEA) report and specifically for that engagement to take place in advance of the Scoping Report or EIA.
We note that para 2.6.183 introduces the possibility of arbitration. We think it would be helpful if the NPS provide greater detail on what might constitute the need for arbitration and describe some of the principles that might underpin that process.

To conclude, Maritime UK believes that an improved consultation process, which gives due consideration to both the safety of navigation and commercial needs of the shipping and ports industries from the earliest possible stage in the development process, will both improve the process for windfarm applications and ease the role of the Infrastructure Planning Committee in reaching a decision on the granting of consent. While this may increase slightly the pre-application requirements, we would note that the purpose of the IPC is to speed up the overall approval process and not necessarily the preparation process.

Member Organisations:
Baltic Exchange; British Ports Association; Chamber of Shipping; Institute of Chartered Shipbrokers; Maritime London; Passenger Shipping Association; UK Major Ports Group.

January 2010

Memorandum submitted by Mrs S Millar

Summary
I would like to draw the committee’s attention to the following points:
— Lack of consultation prior to nomination.
— Flawed SSA consultation.

Introduction
I am a resident of Silecroft, a small West Cumbrian village about 1,000 metres from the new nuclear site at Kirksanton.

I have been running a successful bed and breakfast business in the village for several years. Prior to that I worked in environmental education for nearly 20 years.

Factual Information
Community consultation
1. Community consultation prior to nomination was non-existent for our village, despite the fact that we are only about 1,000 metres from the site. Many of the houses look out over the fields to the site; we are well within sight.
2. I will detail the sequence of events that made me aware of the proposal of the site, since it essentially mirrors that of all other Silecroft residents.
3. 25 Feb 2009: the local paper published a story suggesting that a site “near Millom” might be nominated. I don’t take the paper, but a friend mentioned it to me.
4. Following press pressure to know exactly where this site was to be, RWE finally issued a press release announcing the site around 4–5 March. The road to town was closed that week, so I didn’t see a newspaper and was unaware until later.
5. My first knowledge of the actual position of the site came from a chance meeting with a resident of Kirksanton (during that first week of March) whilst walking my dogs on the footpath, which currently runs through the proposed site at Layriggs. She told me that RWE had sent a letter to 40 or so residents of Kirksanton during that week, but no such letters had been sent to anyone in Silecroft.
6. On 10 March public meetings were apparently announced in the press. Again, I was unaware. On 11 March a Kirksanton resident took it on himself to distribute the DECC “Have your say” leaflets door to door in Silecroft. I spoke to him and he mentioned a possible meeting at Kirksanton. However, Kirksanton residents were concerned on the one hand that their neighbours in Silecroft had no such meeting offered, and on the other hand that their village hall could not accommodate Silecroft residents as well as their own villagers. However, they invited some representatives of Silecroft to attend.
7. I, and several others from Silecroft, attended the packed meeting, but did not feel that we should take up time expressing our views, since it was Kirksanton’s meeting, and they had plenty of questions.
8. Finally, on 7 April, after the nomination date, I received a letter from RWE. Only those Silecroft residents who attended the meeting and left their details received such a letter. The majority of Silecroft residents, therefore, have never received any communication from RWE either before or around the nomination date, or during the consultation process. The only official communication remembered by those I have spoken to is the “Have your say” leaflet, delivered by the Kirksanton resident as mentioned above. In fact, to date, no communication from RWE has ever been received by the majority of this village.
9. I do not consider that it is satisfactory to rely on people happening to see articles in the press as a means of informing and engaging with local residents. Leaving any effort at communication until less than a month before a totally unexpected green field nomination is made is also totally unacceptable.

**Flawed SSA consultation**

10. You will be aware that in the SSA consultation, Kirksanton attracted about a third of the total responses. Many flaws, inaccuracies and untruths in the report by ARUP were pointed out.

11. Some of these have been noted, and corrected in the current draft NPS documents. However, a considerable number of mistakes have persisted into the current HRA and AoS documents for Kirksanton. These will be doubtless be pointed out again by those of us who respond to the current consultation, but we can no longer have any faith that the information we give will be taken into account.

12. For the purpose of this written evidence, I will give just one example. The original ARUP document submitted for nomination said that "the site is subject to man-made defences" (D2, page 11). Several people who responded during the SSA consultation pointed out the fact that there are no man-made defences at or near the site, yet the mistake has not only been repeated, but also compounded, in the AoS for Kirksanton, e.g. "strengthening of coastal defences" (page 13,14), "improvement of coastal defences" (page 16), and even "the site is defended by a coastal defence scheme comprising of armoured protection and constructed in 1993" (page 31).

13. Flooding, rising sea levels, coastal erosion and disruption of the dune system in the adjacent Ramsar/SPA are all major factors in assessing the suitability of this site, so errors such as that above are of major concern. They make a mockery of the consultation process to date, and give little cause for confidence in the present consultation.

**RECOMMENDATION FOR ACTION**

14. Serious, genuine attention to the process of consultation before major mistakes are made.

January 2010

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**Memorandum submitted by the National Grid**

1. National Grid is pleased to have this opportunity to contribute to the Committee’s inquiry into the proposals for energy National Policy Statements (NPSs). We strongly support the changes to the planning system that were introduced by the Planning Act 2008 (the “Act”) and believe that the establishment of a single consenting regime will streamline the planning system to provide greater certainty, efficiency and consistency for all whilst ensuring the timeliness and quality of decision-making, including appropriate community and stakeholder involvement, is improved.

2. Full, effective and judicious implementation of the fundamental reforms within the Act will be crucial to the timely delivery of the energy infrastructure investment programme needed to ensure continued security of energy supply and the creation of a low-carbon economy. A vital component of this implementation is designation of the suite of energy NPSs to provide a coherent and practical framework within which future planning applications for energy infrastructure can be judged, following pre-application consultation with stakeholders and communities as required by the Act.

3. The NPSs, as drafted, provide an excellent primary basis for the Infrastructure Planning Commission’s (IPC’s) decision making process. In particular National Grid welcomes:

   — A stable policy framework, which clearly sets out the Government’s energy strategy and priorities.

   — Recognition of the extent to which our quality of life is dependent on secure and adequate energy supplies.

   — Clear demonstration of the urgent need for a wide variety of new energy infrastructure to ensure continued security of supply and the creation of a low-carbon economy.

   — Robust and sufficiently-detailed assessment principles, generic/technology-specific impacts and information on appropriate mitigation measures which provide specific, unambiguous direction to the IPC and all stakeholders involved, or interested, in an application. Together with the policy framework, this detail will enable consistent and efficient assessment of applications against national policy issues, thereby negating the need for extended debate on such issues at hearing or inquiry stage.

   — Recognition of the need for flexibility in the IPC’s ability to consider related nationally significant infrastructure projects (NSIPs) as linked proposals, via joint applications, or as separate projects in their own right.
4. National Grid therefore very much welcomes the tenor of these draft energy NPSs as the primary basis for decisions by the IPC. There are some areas of specific detail where we believe further work is required prior to the designation of the NPSs. These areas will be expanded on in our more detailed response to the Department of Energy and Climate Change’s consultation.

**INTRODUCTION TO NATIONAL GRID**

5. National Grid is an international electricity and gas company and one of the largest investor-owned energy companies in the world. We play a vital role in delivering gas and electricity to many millions of people across Great Britain in an efficient, reliable and safe manner.

6. Through regulated subsidiary companies, National Grid owns the electricity transmission network in England and Wales, operates the electricity transmission system throughout Great Britain, owns and operates the gas transmission network throughout Great Britain and four of the eight gas distribution networks delivering gas to some 11 million homes and businesses.

7. Our primary duties are to operate, maintain and develop our networks in an economic, efficient and co-ordinated way and to facilitate competition in the supply and generation of electricity and in the supply of gas respectively. Our licences require us to provide connection to and use of our transmission and distribution networks in a non-discriminatory and transparent way.

8. As an electricity transmission system licence holder National Grid also has a duty placed on it under Section 38 and Schedule 9 of the Electricity Act 1989 relating to the preservation of amenity. How National Grid meets this duty is set out in “National Grid’s commitments when undertaking works in the UK: Our stakeholder community and amenity policy”.

9. Through regulated and non-regulated subsidiaries, National Grid also owns and maintains around 20 million domestic and commercial meters, the electricity interconnector between Great Britain and France, a Liquefied Natural Gas (LNG) importation terminal at the Isle of Grain and the short range LNG gas storage facilities in Great Britain. National Grid also has a carbon dioxide transportation subsidiary (National Grid Carbon) which is developing infrastructure for the deployment of Carbon Capture and Storage (CCS) as a key enabler for the transition to a low carbon economy.

**NATIONAL GRID AND PLANNING REFORM**

10. Given the changing face of energy markets, the commitment to address climate change and the age of National Grid’s transmission assets we need to undertake a substantial amount of new energy infrastructure investment and development. We are therefore a major “consumer” of the planning and consents regime as far as it relates to NSIPs.

11. Prior to the Act, the consents regime for projects such as National Grid’s was too complex, too lengthy, too costly; it created uncertainty for communities, business and developers; and it failed to take account of the national need for new infrastructure. A combination of these factors made it difficult for communities to engage properly in the process.

12. We strongly support the changes to the planning system that were introduced by the Act. We believe that the establishment of a single consenting regime, with the IPC as a single independent decision-making body, will streamline the planning system to provide greater certainty, efficiency and consistency for all whilst ensuring the timeliness and quality of decision-making, including appropriate community and stakeholder involvement, is improved.

13. Alongside the Act and the suite of secondary legislation and guidance that has followed, the development and designation of effective NPSs which give a clear framework for decision making, are vital components of realising the benefits of the reformed regime.

**NATIONAL POLICY STATEMENTS**

*Structure and content overview*

14. As they will be the primary consideration for the IPC in determining applications for NSIPs, the structure and content of NPSs are key to ensuring the success of the reforms.

15. National Grid welcomes the draft energy NPSs, which we recognise have been developed in conjunction, and consistent, with relevant Government policy. These clear national statements of policy in relation to energy, its generation and its transportation provide important guidance to promoters of NSIPs, local authorities, statutory consultees and those communities potentially affected by proposals. They are also crucial in clarifying a number of issues, such as need for the infrastructure, which hitherto have been revisited at public inquiries. The absence of such clear guidance in an NPS could lead to continued debate at each stage of the consents process, which would negate the benefit of providing such statements.

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97 Final document to be published by the end of February 2010 at:
http://www.nationalgrid.com/uk/LandandDevelopment/SC/Responsibilities/
16. National Grid agrees that there should be a presumption in favour of developments that applicants demonstrate accord with the relevant NPSs. The IPC will, of course, take account of relevant local factors (including adverse local consequences of a development). However, given the national importance of significant energy projects and provided that a developer can prove that they have minimised, mitigated and/or compensated for (as appropriate) local adverse impacts we strongly support the importance and weight that is attached to the NPSs in IPC decision-making. We also believe that the provisions noted in paragraphs 1.1.2 and 4.1.1(v) of the overarching NPS provide an appropriate balance in this regard.

Assessment principles, impacts and mitigation

17. Whilst NPSs should not be overly prescriptive, their value (ability to clarify policy and process and therefore mitigate delay) is dependent upon the level of detailed information they include. National Grid welcomes the inclusion, within the overarching NPS for energy, and supplemented where necessary by the technology specific information in the other energy NPSs, of details regarding key principles to be followed in the consideration and examination of applications including information concerning:

— Potential impacts associated with energy infrastructure construction and operation.

— The environmental information that the applicant is required to include in the Environmental Statement or application.

— The factors (on an impact-by-impact basis) that the IPC will consider in its decision making.

— The mitigation measures that could be used to offset or eliminate adverse impacts.

18. Although we recognise that the NPSs do not provide a comprehensive list of all possible effects, and that there may be other impacts which the IPC will wish to consider on a project by project basis, it is helpful for the NPSs to be as comprehensive as possible in order to maintain clarity and consistency.

Need for New Energy Infrastructure—Overview

19. It is widely recognised that the UK is coming out of a period of “energy plenty”, with the decline of North Sea gas supplies and many existing power stations reaching the end of their lives. Over one third of the UK’s generation needs replacing in the next 15 to 20 years and within a decade 80% of the UK’s gas will need to be imported if the Government’s objective of maintaining the current levels of security of energy supply is to be met. In order to achieve this, network capacity issues, although significant, cannot be considered in isolation. Other important criteria include:

— Diversity—It needs to be ensured that there is not over-dependence on a certain fuel type for electricity generation or on a single gas supply source or transportation route.

— Reliability—Historically the UK electricity transmission system has operated with reliability of almost 100%. In order to maintain this record it is crucial to respond to demand growth, provide new connections and replace ageing assets.

— Market signals—The networks need to be able to continue to respond to market signals for investment to provide fit-for-purpose networks for the future. Efficient, open, transparent and competitive energy markets are important as they provide fair access to energy supplies, foster sufficient and timely investment through the energy supply chain and deliver diverse, reliable supplies at competitive prices.

20. Equally, the Government’s commitment to mitigating climate change anticipates wide-scale connection to the electricity transmission network of new low-carbon generation, such as large-scale onshore and offshore wind farms, new nuclear power stations, fossil fuel power stations with carbon capture and storage, and distributed and micro generation. Such changes in the type and source of primary energy resources will bring about significant change in the gas and electricity markets going forward and require a multi-billion pound investment programme. This will encompass small and large-scale electricity generation, new gas terminals and substantial investment in the UK’s energy and carbon networks to replace and upgrade ageing assets and construct new infrastructure to connect and efficiently deliver new and existing energy sources, as well as maintaining the levels of safety and reliability to which everyone has become accustomed. This must all be undertaken in a way that takes account of the views of communities and respects precious landscapes and environments.

21. Affordability of energy supplies also forms one of the Government’s fundamental energy policy objectives, and the deliverability of much of the needed energy infrastructure will help ensure that energy prices do not increase due to demand outstripping supply (although other worldwide factors may still have an impact on prices).

22. National Grid therefore strongly supports the Government’s conclusion “that there is a significant need for new major energy infrastructure which will have to be met by projects coming through quickly”.98 The overarching energy NPS sets out the need-case for each generation technology and energy transportation network in turn. Most essentially, these statements of need allow the IPC to start its

assessment of applications for relevant NSIPs on the basis that need has been demonstrated. Importantly, this will enable the timely assessment of the application specifics by the IPC, bypassing potential lengthy delays caused by repetitive debates over whether or not such infrastructure is required.

Need for New Energy Infrastructure—Specific Comments

23. National Grid strongly supports the stated need-case for new electricity generation capacity alongside the expansion and reinforcement of the UK’s electricity transmission network. The supporting information, including supply and demand projections and required transmission reinforcements, are consistent with our current analysis.

24. National Grid also supports the assertion that the IPC should start its assessment of applications for supply, storage and transmission of gas from the basis that there is a significant need for this infrastructure to be provided. Indeed, our latest analysis indicates that the “need” for new gas infrastructure is much stronger than the case currently presented in the NPS. For example 3.9.3 of the draft overarching energy NPS states that “net gas imports are forecast to remain broadly constant during the next decade” whereas our current projections indicate that gas imports will nearly double between now and 2020.

25. In addition to the existing need cases in the draft NPS, National Grid proposes the insertion of an explicit reference to the need for independently provided carbon dioxide transportation and storage infrastructure. New carbon dioxide transport and storage infrastructure will be needed to support the mandated deployment of the Carbon Capture and Storage (CCS) chain, taking captured carbon dioxide away from fossil fuel power stations and industrial emitters and transporting it for permanent storage underground, including on a shared use or common carriage basis.

Need for Flexibility in Considering Grid Connection

26. National Grid recognises that the Act aims to create a holistic planning regime. Wherever possible and appropriate, National Grid will work with promoters of related energy infrastructure projects (usually our customers whom we are seeking to connect such as generators, gas importers, gas storage operators, distribution companies and carbon emitters) to ensure, as far as reasonably practicable, the co-ordination of development consent applications under the Act, such that they can be considered as linked proposals by the IPC. However we strongly welcome the recognition in 4.9.2 of the draft overarching NPS and 2.3.2 of the draft NPS for electricity networks infrastructure, that in some cases, the synchronisation of IPC considerations may have an adverse impact on the delivery of climate change or security of supply objectives. We acknowledge that when such cases arise there is a requirement, covered in the relevant NPSs, for applicants to explain the reasons for separate applications.

Conclusion

27. Full, effective and judicious implementation of the fundamental reforms within the Act will be crucial to the timely delivery of the necessary investment programme to ensure continued security of energy supply and the creation of a low-carbon economy. A vital component of this implementation is the designation of the suite of energy NPSs.

28. National Grid very much supports the tenor of these draft energy NPSs and believes that they provide a coherent and practical framework within which the IPC can assess future planning applications for nationally significant energy infrastructure. In particular we welcome:

— A stable policy framework, which clearly sets out the Government’s energy strategy and priorities.
— Recognition of the extent to which our quality of life is dependent upon secure and adequate energy supplies.
— Clear demonstration of the urgent need for a wide variety of new energy infrastructure to ensure continued security of supply and the creation of a low-carbon economy.
— Robust and sufficiently-detailed assessment principles, generic/technology-specific impacts and information on appropriate mitigation measures which provide specific, unambiguous direction to the IPC and all stakeholders involved, or interested, in an application. Together with the policy framework this detail will enable consistent and efficient assessment of applications against national policy issues, thereby negating the need for extended debate on such issues at hearing or inquiry stage.
— Recognition of the need for flexibility in the IPC’s ability to consider related NSIPs as linked proposals, via joint applications, or as separate projects in their own right.

29. There are some areas of specific detail where we believe further work is required prior to the designation of the NPSs. These areas will be expanded on in our more detailed response to the Department of Energy and Climate Change’s consultation.

January 2010
Memorandum submitted by Natural England

1. Natural England welcomes the preparation of the National Policy Statements (NPS) for energy to guide decisions on major energy developments in England (and Wales).
- The transition to a low carbon economy is imperative, to address both anthropogenic climate change and long term energy security. We recognise the critical role that the energy NPSs will play and support the strategic lead that Government is providing.
- It is vital that a clear statement of the national need for additional energy generation and supply capacity is set out, which identifies the role of different types and scales of infrastructure and technology in decarbonising the UK energy system and maintaining affordable supplies.
- It is equally important that NPSs set out how that additional capacity will be provided for in ways that contribute to sustainable development.
- We advise that the energy NPS should, in parallel with an improved regulatory framework, provide stronger signals to the market, decision-makers and other stakeholders as to the sustainable and diverse energy mix that is required.
- We also advise that decision-making for major energy infrastructure should include a sound understanding of where it is needed and best located to maximise benefits and minimise costs. This requires clearer guidance on co-ordination with spatial plans and strategic assessments of need and capacity.
- We recommend a number of improvements to the text of the NPS to ensure that the natural environment is properly considered in the siting, design and assessment of major energy schemes, so that balanced, sustainable, judgements can be reached.

INTRODUCTION

2. Natural England is a statutory body created in 2006, charged with the responsibility to ensure that England’s unique natural environment is protected and improved. Natural England’s purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.

3. In our capacity as a statutory adviser to Government, we offer advice on the making of national public policy through our analysis, evidence, and lessons drawn from delivery experience. As an NDPB, we then implement national public policy throughout its own activities via the development of organisational policy (specific to the activities of Natural England), guidance for local delivery, and forward programmes of evidence gathering.

4. Energy developments of all types can have significant impacts on the natural environment, particularly on sites of international and national nature conservation importance, on our most valued landscapes, and our collective ability to adapt to climate change.

5. It is, therefore, imperative that impacts are fully assessed, avoided wherever possible, appropriately mitigated and, as a last resort, compensated for.

6. Based on the evidence from case work, Natural England believes that our future energy needs can be met in a manner that is consistent with the protection and enhancement of the natural environment. It is important that we do so, to enable society and the environment upon which the economy depends, to adapt to the challenges of climate change.

7. As a statutory consultee Natural England will be fully engaged in the new infrastructure planning regime at project level to ensure that environmental impacts are fully addressed and opportunities to secure enhanced resilience of the natural environment are maximised, as an integral part of the provision of major infrastructure. A clear and robust NPS is fundamental to ensuring sustainable decisions on major infrastructure projects by the Infrastructure Planning Commission (IPC) and the effective engagement of all stakeholders in the process.

8. Natural England’s comments on the draft National Policy Statements for energy can be summarised as follows:

GOVERNMENT POLICY AND NEED FOR NEW INFRASTRUCTURE

9. The energy NPSs restate the Government’s existing policy for the market to decide what energy infrastructure is brought forward within the framework of strategic interventions by Government. We therefore recommend that the NPS should provide a clearer strategic steer to energy companies, the IPC, and other stakeholders on the evolution of the energy mix and that the regulatory framework enhances such a steer. The strategic direction given should be linked to the achievement of outcomes described in the Low Carbon Transition Plan. While we recognise that there is a need to retain some flexibility in the precise mix, and the NPS rightly sets out a strong case for the need for all types of energy generation as part of diverse mix, the NPS should prioritise low carbon technologies if national and international targets on climate
change are to be achieved. The Committee on Climate Change have made clear that electricity generation will need to be completely decarbonised (not "largely", as stated in the NPS) by the 2030s if we are to meet the 2050 target of 80% GHG reduction.

10. The UK does not have the same range of levers on the provision of energy which some other EU nations hold. Consequently, Government, and OFGEM, need to establish mechanisms which regulate the market sufficiently well to correct actual or potential market failures, particularly those which might lead to low carbon or renewable energy being put at a competitive disadvantage compared to high carbon, unsustainable sources. OFGEM’s current review of its regulatory regime provides an ideal opportunity to achieve this.

11. Without the right regulatory mechanisms, working in tandem with national policy and guidance to facilitate the delivery of a diverse and sustainable energy mix, we are concerned that existing interventions will not reduce greenhouse gas (GHG) emissions and secure affordable supplies as quickly and sustainably as is necessary.

12. We would also welcome a clear statement that fossil fuel generation without Carbon Capture & Storage needs to be phased out in the next decade, and increasingly replaced with low carbon and renewable alternatives in order to ensure that the UK meets its legally binding carbon budgets and tackles anthropogenic climate change. Investment in fossil fuel and nuclear power must not lead to any diminution of investment in renewables, other low carbon energy, or greater energy efficiency.

13. We appreciate that the primary purpose of the NPSs is to guide decision-making on large scale energy projects and therefore the focus is on new large scale, centralised generation and distribution.

14. Nevertheless, NPSs will have a role in guiding decisions on smaller scale schemes. We recommend that it should communicate greater ambition on the contribution of energy efficiency, demand management and distributed generation to national, regional and local objectives.

15. These alternatives can reduce (but not avoid) the need for large scale, centralised infrastructure and, generally, be delivered more quickly and at less expense to society and the environment.

RELATIONSHIP WITH SPATIAL PLANNING

16. Whilst we appreciate that, with the exception of the Nuclear NPS, the energy NPSs are not locationally specific, energy planning is an integral part of spatial planning at regional and local level, contributing to meeting wider needs for development and delivering sustainable communities. Planning and decision-making for major energy infrastructure must therefore be properly co-ordinated with spatial planning, on- and off-shore so that we ensure that we make best use of our land and seas. We believe that the NPS should include clearer guidance on the spatial dimensions of future major energy developments and how effective co-ordination is achieved.

17. In the absence of co-ordination and alignment with spatial plans (Regional strategies and Local Development Frameworks and Marine Spatial Plans) and strategic assessments of capacity and need, there is a risk that the investment decisions of promoters and IPC decision-making will be made in isolation and result in sub-optimal outcomes in respect of the natural environment as well as energy security, emissions reductions and wider social and economic objectives.

18. In some places, such as the Severn estuary and other our coasts and estuaries, it is likely that a number of NSIPs will be proposed and the need for a strategic spatial approach is especially apparent where this is the case.

19. In 2008, Natural England recommended that Government undertake a strategic assessment of the capacity for renewable and low carbon energy to underpin the setting of regional targets for any one type of technology or source. The departments for Community and Local Government and Energy and Climate Change have since embarked on a developing a robust method for undertaking strategic capacity assessment, with English administrative regions to carry out detailed capacity assessments and use these to inform the setting of new regional targets (to 2020), and on which to develop policies. We recommend that the NPS refers the IPC and promoters to this initiative as one means of helping to facilitate spatial integration. Better co-ordination with spatial plans and strategic assessments will also improve IPC accountability and public/community engagement with, and acceptance of, NSIPs and provide greater certainty for energy companies.

RELATIONSHIP WITH OTHER DOCUMENTS

20. The NPS should more clearly identify how it should be used by the Marine Management Organisation and regional and local decision makers to guide decisions on energy developments falling below the Nationally Significant Infrastructure Project thresholds and associated development.

21. It is important the suite of NPS can be easily read as a package and implemented consistently. As currently drafted, there are inconsistencies in the wording of generic issues between the energy and the ports NPS, and between the various energy NPSs. The NPSs would benefit from improvements in the consistency and wherever possible should use the same wording.
THE NATURAL ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

22. The NPS addresses a wide range of impacts relating to the natural environment. Major energy projects will have significant impacts on the natural environment and it is imperative that these impacts are properly assessed and avoided and mitigated wherever possible. Appropriately sited and designed energy projects can also deliver benefits for the natural environment, such as increased ecological resilience.

23. Natural England considers that, as currently drafted, the NPS does not clearly set out the Government’s environmental objectives (beyond those for tackling climate change). The natural environment is largely treated as a range of impacts to assess and overcome.

24. We advise that it highlights the importance of our wildlife, habitats and landscapes, particularly designated areas, the ecosystem services which the environment provides, and the need for conservation and enhancement of the natural environment. The role of protected areas and a healthy natural environment in providing resilience to climate change impacts, in particular, should be more clearly recognised.

25. Stronger guidance to the IPC and promoters is required on the need to integrate (not automatically trade-off) social, economic and environmental objectives and that additional capacity should only be provided where it can meet sustainable development objectives. Our engagement as a statutory consultee on planning case work provides clear evidence that energy developments can be compatible with environmental protection and enhancement. The energy NPSs should also identify the need for NSIPs to deliver appropriate enhancement, as well as protection, of the natural environment and to become exemplars in sustainable development.

ASSESSING IMPACTS OF PROJECTS

26. The NPS would benefit from clearer and more consistent guidance on the weight that the IPC should afford adverse impacts. The NPS sets out a robust case for the urgent and significant need for additional generation and supply capacity and the benefits it brings, but there is little to indicate what types or level of adverse environmental or social impacts might outweigh the need and benefits. As currently drafted some passages give the impression that it will be difficult for adverse impacts to outweigh benefits. Greater weight should also be given to steering major development away from designated areas.

27. We support the aim to incorporate existing national planning policy, where relevant, within the NPS, but there are inconsistencies between the treatment of environmental impacts in the NPS and the current suite of Planning Policy Statements. The impacts sections of the NPS, in particular the landscape and biodiversity impacts, should be strengthened to fully comply with Government planning policy set out in Planning Policy Statements and other Government objectives.

28. We are pleased that cumulative and long term impacts are mentioned in the assessment principles, but we advise that there is a need for greater consideration of the cumulative impacts of energy and other potential infrastructure developments where they are likely to be concentrated in particular areas (eg the Severn Estuary and parts of the East and North West coasts).

NUCLEAR NPS (EN-6)

29. If in order to provide energy security and a low carbon economy to 2030 nuclear power needs to be part of the energy mix we advise that the NPS states that its proportion should be reduced with growing deployment of renewable technologies in 2020-40 and that it should, therefore, be viewed as a bridging technology, not a permanent solution.

30. We accept that a need for new nuclear power stations can be demonstrated, but question the conclusion that all nine sites in England listed in the NPS are needed, since the number of reactors that might be built at each site is unknown. It would better for the Government to set out how much new nuclear generating capacity it believes is needed rather than the number of sites.

31. We emphasise that Government should satisfy itself that the programme for managing radioactive waste is based on sound evidence regarding the short and long term risks posed, is considered as a national not just a local issue, and that the regulatory framework delivers the highest possible safety standards.

32. Natural England has provided technical environmental advice throughout the Strategic Siting Assessment of nominated sites, particularly with regard to the environmental assessments (HRA and AoS). Overall we agree with the conclusion that nine of the 10 sites nominated in England should be listed in the NPS as “potentially suitable” and progress to the application stage. All of the nominated sites are close to internationally protected nature conservation sites, and many face significant challenges in respect the evolution of our coastline. Final decisions on the suitability or acceptability of these sites should, therefore, only be made after full and detailed environmental impact assessment and “appropriate assessment” under the Habitats Regulations has taken place at the project level.

33. We support the Government’s conclusion to exclude Dungeness from the list of potentially suitable sites in the NPS, due to the extreme difficulty associated with mitigating and compensating for the environmental impacts on a rare, internationally important shingle habitat, and in view of the long term sustainability of this coastal site.
TECHNOLOGY-SPECIFIC ENERGY NPSs

Our main comments on EN2-6 can be summarised as follows:

34. In our view the Fossil Fuels NPS provides adequate guidance to the IPC and promoters, but there should be a stronger commitment and clearer timetable in EN-1 regarding the need to phase-out fossil fuel generation in the next decade.

35. We advise that the Renewable NPS should require the IPC to consider the sustainability of biomass feedstocks. We are not confident that sustainability standards are robust enough through the Renewables Obligation Certificates process, as suggested in the NPS.

36. We support the application of the Holford rules in identifying routes for power lines as set out in the Electricity Networks NPS, but would like to see greater emphasis on the need for strategic planning for electricity networks, which fully considers the need to avoid designated areas wherever possible and minimise environmental impacts. There is a particular need for careful planning and clear guidance for the landfall of offshore cabling.

37. Natural England would expect electricity networks to avoid protected sites and landscapes wherever possible. Where impacts are unavoidable, undergrounding should be given serious consideration. The section on undergrounding of power lines in the Electricity Networks NPS should be strengthened to avoid giving the impression that financial considerations will, almost invariably, outweigh the need to avoid adverse environmental impacts.

38. The Appraisal of Sustainability (AoS) for EN-1 needs to give consideration to a wider range of reasonable alternatives. It is recognised that an AoS/SEA of a plan that does not contain location specific proposals is going to be less detailed than one that does. However the alternatives selected within the AoS for the Overarching Energy NPS do not allow for a reasonable comparison and the objectives are too narrowly defined to identify which alternative policy options are environmentally desirable. We recommend using the approach in the Nuclear NPS AoS, the first two stages of which are applicable to a non-location specific NPS.

39. The AoS also needs to place greater emphasis on the wider policy framework within which the proposals will be delivered. This is particularly relevant for identifying indirect, cumulative and additive effects. The AoS should consider the implications of other current and forthcoming NPS, the Marine Policy Statement, development plans and other proposed infrastructure developments.

40. Detailed amendments are required to the AoS to enable Natural England, as a statutory adviser on SEA, to determine if the selected policy options are the least environmentally harmful, and the identified impacts, mitigation measures and monitoring requirements are correctly set out.

HABITAT REGULATIONS ASSESSMENT

41. We appreciate the difficulty of carrying out the Habitats Regulations Assessment (HRA) of strategic high-level plans but feel that the HRA of EN1-5, as currently drafted, lacks rigour. We generally support the conclusions of the HRA of EN-6 (nuclear).

42. The Habitats Regulations Assessments for both EN1-5 and EN6 have concluded that it cannot be excluded on the basis of objective evidence that there will not be an adverse impact on the integrity of sites protected by the Habitats Regulations; Natural England supports this conclusion. The HRAs also conclude that there are no feasible alternative solutions and Imperative Reasons of Overriding Public Interest (IROPI) exists. We recommend inclusion of a clear statement, in both the HRAs and the NPS themselves, that the findings of no alternative solutions and IROPI only apply to the NPS, and not to individual applications.

43. The IPC will be a competent authority for the purposes of the Habitats Regulations and will therefore have to ensure that it correctly applies the tests within the Habitats Regulations when considering applications for development consent. EN-1 directs the IPC to consider a narrow range of alternative solutions and to assume that need has already been demonstrated. This risks guiding the IPC to decisions that do not meet the requirements of the Habitats Regulations.

January 2010
Memorandum submitted by the Nuclear Consultation Group

A EXECUTIVE SUMMARY

A1 The National Policy Statements relating to nuclear energy (EN-1 and EN-6) are confusing, tendentious and poorly integrated

A2 The consultation process leading up to and including that on the NPSs does not support a coherent, practical or fair framework for the Infrastructure Planning Commission to assess planning applications for new nuclear power stations

A3 The volume of documentation, the number of simultaneous consultations, the short deadlines and the format of response make it difficult, if not impossible, for local communities, NGOs, Citizens’ based groups and a wider public to participate effectively in the consultation process

A4 The inherent bias in favour of pro-nuclear positions in both process and content of the NPSs severely disadvantage groups and individuals who question or oppose the development of new nuclear power stations

A5 The criteria and constraints on siting limit the IPC to considering only ten sites which imposes an unfair burden of risk on those communities close to the sites

A6 The discretionary criteria relating to flooding and coastal processes provide inadequate guidance to the IPC. These criteria should be unambiguous and applied to exclude sites which are vulnerable to flooding over the next 200 years

A7 Long term on-site storage of spent fuel and other radioactive wastes from new build is a matter of public concern and raises technical, social and ethical issues which are not addressed in the NPSs

A8 Satisfactory arrangements for the long-term management of radioactive wastes do not exist and there is no evidence that they will exist in future

A9 Local communities have not been offered the opportunity to consider whether they wish to host spent fuel and waste stores into the far future

A10 There should be a presumption against permitting a site where the impacts on environment and ecology may lead to irrecoverable damage

A11 The principle of Imperative Reasons of Overriding Public Interest should not be restricted to promoting nuclear energy at all cost but should also be applied to to protecting significant environments from destruction

A12 Stronger guidance is needed on what degree of coastal change would make a site unacceptable and what levels of mitigation would be needed to prevent unacceptable damage

A13 The “semi-urban” demographics criterion is drawn too tightly and does not limit the radiological consequences to the population. The NPS should adopt a “remote” demographics criterion and define clearly the area it covers to ensure it minimises radiological consequences in the event of a serious accident or incident

A14 The NPS should give much stronger guidance on the emergency planning policies and procedures that must be in place to ensure adequate information is provided to the public. The NPS should also set out the guidelines for an emergency implementation plane that ensures rapid and coordinated response

A15 Overall, the NCG finds the nuclear NPSs as unfit for the purpose of providing a framework within which the IPC can take fair, balanced and measured decisions on the location of new nuclear power stations

1. INTRODUCTION AND PURPOSE

1.1 The Nuclear Consultation Group (NCG) has been especially concerned with the processes of consultation on nuclear energy in the UK. In its 2008 Report (Dorfman, ed. 2008) it provided a wide ranging critique from a variety of perspectives and has subsequently commented on the inadequacy of the consultations on new build. In particular the NCG has responded to earlier stages in the consultation process, on Strategic Siting Assessment (NCG, 2008) and on the Justification of New Nuclear Power Stations (NCG, 2009). The Group’s concerns about the consultation process so far will be found in those documents.

1.2 This evidence is in two parts. The first part (section 2) draws attention to the inadequacy of the consultation process as a means for debating and influencing the form and content of the NPSs. The second part (section 3) is concerned with the presentation and analysis of some of the issues covered in the various documents. In particular, the NCG finds the statements on such issues as the management of radioactive waste, the site selection process, flooding and coastal processes, environmental impacts and mitigation issues contentious and inadequate.

99 The NCG is a network of senior and leading experts in various fields related to nuclear energy policy and politics. It is particularly concerned with consultation processes and has published Nuclear Consultation: Public Trust in Government (Ed. Dorfman, P 2008). An Annex gives details of the Groups’s membership and expertise.
1.3 Overall, the Group finds the draft NPSs relating to nuclear energy confusing, tendentious, vague and poorly integrated. They do not encourage effective and democratic participation and engagement. Rather they appear to be a highly elaborate exercise to achieve premature legitimation for a predetermined policy, namely, the rapid deployment of new nuclear power stations on a limited number of existing nuclear sites. In terms of the Committee’s objective the NCG considers the NPSs do not provide a coherent and practical framework for the IPC to assess planning applications.

1.4 The purpose of the following evidence is to demonstrate why the NCG considers the NPSs to be inadequate both in terms of process and substance.

2. The Consultation Process—Biased and Unfair

2.1 Together with the earlier stages in the decision making process for nuclear new build, the consultation on the NPSs appears to us to be hurried, burdensome, constrained, limited and pre-emptive. We set out our criticisms below.

Parallel processes are too demanding

2.2 Since the end of 2008 there have been several consultations requiring response from interested stakeholders and citizens. These have included consultation on the Strategic Siting Assessment (SSA), on Justification and on the Nomination of Sites for new nuclear power stations. In the current round three consultations are running in parallel, namely, the HoC ECC Committee (submissions by January 15), the draft Energy NPSs (February 22) and the Consultation on the proposed decision on Justification (also February 22). Meanwhile there are other related processes which also require attention, in particular the Generic Design Assessment (GDA) conducted by the regulators of the proposed power station designs. It is clearly unreasonable to expect sufficient attention to be paid simultaneously to three separate consultations each requiring a particular approach, knowledge and expertise. This problem is compounded by,

Volume of Material Impossible to Manage

2.3 The sheer weight of material available for the NPS consultation is intimidating. Apart from the substantial documents on the Energy NPSs (EN-1 and EN-6 for nuclear but four other volumes for the full suite) and the Consultation document, there are further large documents on Habitats Regulations Assessment, Appraisal of Sustainability, Alternative Sites study together with a formidable array of technical appendices, site reports, summary and consultation comments. The documents associated with the Nuclear NPS are listed on pp. 40–42 of the Consultation document (DECC 2009a). Of course, a fully informed appraisal would need to refer to a range of other documents, including the White Paper Low Carbon Transition Plan (TSO. 2009), policy documents on radioactive waste management (from, for example, the Committee on Radioactive Waste management (CoRWM) and the Nuclear Decommissioning Authority (NDA) and possibly technical reports from agencies such as the Environment Agency (EA), Natural England etc and from the regulators. One estimate suggests that a respondent focusing on a specific site would still need to read 1,674 pages of text to be reasonably informed about the proposals and issues (Roche, P. 2009).

2.4 Although some of the documents can be supplied in hard copy on application, some of the technical material is only available online. For those with poor computing and printing facilities for downloading or with no computer mere access to material is at best time-consuming and at worst access is effectively denied. Even when access is achieved, it is quite difficult to be sufficiently selective in perusing technical material. These documents are not the most accessible or entertaining reading, more usually written in a laboured, turgid form of technical prose that requires intense concentration and takes time to assimilate. Given that the consultation period lasts for only 15 weeks, including the Christmas/New Year break, the demands put upon an assiduous respondent are burdensome indeed.

Process Disadvantages Community and Anti-nuclear Groups

2.5 Government policy expects the industry to deliver as large a fleet of new nuclear power stations as quickly as possible. The consultation process is clearly designed towards that end as we make clear below.

2.6 First, the consultation process is fast, leading through site selection, justification, NPS, GDA and planning permission within the space of less than four years (2008–11) with the first new stations commissioned by 2018 (see timeline diagram in DECC January 2009 p.67). Given previous UK experience, if achieved, this would be astonishingly fast. The rapid and sometimes simultaneous consultative exercises together with the accelerated infrastructure planning process are the means to legitimate the policy.

2.7 Second, the decision making process is sequential and cumulative. There is a sequence of decision points which, once taken cannot be revisited. Thus the Strategic Siting criteria are now fixed and the NPSs once adopted will be applied by the IPC. This narrows the scope for deliberation as the process moves from the generic to the site specific. The problem for local communities is that key decisions will have been taken before they become involved. For example, policy on radioactive waste management will be settled and local communities may not have the opportunity to challenge its application at site specific level. By the time decision making reaches the individual site the scope for challenge and change will be severely limited.
2.8 **Third, the consultation process itself is not participative.** Very little effort is made to engage the public and local stakeholder groups beyond thinly attended public meetings and exhibitions. The mode of consultation is formal and requires answers to preconceived questions or written comments. Typically the publicity for consultation events is low key and attendance and response levels are low with the vast majority of the local population unaware that a consultation is taking place. The responses are published but rarely is any analysis performed and no attempt is made to seek representative information on the values and views of the local population. The transcripts provided by DECC of the consultation exercise are revealing and give voice and vent to the pent up frustration felt by many at the inadequacy of the whole process. The objective seems more geared towards satisfying minimum requirements than undertaking a genuinely interactive engagement. Certainly, these consultations are often regarded by local communities as having little real importance or impact on the decision-making process.

2.9 The various aspects of the consultation process outlined above leave local communities at a considerable disadvantage. It is difficult for them to cope with the speed, volume and complexity of material and the method of consultation. Citizen Based Groups (CBOs), NGOs, individual citizens and even local councils find it difficult or impossible to find the time, commitment, experience and knowledge to achieve effective involvement let alone impact on the decision-making process itself. In addition they tend to come into the process during the latter, local stages by which time the scope for influence has been considerably narrowed. By comparison the nuclear industry and government officials have considerable capacity in terms of resources, skills and privileged access to ensure input on all aspects and at all stages.

2.10 The NCG considers the consultation process is markedly skewed in favour of those interests promoting nuclear development. The documentation draws almost exclusively on sources prepared by the nuclear community or those associated with it. There is an entire absence of more sceptical literature, notably from the social sciences which is rich in sources and evidence to counter the claims of nuclear advocates. By contrast to the well resourced nuclear industry, local communities and citizens are far less able to influence the approach, content and recommendations of the nuclear NPS and associated documents. Consequently the NCG concludes that the process is unfair and does not support an equitable framework within which the IPC can take decisions on new nuclear power plants.

— It is impossible for NGOs, CBOs and ordinary citizens to cope with simultaneous consultations within a short space of time.
— The volume of material is unmanageable and much of it difficult to access and assimilate.
— Little attempt has been made to engage local stakeholders and the public in a more participative process enabling them to influence the content of the NPSs.
— The speed, timing and format of the consultation process advantages nuclear industry and government bodies which have time, resources, expertise and access to make an effective response.
— The experience of the consultation process has left local communities, groups and individuals who oppose the Government’s proposals frustrated and disillusioned.

2.11 Consequently the NCG believes the consultation process is seriously flawed and that a new and more participative process should be undertaken in an effort to restore public confidence in Government decision making.

2.12 In the following section some of the substantive inadequacies of the NPS will be set out.

3. **THE NATIONAL POLICY STATEMENTS—INADEQUATE AND UNFAIR BASIS FOR DECISION MAKING**

3.1 Here we focus particularly on the key documents relating to new nuclear energy, namely NPSs EN-1 and EN-6, the Consultation document and the Alternative Sites Report. Reference will also be made where relevant and by way of illustration to specific reports on the Bradwell site. A detailed critique of the the NPSs will be provided in response to the consultation which closes on 22 February. In this evidence we shall confine ourselves to some key issues. These are: the siting process; the problem of managing radioactive waste; flooding and coastal processes; environmental impacts; and demographics and emergency planning.

**Siting—post hoc rationalisation of preordained conclusion**

3.2 It has been clear from the outset that the choice of sites for new nuclear stations would be likely “to focus on areas in the vicinity of existing nuclear facilities” (TSO. 2009, p.33). The reasons were purely pragmatic—these are sites where land is available, infrastructure exists and they are in places where some familiarity with the industry might be expected to reduce resistance from local communities (it must be said this latter point is an assertion that, in our view, is not supported by empirical evidence). The NPSs are unequivocal that nuclear power stations should be built on these sites since “need has been demonstrated” (Ibid, p.14).

3.3 Furthermore, the documents make it clear that there are no sites other than the ten listed. In an elaborate exercise of masterful rationalisation the Alternative Sites Study uses historic studies, views of energy companies and a complex screening exercise to identify around 270 sites, rejecting all but three as “Not worthy of further consideration” (Atkins, 2009, pp. 43–63). Analysis of the three sites at Druridge Bay, Owston ferry and Kingsnorth indicates a number of constraints which would make deployability by
2025 problematic. Of the initial eleven sites nominated, one, Dungeness, was not listed and there are reservations about the practicability of deployment of the two listed “greenfield” sites at Braystones and Kirksanton (DECC, 2009a, p.49).

3.4 The IPC may only consider those sites listed and “should be guided in considering alternative sites by whether they are in the locations identified in the NPS” (EN-1, DECC, 2009d, p.37). The development of the sites depends on the investment decisions of the market. Consequently, the actual number, timing and location of new nuclear power stations is unclear. Unlike the target of 30% renewable capacity by 2020 (EN-1), new nuclear capacity is undefined and unrestrained. The NPS states that “it is essential that this NPS has sufficient sites to allow nuclear to contribute as much as possible towards meeting the need for 25GW of new capacity” (EN-6, DECC, 2009c, p. 13).

3.5 It should be noted that the ten sites listed are, in the main, at considerable distance from major urban centres and therefore they require long distance grid connections. Further, it may prove impossible to utilise the waste heat in distributed systems of power supply (see EN-1 pp. 38–9).

3.6 In terms of siting new nuclear power stations, the NCG considers the NPSs are inadequate and incoherent on the following grounds:

— The approach to siting new nuclear stations is unplanned and vague leaving the market to decide thereby creating uncertainty on the timing, number and locations of new stations. It is unclear what level of nuclear capacity is anticipated or can realistically be deployed.

— The constraints on siting imposed have ensured that no alternatives to the ten listed sites will be considered by the IPC. This imposes an unfair burden of risk on communities close to these sites

— The selected sites are sub-optimal in terms of transmission costs and energy efficiency.

— The need for new nuclear has not been convincingly demonstrated and it may prove impossible to deploy a large number of stations by 2025. Alternative strategies of renewables and energy efficiency are likely to prove more effective and should be more vigorously pursued in EN-1.

Coastal locations—on a vanishing coastline

3.7 The ten sites listed are all on or close to the coast where there is availability of cooling water. Some of them (eg Bradwell, Hartlepool) are within flood zone three, high probability of 0.5% annual flooding. Given the pragmatic reasons for site selection it is unlikely that the ten sites are the only or the best possible sites for new nuclear power stations. The Strategic Siting Assessment (BERR, 2008; DECC, 2009b) and the Alternative Sites Report (Atkins, 2009) must be seen as means of post hoc rationalisation in limiting and justifying the choice of sites. Equally, it may be concluded that, apart from Braystones and Kirksanton, such vulnerable sites would not have been selected were it not for the presence of nuclear facilities (Blowers, 2009).

3.8 Two of the SSA criteria relate to the coastal location of sites. These are flooding, storm surge and tsunami and coastal processes. Both EN-1 and EN-6 recognise that these coastal sites are “at greater risk of flooding” (EN-6, DECC, 2009c, p.32) without mitigation and that mitigation measures may have consequential impacts on coastal change. However, the documents conclude that “at the strategic level the risks are considered to be manageable” (p.32). Nonetheless, the NPSs are evidently cautious and the IPC is urged to “take account of the credible maximum scenario in the most recent marine and coastal flood projections” and to ensure that mitigation would “be achievable at the site for the duration of the life of the station and the interim spent fuel stores” (pp. 33–4). However, it is recognised that predictions of climate change impacts “become less certain the further into the future the assessments are for, and it is not practicable to consider beyond 2,100 at this stage” (EN-6 p.51). It is quite possible that interim stores of highly active wastes will still be present on site in 160 years from the start of generation of a new power station (60 years operation plus 100 years for cooling of fuel). In other words, nuclear activity of some kind is likely to be present on sites until towards the end of the next century.

3.9 The Environment Agency, on the matter of flooding and mitigation is, to say the least, highly qualified and tentative, concluding for the Bradwell site as follows. “The Environment Agency has advised that it is potentially reasonable to conclude that a nuclear power station within the nominated site could potentially be protected against flood risks throughout its lifetime, including the potential effects of climate change, storm surge and tsunami, taking into account possible countermeasures” (p.66).

3.10 Nonetheless, the Government considers this feeble assessment is sufficient to conclude that the Bradwell site passes the flood risk criterion. In reality, beyond 100 years where prediction of sea level rise and coastal change becomes frankly speculative, it is impossible to give any useful guidance at all. It appears to us incredible that coastal areas where flooding and coastal changes are likely to occur within the next 200 years should be considered for inclusion in the list of sites for new nuclear power stations.

3.11 On the issue of flooding and coastal processes the NCG considers that:

— The criteria relating to flooding and coastal processes should be exclusionary.

— Sites which are clearly vulnerable to inundation over the next 200 years should be excluded.

— Mitigation measures should not be contemplated where serious damage is likely to affect neighbouring coastlines or the marine environment.
3.12 We conclude that guidance provided in the NPSs is too flexible and open to interpretation. We believe stringent and unambiguous criteria on flooding and coastal processes should be applied to exclude the location of power stations on inappropriate sites.

Radioactive Wastes—Placing burdens on the future

3.13 A feature of the new nuclear power stations is that spent fuel will remain in storage on site and is likely to remain there a hundred years or so after shut down. Although radioactive wastes are covered in EN-1 (including Appendix G), EN-6 and elsewhere in the documentation (DECC, 2009 c and d) the emphasis is on the positive benefits of power generation rather than the negative disbenefits of the waste that inevitably accompanies it. From experience of the consultation so far it is evident that the public, local communities and some politicians, including MPs, are unaware that the proposals are as much for long term management of highly active wastes as for a nuclear power station.

3.14 In the NPS for nuclear energy (EN-6) the Government claims that it “is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations” (DECC, 2006c, p. 25) and that the IPC will not need to consider this question. In a letter to the Secretary of State four members of the first Committee on Radioactive Waste Management pointed out that the Government’s statement was misleading for three reasons (see letter attached to which there has not yet been a reply). First, the long-term solution of disposal recommended by CoRWM required an intensified programme of research and development before it could be implemented. This programme has not yet been undertaken. Second, a suitable site for a repository would need to be found using the principle of voluntarism, that is an expressed willingness of a community to participate in a site selection process. Although some interest has been shown no community has, as yet, agreed to such participation. Third, the recommendations applied only to legacy not to new build wastes. New build wastes would create more wastes over an indefinite time period and raise different issues to legacy wastes which are unavoidable. Among the issues are technical aspects such as the methods of storage and the issues raised by high burn up fuel which are not addressed in the NPSs. CoRWM was clear that the proposals for legacy wastes would require a new process which “will need to consider a range of issues including the social, political and ethical issues of a deliberate decision to create new nuclear waste” (CoRWM, 2006, p.14). Yet, in the NPS, new build has been conflated with legacy wastes in terms of meeting scientific and social requirements and, moreover, it appears that no separate process will be required to test and validate its proposals for managing waste from new build.

3.15 As for the communities near the ten potential sites selected for new build they are having highly radioactive waste stores imposed on them for an indefinite period without being able to challenge the government’s interpretation of policy. CoRWM was clear that its recommendations on voluntarism “must be applied to new central or major regional stores at new locations if the are to inspire public confidence” (CoRWM, 2007, p.10). As it stands communities hosting spent fuel stores will be given no opportunity to consider whether they wish to volunteer to host a long term radioactive waste facility. In the absence of an acceptable method or site for disposal, these wastes may remain in store indefinitely on sites that by the end of the next century are increasingly likely to be inundated by rising sea levels and storm surges.

3.16 While public support in general for nuclear power changes over time, there is consistently a large majority concerned about the risks associated with nuclear waste. It is fair to say that local communities’ opposition to new nuclear power stations is considerably strengthened and reinforced by proposals for on site nuclear waste storage facilities. It is recognised that risks continue into the far future and will impose burdens of cost, effort and risk on many future generations. The lack of concern about intergenerational equity issues in the NPS proposals is very striking. In the urge to create power stations for the present, the interests of the future are neglected.

3.17 On the issue of radioactive wastes, the NCG considers the NPSs flawed for the following reasons,

— There is little emphasis given to the fact that new nuclear power stations will be accompanied by long term on-site storage of highly active nuclear wastes which is a matter for public concern.

— Long term on-site storage of wastes from new build raises distinctive technical (including handling high burn up fuel), social and ethical issues that are not addressed in the NPSs.

— Despite the Government’s assertion, satisfactory arrangements for the effective long term management of new nuclear wastes do not yet exist and there is no evidence that they will do so in the near future.

— Local communities around the listed sites have not been offered the opportunity to consider whether they wish to volunteer to host a long term highly active waste storage facility.

— Little consideration has been given to the risks imposed on the far future which will be exacerbated by locating waste stores on sites vulnerable to inundation and coastal change.

3.18 For these reasons on the question of radioactive waste the NCG considers the NPS documents are inadequate and misleading.
Environment and Ecology—a necessary sacrifice?

3.19 The Nuclear NPS and associated Habitats Regulations Assessment (HRA) and Assessment of Sustainability (AoS) reports refer to a range of issues and criteria relating to environment and ecology. These embrace international and national designated sites of ecological importance, and areas of amenity, cultural heritage and landscape value. Although it is recognised that there will be adverse impacts, it is considered that disruption and disturbance to important habitats and ecosystems can be potentially ameliorated or lessened through mitigation measures. No matter what the impacts, the need for nuclear power as determined by government policy, is seen as sufficient in itself to override the desirability of conserving environment and ecology. In the case of Bradwell, for instance the “Government has concluded that there is an Imperative Reason of Overriding Public Interest that favours the inclusion of this site in the Nuclear NPS despite the inability to rule out adverse effects on European sites at this stage” (EN-6, DECC, 2009c, p.71). Given the readiness evident in the NPS to invoke IROPI it appears that, in the urgency to achieve nuclear power stations at ten sites, (almost) anything goes.

3.20 Only in the case of the adverse effects on the integrity of the internationally designated areas at Dungeness was it “not considered that mitigation of impacts related to habitat loss would be possible” (Consultation Doc. 55 p.79). Although this is the reason given for not listing Dungeness it is also clear that Dungeness might well have failed on other grounds. There were concerns over whether it could be protected from flood risk and coastal processes and this would have posed “a challenge” if Dungeness had remained in the frame (EN-6, 34 p.75 and 40 p.76). The delisting of Dungeness could be construed not as an isolated case but as a precedent. Other sites, to a greater or lesser degree, manifest similar problems of potential environmental damage and flood risk, for instance, Bradwell is in a much higher flood risk zone than Dungeness. It may be questioned why they, too, were not delisted.

3.21 The answer is that the NPS is vague, unspecific and constrained thereby encouraging the retention of the ten listed sites. It is vague in that adverse effects cannot be ruled out and detailed studies are needed on mitigation measures. It is unspecific in that no guidance is given on the degree of environmental impact that would rule out a site or the level of mitigation that would be needed to retain a site. For example, the Bradwell HRA (DECC, 2009e) lamely concludes that, “Only at the project level HRA can a conclusion of ‘no adverse effect on site integrity’ be made with any confidence” (3.69 p.43). And it is constrained in that it is made abundantly clear that, only in the most exceptional circumstances, should a site be rejected, so imperative is the overriding national interest for the development of nuclear power. On this point the Government is quite clear; the ten sites should be made available even though “potential adverse impacts on Natura 2000 sites cannot be ruled out” (EN-6 A33 p. 276).

3.22 The strong line on IROPI, which suffuses EN-6, is at some variance with the approach stated in EN-1 where the IPC is given a stronger steer on matters of climate change and impact. For example, “The IPC should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an adverse impact on coastal processes at other locations” (4.20.10, p.63).

3.23 In EN-6 guidance is at once both permissive, leaving the IPC some discretion on the basis of evidence at the local level, but also highly restrictive in its emphasis on the need to approve sites for new nuclear energy. This tension between discretion and restriction pervades the whole document and reinforces NCG’s view that the NPS has the implicit function of ensuring sufficient existing sites to fulfil the Government’s commitment to nuclear energy regardless of the serious environmental consequences that may ensue both now and in the future.

3.24 On the issues of environment and ecology NCG considers the NPSs on nuclear energy are inadequate as a framework for the IPC for the following reasons:

— The guidance on environmental impacts is too permissive. There needs to be a presumption against consenting a site in situations where the adverse impacts on ecosystems, habitats, landscapes and amenity would lead to irrecoverable damage.

— There should be stronger guidance on what measures of mitigation must achieve in order to prevent unacceptable damage to environment and ecosystems.

— Stronger guidance is required on the level of potential coastal change arising from climate change that would render a site unacceptable. Sites in flood zone three should be excluded.

— The principle of Imperative Reasons of Overriding Public Interest should not be routinely invoked to promote nuclear energy whatever the consequences for environment and ecology. IROPI should also be used to defend and protect environments that are unique, significant or irreplaceable.

— Overall, on the matter of environment and ecology, the NPS should offer clearer, unambiguous and balanced guidance to the IPC.

3.25 The NCG concludes the guidance on environment and ecology is inadequate and too weighted in favour of granting consent rather than inviting a more balanced assessment of the needs of development and environment.
Demographics—how big is the risk?

3.26 The demographics criterion is one of only two that are exclusionary though it is assessed again at development consent stage to take into account any changes (for example, in reactor design or population) that may have altered the acceptability of the risks to the local population. The demographics criterion has been so constructed that all ten sites pass the criterion and the criterion cannot be revisited by the IPC.

3.27 The objective is “to limit the radiological consequences to the public in the unlikely event of a serious nuclear accident” (EN-6, DECC, 2009c, p.43). The criterion adopted is “semi-urban” derived from a complicated and (as presented in SSA criteria) unintelligible formulation that weights distance from the plant with population to produce a cumulative weighted population within the vicinity up to a distance of 8 km. It is unclear how the parameters are derived and justified (see the critique in BANNG, 2008, 2009). Be that as it may, the outcome is neither fish nor fowl. On the one hand, the criterion indicates that “remoteness” is no longer necessary; on the other “urban” locations are ruled out on grounds that a substantial population might be endangered. But this makes little sense. It seems to NCG that nuclear power stations are regarded either as a potential threat to local populations and, therefore, should be in remote places, or, they are no longer deemed to be so threatening and, therefore, may be sited close to populations where the demand for electricity is based and where they avoid long distance transmission and can take advantage of the potential for CHP (EN—1, 2009d, p.39).

3.28 By adopting a semi-urban criterion the Government has recognised the potential risk to local populations from an incident or accident. What has not been recognised is that substantial populations may be at risk, particularly if a more realistic notion of the area that might be affected were used. To take Bradwell as an example, within 8 km there are substantial settlements including West Mersea (8,000) only 4 km away. Not far beyond, around 15 km. is the large town of Colchester (100,000) and within 25–30 km. the population is around a third of a million. The semi-urban criterion can hardly be said to minimise the risk to population but it serves the purpose of ensuring that the ten listed sites are not excluded on grounds of population density. A more satisfactory, comprehensible and logical approach would be to state what levels of population within specific zones were acceptable in terms of radiological risk from accidents or other incidents.

3.29 A related issue is the protection of the public in the event of an accident. The scale of an accident will vary but it is necessary to plan for the biggest credible scenario which might involve a very large population within a wide area of the plant (as, for example, was the case at Three Mile Island in 1979). Preparedness involves the following steps: clear and realistic identification of emergency planning zones; adequate provision of information to the public; planning for eventualities including the possible evacuation of large populations. Present planning is deficient on all counts. Emergency Planning Zones are too tightly drawn to the immediate vicinity of power stations; the public are unaware of the warnings, procedures and precautions that are needed in the event of an accident; and evacuation of large populations is likely to prove impossible.

3.30 In the NPSs emergency planning is a matter for local consideration relying on existing regulations and guidelines to be drawn up and implemented by nuclear operators and emergency services. The Government “does not generally believe that it is possible to determine the ability of a site to meet emergency planning obligations at a national level...”(EN-6 4.12.3 p.42). The NCG finds this quite inadequate and unreasonable and unlikely to reassure the public put at risk. The NPSs are incredibly vague and insubstantial on the matter of emergency planning. Ultimately, it may prove impossible to protect the population in the event of a major emergency. In the NCG’s view it would be more prudent to adopt a cautious approach by defining more clearly the nature of the potential risks and setting out some clear, detailed and generic guidelines on what procedures, plans and policies must be in place. It is surely not reasonable to leave these matters entirely to local determination on a site specific basis.

3.31 On the matter of demographics and emergency planning the NCG has the following observations,

— The NPS should ensure that guidance to the IPC is firmly based on the Government’s objective “to limit the radiological consequences to the public in the unlikely event of a serious nuclear accident”. This means limiting the numbers potentially exposed and ensuring a swift and effective response in an emergency.

— The exclusionary “semi-urban” demographic criterion does not meet the Government’s objective. The NPS should apply a “remote” criterion indicating what levels of population within specific zones are deemed to be acceptable in terms of radiological risk in the event of a major accident.

— The NPS should give strong and detailed indicative generic guidance on emergency planning policy and procedures. This guidance should require from the developer the provision of adequate and intelligible information for the general public and from the relevant authorities a plan of coordinated rapid response together with an implementation plan.

3.32 The NCG finds the generic guidance in the NPSs relating to demographics and emergency planning confusing, contradictory and lacking in depth or sufficient detail. The Government should consider reviewing these issues in order to provide the IPC with useful and implementable guidance.
4. **OTHER ISSUES AND CONCLUSION**

4.1 In this submission NCG has only identified some of the key issues which we feel require attention. There are other matters, for example, socio-economic issues where we feel the guidance is partial reflecting the general bias towards nuclear energy that is evident throughout the documentation. There are also some more technical issues, for example, the need for cooling water, where we feel the guidance is inadequate and needs to be strengthened. These matters will be raised in response to the Government’s current consultation on the National Energy NPSs.

4.2 It will be clear that the NCG does not regard the NPSs as providing a sufficiently coherent or practical framework for the IPC to assess planning applications for nuclear power stations. We consider the consultation process leading up to and including the NPSs as deeply flawed, biased and unfair. Local communities, groups and citizens who wish to participate are disadvantaged in the time, expertise and resources they are able to devote to responding to the consultation. This imbalance is reflected in the overly pro-nuclear bias in the documentation. In substance the NPSs reflect a process that is hurried, incoherent and unintegrated. The intention of the exercise is clearly set out in EN-1. It is to “help in terms of removing planning barriers” and “to deliver faster and more transparent decisions on energy infrastructure” (p.5 1.6.1). The nuclear NPSs have limited the decision to ten sites with a requirement on the part of the IPC to deliver as many of these sites as possible. The NPSs provide a post hoc rationalisation of choices already made for pragmatic reasons. They are flawed documents reflecting a flawed process.

4.3 The NCG concludes that the draft NPSs on nuclear energy provide a passport for the nuclear industry to build new power stations on existing sites. As a framework for guiding the IPC the NPSs must be regarded as unfit for the purpose of taking fair, balanced and measured decisions on the location of new nuclear power stations.

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January 2010
New Nuclear Build and the Management of Radioactive Wastes

We write to you as members of the first Committee on Radioactive Waste Management (CoRWM) which presented recommendations on the long term management of solid higher activity wastes to government in 2006. These recommendations were substantially endorsed by government and expressed as policy in its White Paper on Managing Radioactive Waste Safely in June 2008 (CM 7386). We wish to express our concern that our recommendations have been seriously misrepresented in your draft National Policy Statement on Nuclear Energy published on 9 November.

In concluding the section on radioactive waste management the NPS states: “the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider this question” (paragraph 3.8.20).

We contend that it is unknowable whether or not effective arrangements will exist and that the question of management of these wastes on specific sites should be a matter that the IPC must consider.

The policy stated in the White Paper on Nuclear Energy is “that before development consents for new nuclear power stations are granted, the government will need to be satisfied that effective arrangements exist or will exist to manage and dispose of the waste they will produce” (CM 7296, 2008, p.99).

In our view this is a matter of judgement not of ineluctable fact. The CoRWM1 proposals for long-term management of radioactive wastes identified a process towards a long-term solution, recognising that deep disposal should be implemented on the basis of “an intensified programme of research and development into the long-term safety of geological disposal aimed at reducing uncertainties at generic and site-specific levels, as well as into improved means for storing wastes in the longer-term” (CoRWM, 2006, rec. 4). Moreover, implementation would also depend on finding a suitable site based on the principle of volunteerism, that is an expressed willingness of a community to participate in a site selection process. Neither the scientific nor the social requirements have yet been met and consequently, in our judgement, it is not possible to conclude that effective arrangements “exist or will exist”.

In any case, the policy set out by CoRWM1 and subsequently pursued by government applies to legacy wastes alone. CoRWM was quite clear that its proposals should not apply to new build:

“The main concern in the present context is that the proposals might be seized upon as providing a green light for new build. That is far from the case. New build wastes would extend the timescales for implementation, possibly for very long, but essentially unknowable, future periods. Further, the political and ethical issues raised by the creation of more wastes are quite different from those relating to committed—and, therefore, unavoidable—wastes. Should a new build programme be introduced, in CoRWM’s view it would require a quite separate process to test and validate proposals for the management of the wastes arising.” (Page 13, Managing our radioactive wastes safely, CoRWM’s recommendations to Government, CoRWM document 700, July 2006).

However, it is clear that government has conflated the issue of new build with legacy wastes and thereby intends the CoRWM proposals to apply to both. No separate process, as suggested by CoRWM1, for new build wastes is contemplated. There will be no opportunity for communities selected for new nuclear power stations to consider whether they wish to volunteer to host a long term radioactive waste facility; it will simply be imposed upon them. As the government recognises these wastes may well be stored on site “for around 160 years from the start of the power station’s operations, to enable an adequate cooling period for fuel discharged following the end of the power station’s operation.” (Draft National Policy Statement for Nuclear Power Generation EN-6, 3.8.17). In the absence of a process or acceptable policy for new build wastes, they may remain on site indefinitely. It is quite possible that, as a result of sea level changes, storm surge and coastal processes, conditions at some of the most vulnerable coastal sites will deteriorate thereby making it increasingly difficult to manage the wastes safely.

The problems presented by managing wastes in the very long-term will be both generic and site-specific. Consequently we find it hard to understand why the IPC, when considering applications for the development of individual sites, need not consider the question of waste management. Given the levels of public anxiety raised by the issue of nuclear waste and the burdens of risk and management that are imposed on future generations we believe consideration of safe management of wastes at each site should be a primary concern of the IPC. We invite you to confirm that this would be your expectation.
In conclusion we reiterate that we do not consider it credible to argue that effective arrangements exist or will exist either at a generic or a site-specific level for the long—term management of highly active radioactive wastes arising from new nuclear build. We believe the scrutiny of the arrangements proposed for each site must remain within the remit of the IPC.

We are copying this letter to the Chair of the Infrastructure Planning Commission and the Chair of the Committee on Radioactive Waste Management. In the interest of open debate we shall also make these views known to the media.

Yours sincerely,
Professor Andrew Blowers OBE (member of CoRWM1)
Professor Gordon MacKerron (Chairman, CoRWM1)
Mary Allan (member of CoRWM1)
Pete Wilkinson (member of CoRWM1)
cc. Sir Michael Pitt, Chair, Infrastructure Planning Commission
Professor Robert Pickard, Chair, Committee on Radioactive Waste Management

Memorandum submitted by the Nuclear Decommissioning Authority

1.1 This submission to the House of Commons Energy and Climate Change Select Committee is from the Nuclear Decommissioning Authority (NDA), a non-departmental public body established in 2005 by the Energy Act 2004.

1.2 We provide a brief summary of our work and the reasons why we support the analysis in the draft National Policy Statement (NPS) for Nuclear Power Generation. Key conclusions are as follows:

— We support the analysis in the draft NPS for Nuclear Power Generation that there are suitable ways of dealing with higher activity radioactive waste.

— We believe that good progress is being made and we are confident that with appropriate long term funding, arrangements can be provided for the management of higher activity legacy wastes, as well as those that will arise from a programme of nuclear new build.

— No new issues arise that challenge our ability to dispose of the wastes and spent fuel expected to result from the operation of the two proposed new reactor designs. As set out in the Managing Radioactive Waste Safely (MRWS) White Paper there is a suitably flexible and robust process in place to deal with radioactive waste issues.

— The development of UK Government policy on nuclear new build presents opportunities for benefits from synergies between legacy and new build activities to be realised.

2. Introduction

2.1 The Nuclear Decommissioning Authority (NDA) is a non-departmental public body which was established by the Energy Act 2004 and became operational in April 2005. Our sponsoring department is the Department for Energy and Climate Change and for some aspects of our functions in Scotland we are also responsible to the Scottish Ministers. We remain accountable to the UK Parliament for our operations through the Secretary of State.

2.2 We are responsible for and legally own the 19 former UK Atomic Energy Authority and BNFL sites in Great Britain. As a strategic authority we set the overall approach and through working with others, we focus on the objectives set out in our Business Plan.[8] We are working closely with our stakeholders to produce our second Strategy document which we will consult on later this year, prior to its publication by the end of March 2011.

2.3 We were established in order to deliver the Government’s commitment to dealing effectively with the nuclear legacy and are responsible for driving substantial change to improve delivery and cost efficiency in a large and complex industry. Our mission is to:

Deliver safe, sustainable and publicly acceptable solutions to the challenge of nuclear clean up and waste management. This means never compromising on safety or security, taking full account of our social and environmental responsibilities, always seeking value for money with the taxpayer and actively engaging with stakeholders.

2.4 In summary, our job is to decommission the nuclear facilities that the country has created over the past fifty years or so, and to develop a waste management infrastructure to reduce the risks to this and future generations. In carrying out this vital and complex task, safety, security, environmental responsibility and value for taxpayer’s money are our top priorities.
2.5 In practice, our core activities fall into five primary work streams:

— Site restoration:
  Characterising, retrieving and making passively safe highly radioactive and hazardous material; decommissioning and cleaning-up redundant nuclear facilities across the civil nuclear estate. Our Annual Report and Accounts 2008–09\(^{[i]}\) provides more details.

— Spent fuel management:
  Transporting, storing and, in some cases, reprocessing spent fuel from the UK’s first and second generations of nuclear power stations (Magnox and British Energy’s fleet) and, in doing so, safeguarding approximately 20% of the UK’s electricity supply.

— Nuclear materials:
  Developing sustainable solutions to deal with the UK’s stockpile of plutonium and uranium resulting from the fuel cycle. We have worked with our stakeholders to develop a range of potential strategies to manage the UK civil stockpiles of these materials \(^{[ii]}\) to support the development of Government policy in this area.

— Integrated waste management:
  Packaging, storing and ultimately disposing of low, intermediate and high level radioactive waste including development of the geological disposal facility (GDF). This is also a key enabler for nuclear new build and together with other potential synergies is discussed later in this paper.

— Business optimisation:
  Maximising the value of assets under our control in order to contribute to meeting the costs of the NDA programme. Without in any way compromising safety, the NDA continues to control costs, drive efficiency and deliver value for taxpayers' money. In the first four years of operation the NDA has made cumulative efficiency savings of £625 million, with £5.9 billion of income secured from our commercial assets.

2.6 We have a number of other areas of activity which we describe as critical enablers in the delivery of our mission:

— through competition introducing international companies to the UK nuclear decommissioning supply chain to improve performance and bring innovation;

— investing in nuclear skills and R&D;

— learning from and sharing international best practice with other nuclear countries; and

— working with communities to address the socio-economic impacts of the decommissioning programme.

2.7 In order to deliver this programme of work our spending requirements during the current Comprehensive Spending Round (CSR07) period amounted to £8.4 billion. This comprised approximately £5.1 billion from Government grant-in-aid and £3.3 billion from commercial income.

3. Higher Activity Radioactive Waste Management

3.1 As mentioned above, integrated waste management is one of our core activities and is also a key enabler for nuclear new build. In the draft NPS for Nuclear Power Generation the UK Government has set out the reasons why it believes a suitable site for geological disposal can be identified, why this is technically achievable, and why acceptable interim storage arrangements will be available. We support this position for the following reasons:

Suitable site

3.2 The UK Government and the devolved administrations for Wales and Northern Ireland (Government) set out a framework to implement the geological disposal policy in the Managing Radioactive Waste Safely (MRWS) White Paper\(^{[iv]}\) published in June 2008. This sets out the framework for the implementation of geological disposal, including a flexible site selection process based on voluntarism and partnership. Experience around the world in developing geological disposal facilities demonstrates that this approach is likely to be the most successful way to develop a safe, secure, and environmentally acceptable facility that secures public confidence.

3.3 The MRWS White Paper sets out a step-by-step site selection process. The various stages are as follows:

— Stage 1: Expression of interest, corresponding to the period up to the point where a community decides to open up without commitment discussions with Government.

— Stage 2: Initial screening out of unsuitable areas.

— Stage 3: Community consideration leading to Decision to Participate.
— Stage 4: Desk-based studies in participating areas.
— Stage 5: Surface investigations to identify a preferred site.
— Stage 6: Underground operations.

3.4 Three formal “expressions of interest” relating to the Copeland and Allerdale districts of Cumbria have already been received by the Government. A West Cumbria MRWS Partnership has been established as an advisory body which aims to:

“make recommendations to Allerdale Borough Council, Copeland Borough Council and Cumbria County Council on whether they should participate or not in the geological disposal facility siting process, without commitment to eventually host a facility”.

3.5 We welcome this progress and participate as an observer at their meetings.

3.6 At this stage of the process we are developing a generic disposal system safety case. This will be published in the autumn of 2010 explaining why we think our proposals will meet the rigorous safety requirements set by the regulators. There will be further opportunities to improve the proposals with continued engagement with the regulators and by input from other interested groups including potential local communities.

3.7 The programme for developing a facility needs to be flexible and able to incorporate both technical site investigations and ongoing interactions between the project and the host community. This may mean accommodating longer discussion periods and more research to address regulatory and stakeholders’ concerns. Nevertheless, there is a need to maintain momentum in taking forward this important programme to ensure the safe and secure long-term management of higher activity radioactive waste in the UK. This will require long term stable and secure funding for the programme.

3.8 As set out in the MRWS White Paper, one of the requirements will be for Government to provide a benefits package to a host community. Construction and operation of a geological disposal facility will be a multi-billion pound project that will provide skilled employment for hundreds of people over many decades. It will contribute greatly to the local economy and wider socio-economic framework. There could be spin-off industry benefits, infrastructure benefits, benefits to local educational or academic resources, and positive impacts on local service industries that support the facility and its workforce. It is also likely to involve major investments in local transport facilities and other infrastructure, which would remain after the facility had been closed. In addition there may be other benefits which may be commensurate with developing the social and economic wellbeing of a community that has decided to fulfil such an essential service to the nation.

Technically achievable

3.9 Government policy for long term management of higher activity wastes is geological disposal coupled with safe and secure interim storage and ongoing research and development to support its optimised implementation. This was arrived at following extensive public consultation and is consistent with the approach adopted by the majority of other countries facing similar challenges.

3.10 UK Government policy for new nuclear-build requires “requesting parties” to submit reactor designs to the regulators’ Generic Design Assessment process. As part of this process we advise requesting parties on the disposability of radioactive waste and spent nuclear fuel generated by new reactor designs. This advice is based on the disposability assessment against geological disposal facility design and safety considerations. It is an extension of the assessment methodology we use for legacy wastes known as the Letter of Compliance process, which is subject to regulatory scrutiny.

3.11 We have completed assessments for:
— the UK EPR proposed by EdF and AREVA as a co-requesting party; and
— the AP1000 proposed by Westinghouse Electric Company LLC.

3.12 We have concluded that compared with legacy wastes and existing spent fuel, no new issues arise that challenge the fundamental disposability of the wastes and spent fuel expected to arise from operation of both designs of reactor. Fuel from new reactor designs will be subject to higher burn-up than existing UK reactors. This means extracting more energy from the same amount of fuel with the result that the spent fuel is hotter and more radioactive. Disposability assessments have shown that this can be accommodated without adverse effects on the design or safety of a geological disposal facility.

3.13 One way of addressing this hotter and more radioactive spent fuel is to store it for a longer period of up to 100 years. This would allow the process of radioactive decay to render the fuel similar to that from existing reactors. However, this is an area where further optimisation of geological disposal designs will be explored with the requesting parties. Joint working arrangements for this optimisation are in place between the Nuclear Industry Association (NIA), the utilities and ourselves.
Interim storage

3.14 As previously stated, geological disposal is the way higher activity waste will be managed in the long term. This will be preceded by safe and secure interim storage for a number of decades until a geological disposal facility can receive waste.

3.15 We have published our UK wide review of waste storage arrangements for legacy wastes.[vi] We have interim storage facilities that are and will be safe and effective, and will remain so for as long as is necessary, until a GDF is available for use.

3.16 New nuclear build operators will need to provide safe and secure onsite interim storage of spent fuel and intermediate level waste. There is extensive experience, both in the UK and overseas, of storing such materials and hence this should not present a significant technical challenge. We will seek opportunities to work with potential new build operators to consider options for the interim storage of wastes from any new nuclear power stations.

4. Capability to Deliver Geological Disposal

4.1 The MRWS White Paper confirmed that we are responsible for planning and implementing geological disposal in the United Kingdom. Accordingly, we have set up a new directorate called the Radioactive Waste Management Directorate to develop into an effective delivery organisation to implement a safe, sustainable and publicly acceptable geological disposal programme. This Directorate was formed in 2007 when the UK Government transferred the functions formerly carried out by Nirex to the NDA. Thus the skills and expertise that existed have been retained and further developed.

4.2 We are successfully transforming this part of the NDA to become an organisation that will ultimately be able to hold a nuclear site licence and disposal authorisations for a GDF. Following a detailed review by regulators we have commenced operations as a prospective Site Licence Company (SLC) under voluntary regulatory scrutiny in preparation to becoming the organisation that delivers the facility.

4.3 The competencies required to implement geological disposal will be provided from a combination of our staff and the external supply chain. We have identified the duties and functions needed to undertake our current safety and environmental activities. As part of the development of our procurement strategy we have engaged with the supply chain.

4.4 Many other countries are developing geological disposal facilities. We work closely with implementation organisations around the world and we have undertaken a benchmarking exercise with other comparable programmes to validate our work. This has included the programme of the Swedish waste management organisation, SKB who have recently selected a site, and also the French, Swiss and Japanese geological disposal programmes.

4.5 SKB has undertaken an independent review[vii] of our current programme. We are working with them and others to identify opportunities to strengthen our programme through the transfer of technology and knowledge.

4.6 In order to plan the financing of the geological disposal programme and to inform Government’s staged decision making process we evaluate the potential cost of the programme. This cost is affected by many factors, but at the current stage of planning there are inevitable uncertainties. Therefore, we have developed a tool, termed the Parametric Cost Model, to identify the cost impact of different scenarios. This is used to assist the Department of Energy and Climate Change in their development of a fixed unit price methodology for disposal of material from new nuclear power stations.

4.7 The Committee on Radioactive Waste Management provides independent scrutiny and advice to Government on the long term management of higher activity radioactive wastes. As part of their work they scrutinise our programme and one of their reports[viii] they welcome the progress made by Government and the NDA in carrying forward the geological disposal implementation programme.

5. Potential Synergies

5.1 Since our establishment we have significantly and successfully restructured the industry to deliver our legacy decommissioning and waste management mission. The development of UK Government policy on nuclear new build presents further opportunities for benefits from synergies between legacy and new build activities. These include the following:

— Supply chain
  The supply chain is a critical resource to deliver our mission. In our first four years £4.7 billion was spent in the supply chain which included £1.3 billion in 2008-09, of which 70% was let competitively. Our Supply Chain Development Strategy[ix] include commitments to “explore synergies with other nuclear clients”. We continue to work with all interested parties to enable “a safe, affordable, cost effective, innovative and dynamic market” and recognise that many in the supply chain are potential suppliers for new build.
— Infrastructure

There are potential synergies with regard to infrastructure required for us to deliver our existing responsibilities and those for a new nuclear programme. These will need to be explored in further detail and will cover; waste packaging and conditioning, interim storage, and transport.

— Socio-economic

As a result of our land disposal programme we have generated over £500 million of income by selling land to “new build” operators. Four out of the 10 sites nominated for new nuclear power stations are on land previously owned by NDA and are therefore adjacent to existing nuclear installations. This has given a much more positive economic outlook for those communities than was previously envisaged, and we will be seeking to explore opportunities including the potential redeployment of site staff as manpower requirements on legacy sites reduce and new build sites increase.

— Skills

We need to ensure we have innovative technology and an appropriately skilled workforce and supply chain to deliver our mission. Our Skills and Capability Strategy[^1], supported by major employers, and associated Action Plan[^2] demonstrate how we will meet this challenge. These developments will also support a new nuclear build programme.

— Research and development

We explore opportunities to share research and development findings with international partners. This provides good value for money as it means we can learn from others around the world. The skills built up by this may be useful to support new build work.

6. Conclusions

6.1 We support the analysis in the draft NPS for Nuclear Power Generation that there are suitable ways of dealing with higher activity radioactive waste.

6.2 We believe that good progress is being made and we are confident that with appropriate long term funding, arrangements can be provided for the management of higher activity legacy wastes, as well as those that will arise from a programme of nuclear new build.

6.3 No new issues arise that challenge our ability to dispose of the wastes and spent fuel expected to result from the operation of the two proposed new reactor designs. As set out in the MRWS White Paper there is a suitably flexible and robust process in place to deal with radioactive waste issues.

6.4 The development of UK Government policy on nuclear new build presents opportunities for benefits from synergies between legacy and new build activities to be realised.

January 2010

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[^7]: SKB, SKB Peer Review of the NDA RWMD Provisional Implementation Plan—PIP, 2009.
Memorandum submitted by Nuclear Free Local Authorities

I provide a submission from the Nuclear Free Local Authorities (NFLA) Steering Committee to the Energy and Climate Change Parliamentary Select Committee’s “Inquiry on the Energy National Policy Statements (NPS)”. The Nuclear Free Local Authorities are made up of around 70 councils from across England, Scotland, Wales, Northern Ireland and the Republic of Ireland. Its terms of reference can be found on the NFLA website http://www.nuclearpolicy.info.

The NFLA response concentrates on the Draft Overarching Energy NPS (EN-1) and the Draft NPS for Nuclear Power Generation (EN-6).

1. EXECUTIVE SUMMARY

1.1 The current focus on nuclear power is distracting attention and resources away from other energy programmes. The NFLA believes there is a real need to be sure that a replacement nuclear programme, which can only tackle 4% of UK carbon emissions, is not going to prevent dealing with the other 96%.

1.2 Building new reactors has a high opportunity cost. Local authorities would be able to achieve far more if the money was spent instead on energy efficiency schemes. A step change in energy efficiency was promised in the 2003 Energy White Paper—the NFLA believes local authorities and the wider public are still waiting for it.

1.3 The Draft Overarching National Policy Statement for Energy suggests nuclear power should contribute as much as possible towards meeting the need for 25GW of non-renewable capacity. Yet small-scale renewables are only expected to provide 2% of electricity, but could provide, together with micro-CHP, as much as 15% by 2020.

1.4 Every house will need excellent insulation and some form of Low and Zero Carbon Technology—micro-generation or community heating schemes—if the Government is going to meet both its climate change and its fuel poverty commitments. This means carrying out installations in all of the UK’s 25 million dwellings over the next 40 years or 625,000 dwellings every year between now and 2050. Local authorities should be given a major role in implementing such a programme.

1.5 Investment in new nuclear reactors is likely to exacerbate climate change because each pound spent is buying so much less of a “solution” than if it were spent on energy efficiency measures.

1.6 The National Policy Statements encourage the nuclear industry to provide as much of the 25GW of non-renewable capacity required by 2025 as possible, but little is made of the extra offshore wind capacity available. If the Government is going to direct utilities in a certain direction it needs to be explicit about the criteria it is using to make such directions. If it is simply using estimated carbon emissions it needs to investigate further the emissions from the whole nuclear fuel chain.

1.7 There is a wide disparity between various claims about the numbers of jobs which might be created by a new nuclear reactor construction programme. Just as spending on nuclear may effectively exacerbate climate change; it also kills jobs because alternative energy strategies are so much more effective at creating jobs.

1.8 The issue of dealing with the nuclear waste that has already been created from decades of nuclear power generation is far from resolved. The Government cannot, therefore, assume that waste produced by new reactors can be safely disposed of—along with legacy waste—in a deep geological disposal facility. Thus, the assumption that adequate arrangements for the long term management of radioactive waste from new reactors will exist when required is highly questionable. Cumbria could still be forced to accept a waste disposal facility against its will despite the current emphasis on voluntarism.

1.9 The Infrastructure Planning Commission (IPC) should be required to consider the most up-to-date climate projections for sea-level rises and to take a precautionary approach.

1.10 If issues connected with emergency planning and nuclear terrorism cannot be debated in an open and transparent way because of security concerns, then we have to conclude that new reactors are not compatible with an open and democratic society.

1.11 The Select Committee should recommend that a public hearing take place in the case of applications to build new nuclear reactors and alternative funding arrangements are made for Planning Performance Agreements to avoid the perception of collusion between the applicant and the planning authority.

2. INTRODUCTION

2.1 Replacing nuclear reactors will save only around 4% of the UK’s carbon emissions. The Government says it challenges the view that 4% is not worth bothering with, and that it has to look across all forms of energy, especially because there will be a greater need to start using more electricity for transport and heating.

(1) However, there is a real need to be absolutely sure that promoting new nuclear reactors is not going to negatively impact on the ability to deal with the other 96% of emissions.

2.2 In 2003, the Energy White Paper promised local authorities a “step change” in policies and programmes to deliver energy efficiency. (2) Local authorities were encouraged to take the lead, acting as catalysts for change. Some local authorities have indeed been carrying out some innovative climate change...
strategies, but without central government support these schemes will never be ambitious enough or at the scale required to meet carbon abatement targets. Local authorities are still waiting for the step change in energy efficiency promised six years ago.

2.3 Almost before the ink was dry on the 2003 White Paper, the nuclear industry and its supporters in Government began a campaign to re-visit the nuclear issue. It is very difficult to avoid the conclusion that the worst fears of the Sustainable Development Commission, expressed in 2006, have, in fact been realised, and that re-launching the UK nuclear programme has required “a substantial slice of political leadership”. Political attention has been shifted and undermined efforts to pursue a strategy based on energy efficiency, renewables and Combined Heat and Power (CHP). (3) Sir Jonathon Porritt, the former chair of the Commission, says nuclear power is seriously diverting attention from the hard decisions required to solve the UK’s energy challenges. (4)

2.4 Building new reactors, therefore, has a high opportunity cost—the cost of forgoing the alternative outcomes that could have been purchased with the same money. This particularly impacts on local authorities who could achieve far more if the money spent on new nuclear reactors were instead spent on energy efficiency and renewables.

3. LAUNCHING THE LOCAL ENERGY REVOLUTION

3.1 The arguments in the Draft Overarching National Policy Statement for Energy (EN-1) on energy efficiency and decentralised energy as alternatives to new large scale electricity generation are weak and vague. (5) The document claims that energy efficiency savings are likely to be limited and offset by increases in the use of electricity for heating and transport. It also claims that decentralised and community energy systems are “unlikely to lead to significant replacement of larger-scale infrastructure”. Only 4GW is expected to be generated by small-scale renewables—about 2% of electricity demand compared with the 12% which the European Photovoltaic Industry Association expects to be able to provide with just solar PV across Europe. (6) Unlike nuclear, energy efficiency and renewables are not encouraged to aim high.

3.2 Similarly, the Chief Executive of National Grid, Steve Holliday, says that 15% of the country’s electricity production could come from so-called “embedded generation” in homes and offices by 2020 as micro-generation becomes increasingly viable after the £9 billion rollout of “smart meters” for every home in Britain. (7) This higher figure will include micro-CHP as well as small-scale renewables.

3.3 The Government’s proposed Feed-in Tariff, or “Clean Energy Cashback” scheme, has been set at a rate that is inappropriately low. Alan Simpson MP, who advised the Government on Feed-in Tariffs, says it should aim to get much more than 2% of electricity from micro-generation. “If they were five times as ambitious, it would only cost the average family another £2 a year”. Confirming that nuclear power detracts from renewables, The Guardian reported that the nuclear industry has been lobbying against support for renewables because it undermines the case for new nuclear stations. (8)

3.4 The failure of the Copenhagen Conference to come up with a legally binding set of climate targets means all public agencies must redouble their efforts to open up new fronts at the local and grassroots levels to reduce carbon emissions. The trailblazing work of a few local councils, such as Manchester and Kirklees, is beginning to show how grassroots campaigns can be turned into effective action. A groundswell of actions by individual communities led by local authorities will need all the financial support they can get from national government. If the Government is focussed on getting new nuclear reactors build to the exclusion of building a local decentralised energy system, then it will be difficult for local authorities to continue this exciting leadership role.

3.5 The Local Government Association (LGA) agrees that local government is pivotal to delivering the step-change in CO2 emissions reductions required. (9) The scope for local authority action is significant. Through delivery of services such as transport, planning and housing as well as through their influence on all sectors of the community, local authorities can make reductions in emissions from corporate activities and through stimulating savings in the wider community. Such action can help to deliver joint social, economic and environmental aims and link together initiatives to maximise their impact.

4. FUEL POVERTY

4.1 Ofgem has estimated that renewing infrastructure and meeting carbon targets is likely to require an investment of up to £200 billion which will mean significant increases in domestic energy bills of between 14% and 25% by 2020. (10) Clearly, without a large domestic energy efficiency programme it will be impossible to meet both climate change and fuel poverty commitments. More than seven million households struggle to pay their fuel bills, almost double the official estimate, according to new research published by the National Housing Federation. (11) Yet EN-1 appears to suggest that tackling fuel poverty will be left to the market:

“…provision of new energy infrastructure contributes to … reducing fuel poverty … because the availability of appropriate infrastructure supports the efficient working of the market so as to ensure competitive prices for consumers”. (12)
4.2 If the Government is to meet its target to reduce carbon emissions by 80% by 2050, and eliminate fuel poverty by 2016, it will need to implement a set of policies which can cut emissions from the domestic sector by 80% by 2050. Every house will need excellent insulation and some form of Low and Zero Carbon Technology—micro-generation or community heating schemes. This means carrying out installations in all of the UK’s 25 million dwellings over the next 40 years or 625,000 dwellings every year between now and 2050. (13)

5. NPS’s PROMOTE NUCLEAR OVER OTHER FORMS ON ENERGY

5.1 EN-1 suggests the UK might need a generating capacity of around 100GW by 2020 of which around 43GW is expected to be new capacity. 26GW of this would need to be renewable to meet the target of providing 30% of electricity from renewables by 2020. 17GW would be other types of electricity generation. By 2025 these figures could increase to 35GW and 25GW respectively.

5.2 EN-1 says the precise mix will depend on decisions by the utilities. However, it encourages the nuclear industry, quite prominently, (para 3.1) to contribute as much as possible towards meeting the need for 25GW of non-renewable capacity by 2025, but only mentions (para 3.4.4) briefly that offshore wind has the potential to provide an extra 25GW by 2020. And, as has already been noted, small-scale generation is only expected to provide around 4GW, whereas it could provide up to 30GW according to National Grid.

5.3 If the generation mix is not being left to the market, but utilities are being pushed in certain directions, it would have been sensible if the Government had set out clearly the criteria to be used in decision-making about the mix. Given that both EDF and Eon have asked the Government to set a maximum contribution for renewables—at around the 30% level—so as not to constrain nuclear (14)—it would be sensible for EN-1 to state clearly what criteria will be used to push utilities in certain directions. For example, in the view of the NFLA, the Government’s priority should be for electricity to be generated by sustainable renewable methods which do not generate waste—radioactive or otherwise.

5.4 Obviously the main theme which runs through EN-1 is that electricity generation should be low carbon. Para 2.3.2 of the Nuclear NPS (EN-6) claims that emissions from the nuclear cycle are around 7—22gCO2e/kWh. However, a recent meta-study which looked at 103 lifecycle studies concluded that the figure is more likely to be around 66g CO2e/kWh—worse than all the renewable alternatives, including solar PV. (15) If this is the main criterion being used to direct utilities in a certain direction then the Government needs to investigate more fully what the real emission levels are. In particular, it needs to investigate whether, with increasing demand for uranium, ore quality will decrease causing emissions from the whole nuclear cycle to rise substantially before the end of the life of proposed new reactors. (16)

6. COST EFFECTIVE AND CARBON EFFICIENT SPENDING

6.1 The NFLA believes that tackling climate change is an urgent priority, so the UK Government needs to spend its limited resources as effectively as possible. In other words it is imperative to maximize carbon reductions achieved with every pound spent. Investing in expensive nuclear power is not particularly cost effective. Energy efficiency can be up to seven times more cost effective. So investment in new reactors effectively worsens climate change because each pound spent is buying so much less of a “solution” than if it were spent on energy efficiency measures. (17)

6.2 The proponents of nuclear power argue that, because climate change is so serious the Government needs to promote renewables, energy efficiency and nuclear power. This suggests the UK has infinite sources of finance to spend on large numbers of energy projects, which is clearly not the case, and particularly so given the extent of the public finances and a worldwide economic recession. A scarcity of resources means anything that is spent on nuclear power will not be available to be spent on other energy projects.

7. SOCIO-ECONOMIC IMPACTS

7.1 The Appraisal of Sustainability claims that a 1.6GW nuclear plant could employ up to 4,000 people during construction and 500 when operational. (18) The Government has stated that it has set out a scenario which involves the construction of twenty new reactors—up to 32GW.

7.2 Further clarity is required concerning these job numbers. EDF, one of the companies likely to be involved in new-build, has said its plans for the UK “could create approximately 350 direct permanent jobs and over 2,000 temporary jobs during the peak construction period” for each power station. However, EDF has also said its station currently under construction in Finland currently employs “around 600 (construction) people work at the site, with up to 3,000 during peak times”. (21)

7.3 As a capital intensive industry, nuclear power is not a very efficient way of creating jobs. It produces around 75 jobs per year per TWh of power, whereas wind power produces 918–2,400 per year per TWh. And due to technological changes, any new nuclear power stations would employ fewer people than existing plants. (22)
7.4 Investment in renewables and energy efficiency could create seven times more green jobs over the next ten years than would be lost in the coal and nuclear sectors in Europe, according to a report published by Greenpeace and the European Renewable Energy Council (EREC), and backed by a number of trade unions. (23)

7.5 Peter Bradford, a former member of the Nuclear Regulatory Commission, argues that nuclear power could actually kill jobs as the capital markets are not swimming in credit. The NFLA would argue that if billions of pounds are spent for nuclear construction it may well suck up money than might be otherwise be available for, say, wind projects that could create far more jobs per pound spent. (24)

7.6 Building nuclear reactors may also prevent the diversification of a local economy. Many new businesses would be reluctant to move into an area which is so heavily focused on promoting the nuclear industry. It may also detract from the promotion of other industries, such as those connected to food and agriculture or tourism, which require an area that has a reputation for having a clean environment.

7.7 A large influx of workers during the construction phase of a new reactor would put a strain on local services and facilities. Short duration, capital intensive construction projects have been shown to seriously distort the local labour market. Often the bulk of those employed are from outside the local area. After the project is completed many migrant workers remain in the area compounding local employment problems. (25)

8. Nuclear Waste

8.1 Probably the most contentious point made in the Nuclear NPS concerns nuclear waste. The Government says its preliminary conclusion is that it is satisfied effective arrangements will exist to manage and dispose of the waste produced by new reactors. “As a result the IPC need not consider this question.” (para 3.8.20) Consequently the need to store spent nuclear fuel at the reactor sites for up to 160 years is not even going to be examined by the new IPC.

8.2 The Government’s confidence that it will find a suitable site in a community which has expressed a willingness to host a site is misplaced. The three Cumbrian authorities looking into whether or not to volunteer will not finish the first round of consultation until 31 March 2010, and will not look at the radioactive waste inventory until later in 2010. The full extent of the new reactor programme is still unknown and may require a second deep geological disposal facility. Cumbria may yet decide against hosting a deep geological disposal facility, or it may decide it is only willing to host a facility for legacy waste. It is also possible the geology of West Cumbria may not be appropriate for such a facility.

8.3 However, the Government has explicitly stated it is prepared to “explore other approaches”—ie override a Community’s wishes—if the voluntarism approach to disposal does not work. (26) This completely undermines the voluntary approach and suggests that Cumbria could be forced to accept waste whether it wants to or not.

8.4 The issue of dealing with nuclear waste already created is far from resolved. The Government cannot, therefore, assume that waste produced by new reactors can be safely disposed of—along with legacy waste—in a deep geological disposal facility. Thus, the assumption that adequate arrangements for the long term management of radioactive waste from new reactors will exist when required is highly questionable.

8.5 Under the Planning Act 2008 the Nuclear NPS consultation is the last chance to challenge the principle that new nuclear reactors should be built at the 10 proposed sites, and that these reactors should be permitted to generate spent nuclear waste fuel which may be stored on the sites for up to 160 years. No information is given on how this waste might be transported away from the sites eventually, and whether facilities might be required in future for, for example, encapsulating the waste. The communities living around the proposed nuclear sites are to be given almost no say on whether their area should be allowed to become a de facto nuclear waste storage site for the foreseeable future. This is in sharp contrast to the voluntarist approach recommended by the Committee on Radioactive Waste Management (CoRWM).

8.6 The Government’s separate, but related, Justification consultation quotes the International Commission on Radiological Protection (ICRP) Publication 77 as follows:

“Waste management and disposal operations are an integral part of the practice generating the waste. It is wrong to regard them as a free standing practice that needs its own justification.” (27)

In other words, the disposal of spent fuel and nuclear waste from new reactors may well be subject to no further public scrutiny after 22 February 2010. It looks likely that, as things stand at the moment, the IPC will be simply told that the strategic question of whether nuclear waste should be disposed of in a geological repository has already been decided and that any planning application for a geological disposal facility only needs to be examined with regard to local planning issues. There will effectively be no Nirex Inquiry Part 2. In other words, Cumbria could be forced to accept a geological disposal facility against its will without even so much as a public inquiry.
9. Climate Change Impacts

9.1 A recent study published in the Proceedings of the National Academy of Sciences (28) has predicted that global average sea levels are likely to rise by between 75cm and 190cm by 2100—three times faster than official predictions of the Intergovernmental Panel on Climate Change (IPCC) which estimates a maximum rise of 59 centimetres by 2100. (29)

9.2 There will also be an increase in major storms, more intense gales and hurricanes and these, in turn, will produce massive storm surges as they pass over the sea. The result will be a “climatic double whammy” that will savage low-lying regions including Britain’s south-eastern coastline, in particular East Anglia and the Thames Estuary.

9.3 The Institution of Mechanical Engineers says coastal sites like the Sizewell nuclear site on the Suffolk coast might have to be abandoned. It will certainly be affected by rising sea levels. Engineers say they can build concrete walls that will keep out the water throughout the working lives of these new plants. But that is not enough. Nuclear plants may operate for 60 years (up to around 2080), but it could take hundreds of years to decommission them, and spent nuclear waste fuel could be stored there until 2180 or later. (30)

9.4 In 2007 a report for Greenpeace by the Middlesex University Flood Hazard Research Centre looked at the effect of the expected sea level rises and increases in storm surge over the next 200 years on four reactors sites. It concluded that Dungeness appears to be highly threatened, Bradwell is under significant threat and Hinkley Point is also vulnerable. The situation at Sizewell is less clear, but none of these sites are completely threat-free as a location for a new nuclear power plant. It is also important to note that even the lowest estimates of sea-level rise could significantly increase long-term dependence on defence at the stations and increase the current rate of loss in the physical stability of the environments in which the stations are situated. It is currently difficult and costly, and in the future is likely to be increasingly unsustainable, to maintain the presence of power stations in three of the four sites studied. The report concludes that defending the sites from sea water will mean they are “likely to become economically unsustainable” and they “cannot be considered as suitable locations for new reactors”. (31)

9.5 The IPC should be required to consider the most up-to-date climate projections and to take a precautionary approach. In some cases the mitigation of flood risk to a given site may have an adverse effect on the flood risk elsewhere. If measures are required on nearby land not owned by the applicant, EN-1 needs to be clear how these measures might be implemented.

10. Emergency Planning

10.1 New risks have emerged since nuclear reactors were built on the existing sites, such as the risk of terrorist attack, flooding due to climate change and the storage of spent fuel on site, increasing the overall level of risk to nearby communities.

10.2 An examination of the possibility of evacuating Mersea Island, for example, which is only around two miles just across the Blackwater estuary from the Bradwell site, gives cause for concern. The Strood is the road leading off Mersea Island to the mainland, the one exit route in the case of a nuclear incident. It also floods twice a day at the highest tides in Spring and Autumn, sometimes for as much as two hours. Mersea Island has a large additional summer population of perhaps 5,000 tourists, many of whom would be at caravan and camp sites, without the shelter of permanent accommodation. This would further compound the difficulty of implementing an evacuation plan. (32)

10.3 In Cumbria the emergency planner has attacked plans to build nuclear power stations on farm land on two green field sites near Sellafield. David Humphreys, Cumbria County Council’s Emergency Planner says at Sellafield “we already have a well developed emergency plan and a well educated local population. [But] what does concern me are the new reactors at Kirksanton and Braystones. What this does is it brings in an entirely new population being put at risk from these reactors. As an emergency planner it creates major new problems.” (33)

10.4 Whilst EN-6 says the IPC should ensure applicants have consulted the Emergency Planning Authority (and the Nuclear Installations Inspectorate), the Government dismisses concerns about terrorism risks saying it believes the regulatory framework will ensure that risks are minimised and sensibly managed by the industry. The regulatory framework requires nuclear power stations to have their security arrangements approved by the Office for Civil Nuclear Security. The Generic Design Assessment (GDA) is also considering a wide range of hazards including the ability of reactors to withstand accidental aircraft crash or malicious activity. (34)

10.5 Nuclear terrorism has the potential to cause a large number of deaths, and the risk of a successful attack will increase if more nuclear power stations and radioactive waste stores are built. (35) Yet local authorities have very little input into these areas. In fact, information on nuclear reactors and radioactive waste facilities is likely to be increasingly withheld, because of security risks, reversing the trend of the last decade to allow greater openness and transparency in what has traditionally been a highly secretive industry. (36) So great is the risk of a terrorist attack on nuclear facilities that some say nuclear power should no longer have a role to play in supplying energy. (37)

11. If there is not the ability to publicly debate the risk then the public should not be subjected to it.
11.1 Leaked documents by EdF on the vulnerability of the new European Pressurised water Reactor (EPR) to terrorist attack revealed a dangerously flawed approach to security. (38) Nuclear engineering consultancy, Large and Associates, has assessed the secret EdF document and concluded that it includes seriously flawed assumptions about whether the reactor could withstand a potential terrorist attack using hijacked commercial aircraft. (39) Clearly modes of attack other than crashing a passenger aircraft into a nuclear site also need to be considered, such as attacks involving vehicles loaded with explosives, or suicide bombers. (40)

11.2 NFLA believes that if these issues cannot be debated in an open and transparent way because of security concerns, then we have to conclude that new reactors are not compatible with an open and democratic society.

12. THE IPC AND DEMOCRATIC ACCOUNTABILITY

12.1 The NFLA is seriously concerned about how the Planning Act 2008 represents an attack on democratic accountability. (41) In the case of applications to build nuclear power stations the removal of the right to cross examine witnesses is particularly disturbing. The new Act means that the IPC will normally make decisions without even a public hearing. The Select Committee could go some way towards rectifying this situation by recommending that public hearings take place in the case of applications for nuclear power stations.

12.2 NFLA is also concerned that there may be a perception, amongst some community groups, of potential collusion between the applicant and the local authority when a Planning Performance Agreement is reached, with funding going from the applicant to the local authority. The “perception” of collusion could seriously strain relationships between the local authority and its citizens, because of the danger that any funding from the developer will compromise the local authority’s final recommendations. The Select Committee should consider recommending to the Government that alternative funding arrangements are made for the planning authority.

13 CONCLUSION

In its submission to the Energy and Climate Change Parliamentary Select Committee the NFLA has sought to show that there are major unresolved issues and concerns over a nuclear new build programme. Other renewable energy alternatives, energy efficiency and micro-generation may all be significantly curtailed in favour of nuclear power. The NFLA hopes the Committee will consider all these issues and make appropriate recommendations to the Government.

REFERENCES

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7. Times 4 December 2009 http://business.timesonline.co.uk/tol/business/industry_sectors/technology/article6943586.ece
12. EN-1 para 2.1.20


27. The Justification of Practices Involving Ionising Radiation Regulations 2004: Consultation on the Secretary of State’s Proposed Decision as Justifying Authority on the Regulatory Justification of the New Nuclear Power Station Designs currently known as the AP1000 and the EPR. Volume 2 and Volume 3 para 4.1.


37. The risk of nuclear terrorism in the UK by Professor Paul Rogers, ORG Factsheet No.3 http://www.oxfordresearchgroup.org.uk/sites/default/files/energyfactsheet3.pdf
Memorandum submitted by the Nuclear Industry Association

The Nuclear Industry Association (NIA) welcomes this opportunity to comment on the Government’s proposals for National Policy Statements (NPSs) for energy which we believe will be vital in ensuring the UK’s secure low carbon energy future.

NIA is the trade association and information and representative body for the civil nuclear industry in the UK. It represents over 180 companies operating in all aspects of the nuclear fuel cycle, including the current and prospective operators of the nuclear power stations, the international designers and vendors of nuclear power stations, and those engaged in decommissioning, waste management and nuclear liabilities management. Members also include nuclear equipment suppliers, engineering and construction firms, nuclear research organisations, and legal, financial and consultancy companies. Several of these companies will be making their own responses to this consultation.

1. Do you think that the Government should formally approve (“designate”) the draft Overarching Energy National Policy Statement?

Yes it is vital because it establishes the national need for new energy infrastructure and a diverse energy mix. Without this policy statement being designated these issues of national need could be re-opened in individual planning applications to the IPC.

The UK faces an electricity generation gap in the next 10–15 years as the existing coal and nuclear power stations are due for retirement. Around 30% of Britain’s electricity generating plant will need to be replaced by 2020. Urgent investment in replacement generating capacity and associated infrastructure will be required to ensure the reliability and security of the UK’s future electricity supply. A common feature of proposals for new generating capacity of any kind is the long and unpredictable amount of time many applications take in the planning process, without any guarantee that they will be approved. A key feature of the industry’s case to Government in recent years has been the need for reform of the planning system to streamline its procedures and introduce a greater degree of predictability, particularly over timing, to provide greater confidence to potential investors in new nuclear plant.

Modern nuclear reactors take around five years to construct. However, under the current planning and regulatory approvals process it would take perhaps at least an additional five years to get to the point where the industry could start construction.

The planning process for Sizewell B, the last nuclear station built in the UK, took over six years from January 1981 to March 1987, at a cost of around three hundred million pounds. That period included a public inquiry of 340 inquiry days (at that time the longest in planning history); of which 50 days were devoted to “policy”, 120 days to “need and economics”, 100 days to “design and safety issues” and only about 30 days to “local issues”. In the Hinkley Point C Inquiry which followed two years later there were 182 inquiry days, during which many of the same issues were debated at length again.

These NPSs are therefore vital to deliver, subject to HSE requirements, the energy infrastructure the country needs and remove the unnecessary delays.

2. Does the draft Overarching Energy National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

This draft NPS provides information about need, but makes it clear that this is simply a factor that the IPC should take into account. It would be helpful if there was a clear indication from Government that the need for new nuclear power (and other energy related development) should be given significant weight by the IPC in determining applications for development consent. Similarly, there is no explicit statement in EN-i about the urgency of providing new generating capacity and the benefits of the earlier provision of low carbon generation. This should be made clear in both EN-i and EN-5. We have made other specific comments on this statement below.
3. Does the draft Overarching Energy National Policy Statement provide suitable information to the Infrastructure Planning Commission on the Government’s energy and climate policy?

Yes although on energy security there is no mention of the significant security of supply attributes of nuclear power. For example there is no mention of the long time taken for power drop off from a nuclear power station that is not refuelled and the quantity of uranium held in the UK at any time. We have expanded on this point in the answer to question 23.

4. Does the draft Overarching Energy National Policy Statement provide suitable direction to the Infrastructure Planning Commission on the need and urgency for new energy infrastructure?

Yes the statement of need and urgency is both comprehensive and in our opinion accurately describes the need for energy infrastructure in the UK.

5. Do the assessment principles in the draft Overarching Energy National Policy Statement provide suitable direction to the Infrastructure Planning Commission to inform its decision-making?

We have some concern over the way in which alternatives are to be considered. The NPS appears to direct the IPC to consider the issue of urgency before all other criteria. So for example this could lead in the consideration of alternatives to rule out all but those technologies with the shortest build times regardless of their impact on security of supply or carbon emissions. Whereas facilities with longer construction times are in greater need of certainty in the planning process which is supposed to be delivered by the NPS/IPC system.

6. Does the draft Overarching Energy National Policy Statement appropriately cover the generic impacts of new energy infrastructure and potential options to mitigate those impacts?

Yes.

7. Do you have any comments on any aspect of the draft Overarching Energy National Policy Statement not covered by the previous questions?

No.

8. Do you think that the Government should formally approve ("designate"):  
(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?  
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?  
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?  
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes. These sectoral statements are essential in conjunction with the overarching statement and that for nuclear power to allow the IPC to take the planning decisions on our vital energy infrastructure in a timely way. We strongly agree with the statement made in EN-i point 3.3.25 that “no one type has all the characteristics needed to deliver the UK’s climate change and energy security objectives on its own”. Taken together all of the energy NPSs will be a step towards achieving the balanced and diverse low carbon energy mix that the country urgently needs. However we will only comment on EN-5 in response to the questions on this section as this is the only one directly relevant to the development of new nuclear power stations.

9. Do the following draft National Policy Statements provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent:  
(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?  
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?  
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?  
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes, we believe EN-5 does so.

10. Do the following draft National Policy Statements appropriately cover the impacts of the specific types of new energy infrastructure covered in them, and potential options to mitigate those impacts:  
(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?  
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?  
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?  
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

We believe that for EN-5 it does.
11. Do you have any comments on any aspect of the following draft National Policy Statements not covered by the previous questions:
(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?
No.

CHAPTER 4: APPRAISAL OF SUSTAINABILITY AND HABITATS REGULATIONS ASSESSMENT FOR EN 1-5

12. Do you agree with the findings from the following Appraisal of Sustainability reports:
(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-1)?
(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?
For EN-5 yes we do.

13. Do you think that any findings from the following Appraisal of Sustainability reports have not been taken account of properly in the relevant draft National Policy Statements:
(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-i)?
(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?
For EN-5 no we don’t.

14. Do you have any comments on any aspect of the following Appraisal of Sustainability reports not covered by the previous questions:
(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-i)?
(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?
Not for EN-5.

15. Do you have any comments on the Habitats Regulations Assessment reports for the following draft National Policy Statements:
(a) Habitats Regulations Assessment report for the draft Overarching Energy National Policy Statement (EN-i)?
(b) Habitats Regulations Assessment report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Habitats Regulations Assessment report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Habitats Regulations Assessment report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Habitats Regulations Assessment report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?
Not for EN-5.
Chapter 5: Draft Nuclear NPS (EN-6) and Associated Documents

16. Do you think that the Government should formally approve (“designate”) the draft Nuclear National Policy Statement?

Yes as we stated in answer to question 1 these statements including the one for nuclear are vital. This statement is essential in conjunction with the overarching statement and the other sectoral statements to allow the IPC to take the planning decisions on our vital energy infrastructure in a timely way. Taken together these statements represent a big step towards delivering the balanced low carbon energy mix that the country urgently needs. As a large scale secure low carbon form of generation we agree it will be essential to have a substantial proportion of nuclear power in the energy mix.

17. Does the draft Nuclear National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

As we stated in answer to question 2 the draft NPSs provide information about need, but makes it clear that this is simply a factor that the IPC should take into account. It would be helpful if there was a clear indication from Government that the need for new nuclear power should be given significant weight by the IPC in determining applications for development consent. This should be made clear in both EN-1 and EN-5.

18. Does the draft Nuclear National Policy Statement provide suitable direction to the Infrastructure Planning Commission on the need and urgency for new nuclear power stations?

Yes. It will be important that the IPC considers the additional benefits that could accrue from early deployment, and should consider the extent to which the UK is making progress towards the policy goals asset out in the National Policy Statement, when examining specific applications for development consent.

19. Do you agree with the Government’s preliminary conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced by new nuclear power stations in the UK?

Yes. The government has a clear policy on how waste will be managed and disposed of safely. Furthermore, we are confident that the Nuclear Decommissioning Authority (NBA) will be able to implement this policy and deliver the geological disposal facility. Radioactive waste and spent fuel has been safely handled and stored on licensed nuclear sites in the UK for well over 50 years and will continue to be in the future during the development of a permanent disposal facility. The CoRWM process to decide the disposal method for higher level legacy waste was extremely thorough and the geological method chosen is in line with international best practice. It will also be suitable for new build as the spent fuel and higher activity waste from new build do not create fundamentally different problems for disposal. We also agree with the government’s assessment that it will be possible to find a suitable location for the facility given the assessment from the British Geological Survey. We note the progress made so far and the fact that there are already communities interested in taking part in discussions about hosting a facility. These developments give confidence that effective arrangements will exist to manage and dispose of waste and spent fuel arising from new build.

The arrangements for a Funded Decommissioning Plan, as set out in the Energy Act 2008, provide the necessary protection for the taxpayer that a sufficient fund will be built up by the developer to meet the costs of decommissioning and waste disposal.

The interim storage method referenced in the policy statement is reasonable and could be the model followed. We welcome Government’s recognition that other approaches to interim storage and encapsulation are also possible. We also think that the Government should be ready to consider reprocessing/recycling options for new build used fuel, as and when appropriate. The funded decommissioning plan system that will be used for new nuclear reactors is sufficiently flexible to cope with changes to these arrangements as technology improves or plans are amended and to ensure these are still funded by the developer.

20. Does the draft Nuclear National Policy Statement appropriately cover the impacts of new nuclear power stations and potential options to mitigate those impacts?

Yes, although we note that many of the issues listed as nuclear specific are more specific to facilities situated on the coast (which nuclear is likely to be but other facilities could also be).
21. Do you agree with the Government’s preliminary conclusion on the potential suitability of sites nominated into the Strategic Siting Assessment, as set out below? You can respond in general terms on the assessment as a whole, or against one or more specific sites.

(a) General comments

The Government considers the following sites to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:

(b) Bradwell (c) Braystones (d) Hartlepool (e) Heysham
(f) Hinkley Point (g) Kirksanton (h) Oldbury
(i) Sellafield (j) Sizewell (k) Wylfa

The Government does not consider the following site to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:

(l) Dungeness

While we generally agree with the criteria and the method of assessment we disagree with the judgment reached on Dungeness. We believe that any effects of a new station at Dungeness would not have any substantially different implications than exist for the existing two stations and that these effects can be mitigated.

The only criterion within the Government’s Strategic Siting Assessment process which the Dungeness site does not meet criteria is D6: “Internationally designated sites of ecological importance”.

All of the nominated sites have the potential to have an impact on internationally designated sites and so it is not clear why the Dungeness site alone should be excluded on this discretionary criterion. The Government assessment of Dungeness notes that, unlike other sites, direct land take is likely to be unavoidable. Whilst some land take from the designated shingle habitat is likely to be required, it is not possible to conclude at this stage, and in the absence of project-specific plans, that a suitable compensatory habitat could not be identified or created.

It is therefore premature to rule out Dungeness as a potential site based on the evidence available, and in advance of any project-specific proposal.

Coastal protection is also identified as an area of concern, but the Government has concluded, on the basis of advice from the Environment Agency, that there is potential to protect the site from the risk of flooding and the impact of coastal processes. In this respect, Dungeness does not materially differ from other sites which are assessed as suitable.

There is a high level of local support for nuclear power operations at Dungeness, and the potential economic benefits of development more than offset any issues of planning blight caused by uncertainty over whether development would proceed.

In addition one reason stated for the exclusion of Dungeness as stated in section D6 of the site assessment is that the Government believes that ten sites are all that is required to deliver new nuclear. No evidence is presented for this assertion, the statement in Annex A of EN-6 which also comments on this says that the 10 will be required but does not make the case for why 10 would be sufficient. In fact the evidence presented makes the case for including all 11 sites due to imperative reasons of overwhelming public interest as the government’s stated policy is that nuclear should be free to contribute up to 25GW of nuclear capacity up to 2025. If only 10 sites are included then the NPS will clearly constrain this. In terms of mitigation against effects such as habitat loss the assessment under the Habitats Directive itself makes clear the mitigation that could be applied in terms of site design and operation.

We also think that some of the reservations around the sites at Kirksanton and Braystones are unfounded. For example it is hardly credible to say that the sites (and particularly Braystones) suffer in comparison to Sellafield in not having a qualified workforce in the area when particularly in the latter case it is only a couple of kilometers away.

22. Do you agree with the Government’s preliminary conclusion that the three sites identified in the Alternative Sites Study, as listed below, are not potentially suitable for the deployment of new nuclear power stations by the end of 2025? You can respond in general terms on the sites identified in the Study as a whole, or against one or more specific sites.

(a) General comments
(b) Druridge Bay
(c) Kingsnorth
(d) Owston Ferry

Yes we would agree for the reasons set out in the NPS that these sites are not deliverable by 2025 although beyond this date it is possible that other sites may be suitable.

23. Do you agree with the findings from the Appraisal of Sustainability reports for the draft Nuclear National Policy Statement?

Yes in general we agree with the findings. We do have some observations on the content of the analysis. The figures for the lifecycle carbon emissions from nuclear are in a high range. It is surprising that the study by the Parliamentary Office of Science and Technology on the issue (itself a review of several other studies and referenced in the Nuclear White Paper) which put the figure at 5g CO2/kWh is outside the range of figures
use. In calculating carbon emissions which nuclear would save or not (depending on whether it was replacing or being replaced by gas) there is no mention of the difference between pipeline and LNG supplied gas as the latter has much higher carbon emissions due to the energy requirement to liquefy and re-gasify the supply.

As we stated in response to question 3 it is surprising that the ability to store fuel supplies and the nature of fuels is not mentioned under security of supply considerations. For example a nuclear station can operate for around a year and a half without refuelling and after that output drops away only slowly with no loss of safety as the operating conditions are normal apart from the lower power output. A fossil fuel station will drop power immediately if its fuel supply is cut off. Also, in view of the relatively small volumes involved it would be possible to stockpile the fuel required for a reactor’s entire lifetime next to the plant should there be concerns about security of uranium supplies in the future—something that would be physically impossible for a fossil fuel station. Even without doing this the amount of uranium in the country at any one time is very large due to our long history of the nuclear industry, recycling at Sellafield, fuel fabrication at Springfields and the enrichment operations at Capenhurst.

On the issue of radiation there is a strict monitoring regime and atmospheric emissions are very low in comparison with natural background radiation variations and emissions from other non-nuclear power related sources. Finally, in the section on biodiversity implications it seems very strange that it does not refer to climate change which is likely to have the largest impact on biodiversity.

24. Do you think that any findings from the Appraisal of Sustainability reports for the draft Nuclear National Policy Statement have not been taken account of properly in the draft Nuclear National Policy Statement?

No, we think that all the elements contained in the appraisal are reflected in the NPS (although we think some of the missing elements listed in the answer to the previous question should also be included).

25. Do you have any comments on the Habitats Regulations Assessment reports for the draft Nuclear National Policy Statement?

No we think these accurately reflect the likely impacts at the sites.

26. Do you have any comments on any aspect of the draft Nuclear National Policy Statement or its associated documents not covered by the previous questions?

As mentioned under question 23 it seems strange that the UK’s own Parliamentary Office of Science and Technology report on lifecycle carbon emissions is not referenced as it was in the Nuclear White Paper. Also as referred to under question 23 it seems a major omission not to include reference to the refuelling characteristics of nuclear stations and the ability to store uranium as this is one of the major security of supply benefits of nuclear power.

Paragraph 4.10.2 is not clear on the status of a related grid connection application when considering a development consent application for a nuclear power station. The paragraph implies that the status of the grid connection should be a factor which the IPC takes into consideration. Our view is that this needs to be clarified to state that development consent applications related to grid connections should be independently considered under EN-5 and this should not be a factor taken into consideration by the IPC in relation to a nuclear development consent application under EN-6 unless the two applications are submitted together.

CHAPTER 6: IMPACT ASSESSMENT AND OTHER QUESTIONS

27. Do you have any comments on the Impact Assessment report for the draft energy National Policy Statements?

No.

28. Does this package of draft energy National Policy Statements provide a useful reference for those wishing to engage in the process for development consent for nationally significant energy infrastructure, particularly for applicants?

Yes.

29. Do you have any comments on any aspect of the draft energy National Policy Statements or their associated documents not covered by the previous questions?

The figure quoted for the amount of new nuclear announced by the companies is inconsistent across the NPS documents (this is possibly because some of them were finalised before the GDF-Suez/Iberdrola/Scottish and Southern joint venture announced how much capacity they wanted to build.)

January 2010
Memorandum submitted by Nuclear Legacy Advisory Forum (NuLeAF)

NEW NUCLEAR BUILD AND RADIOACTIVE WASTE MANAGEMENT

INTRODUCTION

1. NuLeAF is a Special Interest Group of the Local Government Association that seeks to represent the views of its member local authorities on nuclear legacy management issues and developments that may impact upon that management. Further information about NuLeAF is available at www.nuleaf.org.uk.

2. As an organisation, NuLeAF is neither pro nor anti nuclear. However, it does have considerable collective understanding and experience of radioactive waste management developments. This has been drawn on in preparation of the comments below, which arise from a meeting of NuLeAF’s Strategy Review Group on 15 December 2009. NuLeAF’s draft formal response to the Government consultation on the draft Nuclear NPS will be considered at its Steering Group meeting on 27 January.

3. This submission provides comments on two aspects of the draft Nuclear NPS’s coverage of radioactive waste management that we think should inform discussion at the Committee:

   (a) the Government’s preliminary conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced by new nuclear power stations; and

   (b) the Government’s view that, as a result, “the IPC need not consider this question” (draft Nuclear NPS, para 3.8.20).

THE GOVERNMENT’S PRELIMINARY CONCLUSION THAT EFFECTIVE ARRANGEMENTS FOR MANAGING RADIOACTIVE WASTE WILL EXIST

4. The draft Nuclear NPS refers to the Government’s policy that “before development consents for new nuclear power stations are granted, the Government will need to be satisfied that effective arrangements exist or will exist to manage and dispose of the waste they will produce” (para 3.8.1). In reaching its overall conclusion, Government focused on higher activity wastes and concluded that: geological disposal is technically achievable for those wastes; a suitable site can be found for geological disposal, and safe, secure and environmentally acceptable interim storage will be available prior to geological disposal.

5. In relation to finding a site for a Geological Disposal Facility (GDF), Government refers to the formal “expressions of interest” about potential involvement in the siting process that have been received from three local authorities (para 3.8.14). The Committee should be aware that a Partnership has been established to advise these local authorities on a decision about formal participation. Further information about the Partnership is available at www.westcumbriamwrs.org.uk.

6. The central issue about the Government’s preliminary conclusion is not whether technical solutions to radioactive waste management are known in principle or, in some cases, practice (as they are), but whether current strategies for implementing them will succeed and, if not, whether fall-backs or contingencies can be put in place. Whether current strategies are likely to succeed is essentially a matter of judgement. Certainly the Government’s current approach to siting a GDF—based on voluntarism and partnership—does offer enhanced prospects for success (compared to previous attempts), but the outcome cannot be known for certain. Whether fall-backs or contingencies (as in the case of alternatives to the current GDF siting process) are likely to succeed could be argued to come down to a question of whether Government has the political will and/or financial resources.

7. Either way, and regardless of the case for or against new nuclear power stations, NuLeAF considers it important that the prospects for effective radioactive waste management arrangements should be enhanced by: (a) maintaining adequate levels of Government funding (particularly for the GDF programme); (b) ensuring openness and transparency in strategy development and implementation; and (c) pursuing strategies for managing radioactive wastes that pay full and proper regard to the views of host communities and their local authorities.

8. More specifically, point (c) is likely to mean:

   — ensuring that host communities and their decision making bodies can play an appropriate and significant role in decision making about the inventory of wastes for disposal in a GDF;

   — ensuring that public acceptability is placed at the heart of decision-making in the implementation of strategy for managing Low Level Wastes (LLW); and

   — ensuring that potentially affected local authorities are fully involved in assessment and decision-making about options for the interim storage of spent fuel from new reactors.

THE GOVERNMENT’S VIEW THAT THE IPC NEED NOT CONSIDER WHETHER EFFECTIVE ARRANGEMENTS FOR MANAGING RADIOACTIVE WASTES WILL EXIST

9. The stark statement in the draft Nuclear NPS that the IPC need not consider this question (emphasis added) is capable of being misinterpreted to mean that the IPC will not have to consider radioactive waste management issues at all. We believe that this is not what the Government meant and that it should be encouraged to clarify its position.
10. We note in particular that DCLG advice to Chief Planning Officers is that the IPC will invite the relevant local authority to submit a local impact report by a specified deadline (Letter, 9/11/09, para 9). It adds that the Planning Act is not prescriptive about what should or should not be included in local impact reports—it is for the local authority to determine what they regard as relevant having considered the likely impact of the proposed development on the authority’s area.

11. In determining what is relevant, local authorities are likely to bear in mind the following:

— A statement that the significance of radioactive waste effects will need to be determined through studies at the level of Environmental Impact Assessment and Habitat Regulation Assessments (draft Nuclear NPS, para 1.5.6).
— That the local radioactive waste management effects should be assessed at the project level (Appraisal of Sustainability (AoS), paras S.11.27 and 6.4.14).
— That detailed site specific plans for spent fuel management will be presented by potential operators for assessment by regulators and planning authorities (AoS para 6.4.11).
— That it is at the local site level that a full understanding of the impacts of spent fuel management can be identified, minimised and mitigated (AoS para 6.4.18).
— That when reactor site-specific consideration is given to waste a “Radioactive Waste Management Case” will be required (Justification Consultation Document, para 4.67).

12. It will therefore be important for the relevant local authorities to pay close regard to radioactive waste management issues when preparing Local Impact Reports for the IPC. These issues might include:

— the pros and cons of different options for the interim storage of spent fuel from new nuclear power stations;
— the availability of on and off-site treatment and storage facilities for Intermediate Level Waste (ILW), including on any neighbouring nuclear sites;
— the availability of on and off-site treatment and disposal facilities for LLW, including on any neighbouring nuclear sites; and
— the case for the provision of community funds in association with the development of long-term storage facilities for spent fuel, or for the on-site disposal of LLW or short-lived ILW.

13. We would anticipate that the IPC will need to consider the radioactive waste management issues raised in Local Impact Reports, and suggest that Government be encouraged to clarify that this is the case.

January 2010

Memorandum submitted by the Nuclear Waste Advisory Associates

**Effective Arrangements for Waste from New Reactors Do Not Exist**

**Acronyms**

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1. Executive Summary

1.1 This memorandum examines the evidence for the Government’s assertion that effective arrangements will exist for waste produced by new reactors.

1.2 We note that four former members of the Committee on Radioactive Waste Management (CoRWM (i)) have written to the the Secretary of State to express concern that the Committee’s recommendations have been seriously misrepresented in the Draft National Policy Statement for Nuclear Power Generation, and state that: “It is unknowable whether or not effective arrangements will exist . . .”

1.3 Nirex’s application to begin excavation work at their proposed disposal site near Sellafield in the 1990s—the so-called “Rock Characterisation Facility” (or “RCF” proposal) was rejected on generic scientific grounds (as well as for site specific reasons). The implications of this rejection have still not been fully examined or resolved.

1.4 Technical problems and uncertainties described by the Environment Agency (EA), and the European Union Joint Research Centre (EU JRC), as well as the uncertainties regarding radionuclide properties detailed in this memorandum, such as their solubility and sorption—or even their presence as a gas—could mean estimated contamination levels calculated for a deep geological disposal facility are in error by a factor of 10,000 to 1,000,000 which clearly has implications for the risk estimates.

1.5 Resolution of the problems raised at the Nirex RCF Inquiry, and more recently by the EA and EU JRC, is not a simple matter of providing sufficient funding for researchers over the next few decades. It may, in fact, not be possible to resolve all of the issues. Further research may not produce the required answers or it may identify further serious problems that simply had not previously been realised. Therefore it may not be possible to make a safety case for deep geological disposal. So, the Government’s confidence that effective arrangements to dispose of waste from new reactors will exist is premature.

1.6 The task at hand for a waste disposal applicant is to demonstrate that the resultant dose would be less than 20 micro sievert(10) per year. This memorandum addresses the current status of the nuclear industry’s ability to utilise reliable and meaningful data in order to forecast the likely health impact of placing nuclear waste in a deep underground disposal facility—in order that such a project would not recklessly endanger people in the future.

1.7 We conclude that achieving such a dose target is simply not scientifically demonstrable or achievable in practice. It is in the nature of chemical elements and geological and biological systems to behave in a variable and hence unpredictable manner such that they make reliable risk/time calculations into the far future not only difficult but virtually impossible.

1.8 The Government’s evidence (produced as part of the Nuclear National Policy Statement consultation) refers very specifically to the Finnish disposal project. It claims that the Finnish Regulator (“STUK”) “did not identify any reason why the project couldn’t move forward”. But this does not provide an accurate representation of the STUK evidence base.

1.9 New reactor fuel would be “high burn up” fuel which is hotter and more radioactive than spent fuel from existing reactors and unlike anything generated in the UK before. Such waste fuel would require longer storage at the reactor site and would be more fiercely radiotoxic. The Government is relying on disposability assessments of this new type of fuel carried out by the Nuclear Decommissioning Authority (NDA) to reach its conclusions. But these assessments have still to be reviewed by the Environment Agency (EA). However,

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10 micro = one millionth. A Sievert is a measure of radiation dose. It’s units are energy—per unit weight—of exposure; and it can be thought of in terms of the overall “punch” associated with the bombardment.

the EA review is not due until Spring 2010 and therefore the results of this project will not be available to be fed into the Government’s Public Consultation on this matter, thereby denying consultees access to crucial information.

1.10 The Nuclear industry has failed to present independent information to either the Nuclear NPS or the Justification process on conditions for workers and the public in the countries that mine and process uranium for new reactors. Two previous public inquiries into new reactor construction in the United Kingdom (UK) have recommended that an evaluation of these impacts should be carried out. Without a full evaluation of these impacts, including a Sustainability Appraisal, the Nuclear NPS is not fit for purpose.

1.11 In short, the Government’s conclusion “…that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations” is not supported by the evidence. The Nuclear NPS is, therefore, not “fit for purpose”.

2. INTRODUCTION

2.1 Nuclear Waste Advisory Associates (NWAA) is an independent group of experts with a collective experience of nuclear issues of well over 200 years. We aim to provide information and advice on the risks posed by radioactive waste, and support to decision makers, stakeholders and communities involved in its management. Our membership includes former members of the Committee on Radioactive Waste Management (CoRWM(i)) and several members who worked for environmental organisations during the Public Inquiry into Nirex’s application to build a Rock Characterisation Facility (RCF) in Cumbria.102

2.2 Part Three of the Draft National Policy Statement (NPS) for Nuclear Power Generation (EN-6) concludes that:

“…the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the [Independent Infrastructure Planning Commission] IPC need not consider this question.”103

2.3 Paragraphs 5.40 and 5.41 of the Consultation Document 104 are also relevant. These refer consultees to Annex G of the consultation document 105 for a description of how the preliminary conclusions on waste have been reached, and also to a document called “The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence”,106 which gives further background on the evidence. Not referred to in the Consultation Document, but also relevant, is the Appraisal of Sustainability (AoS): Radioactive and Hazardous Waste report, which is also called Annex K of the AoS Main Report.107

2.4 In this memorandum, NWAA examines the evidence for the Government’s assertion that effective arrangements will exist for waste produced by new reactors, and concludes that the issue of dealing with nuclear waste already created (legacy waste) is far from resolved. Furthermore, this document reports the Environment Agency’s view that further research cannot be relied upon to resolve the outstanding issues. This means that Government cannot assume that waste produced by new reactors can be safely disposed of in a deep geological disposal facility. Therefore the assumption that adequate arrangements for the long term management of radioactive waste from new reactors will exist when required is unfounded and therefore renders the NPS invalid at this point in time. Co-disposal of legacy and new build wastes was neither examined by CoRWM(i) nor considered within the extensive public consultation held in conjunction with CoRWM(i).

2.5 Given that there are acknowledged significant scientific, technical and ethical hurdles to the problem of disposing of nuclear waste, then the Draft NPS for Nuclear Power Generation (EN-6) is not fit for purpose. The Government should, therefore, return to the position espoused in the February 2003 Energy White Paper that there are “important issues of nuclear waste to be resolved” before new reactors can be built.108

2.6 We also examine whether the contention that “no new issues arise that challenge the fundamental disposability of the waste and spent fuel expected to arise from operation of the EPR and AP1000 reactors” 109 is correct, and conclude that there are in fact new issues associated with the waste fuel that would be produced by waste fuel from these reactors designs and that much further examination of the evidence for the Government’s contention is required, as is an associated programme of relevant and appropriate research.

102 See http://www.nuclearwasteadvisory.co.uk/default.asp
105 Also available here: https://www.energynpsconsultation.decc.gov.uk/nuclear/managementdisposalwaste/annex/
109 Draft Nuclear NPS para 3.8.10
3. CoRWM(i)

3.1 Four former members of CoRWM(i) have written to the Secretary of State to express concern that the Committee’s recommendations have been seriously misrepresented in the Draft National Policy Statement for Nuclear Power Generation.110 The letter states:

“It is unknowable whether or not effective arrangements will exist …”

3.2 The CoRWM (i) recommendations called for:

“…an intensified programme of research and development into the long-term safety of geological disposal aimed at reducing uncertainties at generic and site-specific levels, as well as into improved means for storing wastes in the longer-term”.

The former CoRWM members say that because the scientific and technical requirements have not yet been met, it is not possible to conclude that effective arrangements for the long term disposal of waste “exist or will exist”.

3.3 In addition CoRWM (i) was quite clear that its recommendations do not apply to waste arising from new reactors. This is because, in addition to the far more burdensome physical attributes of the much higher heat output and fission product content, the political and ethical issues raised by the creation of an unknown inventory of new build waste, with an indefinite time-scale for management, are quite different from those arising due to the waste burden we currently face following decisions and actions of our predecessors.111 What is currently being put forward by Government is the proposal that we should create more wastes—knowing as we do that we have no credible strategy for its long term handling. The Secretary of State has ignored the recommendation by CoRWM(i) that the management of radioactive waste from new reactors should be subject to a separate process of examination. Therefore the social requirements for new build wastes have not been met, and thus again, it is not possible to conclude that effective arrangements “exist or will exist”

4. Nirex Inquiry

4.1 In addition to concerns raised by CoRWM (i), there are far more fundamental concerns that were originally raised at the 1990s Public Inquiry into Nirex’s application to begin excavation works at their proposed disposal site. The project was known as a “Rock Characterisation Facility” (or “RCF”). This proposal was rejected on generic scientific grounds (as well as for site specific reasons). The implications of this rejection have still not been fully examined or resolved nor has the necessary programme of research to address the inadequate scientific justification been implemented.

4.2 On 17 March 1997, the then Secretary of State for the Environment, John Gummer, rejected Nirex’s planning application. He based his rejection on the evidence reported to him by the Inquiry Inspector, Mr C S McDonald, and the Technical Assessor, Mr Colin Knipe. Although much of the evidence dealt with site-specific issues, a very large amount of information pertaining to generic issues was also reported. Overall, the Inspector concluded that the Nuclear Industry should not be given the go-ahead to begin their planned programme:

“...in [their] current state of inadequate knowledge.” 112

4.3 Mr McDonald reported, for example, that the chemical containment system the industry proposed was:

“...new and untried with more experimentation and modelling development indubitably required.”113

4.4 Similarly Colin Knipe, stated that:

“The evidence suggests that considerably more experimentation and model development is needed on radionuclide solubility, sorption114 and general thermodynamic relationships over the range of temperatures and chemical conditions”115

He continued:

“There is a general need for the Nirex science programme to be advanced on all fronts.”116

110 A copy of the letter, signed by former chairman Professor Gordon MacKerron, Professor Andrew Blowers OBE, Mary Allan and Pete Wilkinson, dated 20 November 2009 can be found at http://www.nuclearwasteadvisory.co.uk/uploads/5647 CoRWM1_Letter_201109.pdf
111 Managing our Radioactive Waste Safely, CoRWM, November 2006, para 25 page 15
113 McDonald (1997) pp 241–242—para 6E.70
114 The nuclear industry use the term “sorption” to refer to the “take-up” of radionuclides by rock surfaces.
115 Para C142 Chapter C Science and Technical Programmes. http://www.jpb.co.uk/nirexinquiry/Chapter%20C.rtf
116 Para C144 Chapter C Science and Technical Programmes. http://www.jpb.co.uk/nirexinquiry/Chapter%20C.rtf
4.5 This generic concern was even confirmed in the September 2001 Managing Radioactive Waste Safely (MRWS) consultation document which initiated the ‘MRWS’ programme. This document stated that:

“In March 1997 the then Secretary of State for the Environment decided not to give Nirex planning permission for the RCF. This decision called into question whether at that time an underground repository for the disposal of radioactive wastes could be scientifically justified or publicly acceptable. This led to a completely new look at radioactive waste management policy in the UK.”\(^\text{117}\) [Emphasis Added]

5. FURTHER RESEARCH CAN IDENTIFY NEW PROBLEMS

5.1 The Inspector at the 1990s “RCF” Inquiry concluded:

“The expansion in scope of the work over the last five years or so has also been very impressive, but does indicate amongst other things that the practical difficulties of the deep disposal option were originally underestimated by the international consensus.”\(^\text{118}\)

5.2 In November 2009 Professor Francis Livens, Professor of Radiochemistry at the University of Manchester, and also a member of the current CoRWM (iii) committee stated:

“In recent years we have recognised where we do not have relevant expertise, [concerning radioactive waste management] and that is a first step towards dealing with these pressing problems. We are starting at a very low base along what will be a long and complex journey.”\(^\text{119}\) [Emphasis added]

This indicates that very little further work has been done in the intervening period.

6. THE ENVIRONMENT AGENCY (EA)

6.1 In November 2005, UK Nirex Ltd produced a paper for CoRWM (i) on the ‘viability’ of a planned deep disposal facility.\(^\text{120}\) Any such future project would need a licence from the Environment Agency (EA) (in England and Wales and the Scottish Environment Protection Agency (SEPA) in Scotland). Thus, the EA produced a commentary response to Nirex’ “Viability” documents—which was also published in November 2005.\(^\text{121}\) In this report the EA said Nirex:

“. . . has not provided a good technical overview of many remaining key technical challenges and how they will be resolved . . . we consider that Nirex present an overly optimistic view.”.

6.2 Whilst the EA review recognised that Nirex’s report identifies a number of “viability threatening issues”, it expressed particular concern about Carbon-14—a radioactive isotope of carbon.\(^\text{122}\) Nirex was assuming that the Carbon-14 would be held underground for a very long time into the future—as they had predicted that this carbon (in the form of “carbon dioxide”) would react with the cement in the disposal facility. However the EA stated:

“In our view, more confidence is needed that complete reaction of carbon dioxide will occur in cracked backfill or that the gas pathway would not lead to unacceptable consequences were this not to be the case”. (Part 6, page 10).

Carbon-14 is discussed further at paragraphs 10.1 and 10.2

6.3 The Agency goes on to list ten key technical challenges “. . . where further work is needed before an acceptable repository safety case could be generated.”\(^\text{123}\) These are listed in Annex A. Note the sub-headings have been added by NWAA in order to ease comprehension of the points made.

6.4 In August 2009 the EA followed this up by producing a list of nine “major knowledge limitations on the technical issues”.\(^\text{124}\) These nine issues are listed in Annex B.


\(^{118}\) McDonald (1997) Paragraph 6C.145


\(^{122}\) See http://en.wikipedia.org/wiki/Carbon-14


6.5 More recently, a report of a joint regulatory review carried out by the EA, Health and Safety Executive (HSE) and Department of Transport (DoT) states that:

“Although RWMD [Radioactive Waste Management Division within the NDA] has a considerable database of knowledge and research, it does not appear to have a clear picture of: (a) ‘what we know enough about’ (b) ‘what else we really need to know’ for development of a GDF [Geological Disposal Facility] and safety case, and hence (c) what the business priorities for research are. Work in hand led by the Head of Research may remedy this and should be encouraged”.125

7. EU JOINT RESEARCH CENTRE

7.1 The EU JRC issued a report on geological disposal on 1 October 2009 with a press release which claimed the report identified no major conceptual or research gaps that would be a hurdle to deep disposal and concluded that such an approach to radioactive waste management is “technically ripe for implementation.” However this conclusion was not backed up by the evidence contained in the report.126

7.2 Chapter Two of the Report (pp 10–21) entitled “The Technical Concept of Geological Disposal” shows that in fact there are a very large number of conceptual and research gaps associated with deep geological disposal. Annex C lists nearly 40 technical issues, extracted from the report by NWAA, which indicate nuclear waste disposal is far from a proven technology.127

8. THE IMPORTANCE OF CHEMISTRY

8.1 The next three sections deal with some of the major technical issues which need to be resolved before an acceptable safety case could be made for disposal. These include issues around solubility and sorption, and specific problems associated with the presence of plutonium in combination with cellulose and also the problem of gas generation.

8.2 A key factor in the calculation of risk is the level of hazard associated with the water that seeps out of a nuclear waste burial site. This would depend on:

— How much radioactivity would dissolve in the underground water supply system—its solubility; and
— How much of this radioactivity would be taken up by the rock surfaces during the journey towards the surface.

8.3 To ascribe the appropriate chemical parameters to the solubility of each radionuclide, in order to ascertain the predicted contamination levels of ground-water that has washed through a radioactive waste burial site in advance, demands a huge amount of chemical data. At the RCF Public Inquiry (PI) it was established that the nuclear industry simply did not have the data to justify their claim that the risks arising from the burial of nuclear waste would be insignificant. (See para 3.4 above) Although this specifically refers to “chemical conditions relevant to a Sellafield repository”, there would be similar difficulties in ascribing these chemical parameters wherever the proposed location.

8.4 In October 2007 the International Atomic Energy Agency (IAEA) published a document on recent findings concerning the solubility of radioactive wastes in a burial facility environment.128 The report states:

“The capacity to model129 all the effects involved in the dissolution130 of the waste form, in conditions similar to the disposal site, is the final goal of all the research undertaken by many research groups over many years. As we will see in this report, this kind of investigation is far from being finished.”131

(Emphasis added)

What was the case two years ago remains so today. The fact that the research is “far from being finished” indicates that the nuclear industry is not in a position to provide the necessary underlying data required to demonstrate that it could meet the risk targets set by the EA. (See paras 12.3 and 12.4).

8.5 In order to assess the reliability of predictions of contamination levels, an experiment was carried out in 1991 at the “Pocos de Caldas” Uranium Mine in Brazil. The experiment tested whether chemical information fed into a computer model would enable an accurate forecast to be made of uranium contamination levels in underground water found at the site. In fact the computer model under-estimated

129 “Model” refers here to an approach to making predictions using equations.
130 “Dissolution” refers here to the process in which solids dissolve in liquids
the uranium levels of the underground water at the mine by a factor of 200 million.\textsuperscript{132} Four possible explanations were advanced for this enormous error, though no definitive conclusion was reached.\textsuperscript{133} This, in itself, indicates the extreme variability of the parameters in question and thus puts into question the whole basis for risk estimates advanced. Over 15 years later (in 2007), the nuclear industry are still quoting data ranges for uranium contamination levels that can vary by up to 100,000,000 units.\textsuperscript{134}

8.6 While the large error range may seem extraordinary, a comparison, for example, of the solubility of carbon in a diamond with the solubility of carbon in sugar illustrates just how easily wildly inaccurate predictions can be made. Sugar is a compound, made up of three different elements, carbon, hydrogen and oxygen. Although commonly found as solid crystals, sugar is readily soluble. On the other hand, diamonds, which consist of pure carbon, are essentially insoluble. Thus, it is safe to wear a diamond ring in the shower or when washing your hands as it will not dissolve. Similarly the other types of radioactive atoms in radioactive waste can exhibit very different types of behaviour in different chemical situations. It is the radionuclide that causes the harm, but generally speaking\textsuperscript{135} radionuclides do not “travel solo”: they exist in combination with other chemical elements to form chemical compounds. Different chemical compounds can result in extraordinary degrees of variation in behaviour with respect to the specific radionuclide in question. It is therefore a mistake to attribute solubility to elements or isotopes of elements (as the nuclear industry and EA tend to do when making their estimates) when it should rightly be attributed to the compounds in which they are found.

8.7 In May 2008 the NDA’s RWMD launched a consultation on its proposed research and development strategy.\textsuperscript{136} On page 43 of the document, the NDA cites three reports concerning radionuclide solubility to indicate its current knowledge base. However each of these three reports was prepared prior to the 1995–96 RCF Inquiry and as such represent the same level of scientific and technical acumen which was a significant contributor to the Inspector’s decision to refuse Nirex permission progress the proposed project. It can therefore be seen that little has advanced in terms of real evidence and research between the RCF PI in the late 1990s and the NDA Research Consultation just over a decade later.

8.8 In its consultation response, the NDA RWMD says “a response to these [technical] comments will not appear in our updated strategy document”,\textsuperscript{137}

8.9 An important factor in the forecast of the extent to which radionuclides will reach the surface is process of “sorption”. Basically, in the context of the prediction of the risk associated with disposal, “sorption” refers to the extent to which radionuclides would be taken up by solid surfaces (such as cement or rock). The difficulties involved in measuring sorption emerged at a Nuclear Energy Agency (NEA)\textsuperscript{138} workshop held in Oxford in May 1997,\textsuperscript{139} when Mr Hans Wanner, of the Swiss Federal Nuclear Safety Inspectorate (HSK), stated:

“\textit{The term ‘uncertainty’ is commonly connected with ‘error’ in a statistical sense, but a statistical basis rarely exists for Kd [sorption] values because they depend on too many unknown parameters. Hence the assignment of an uncertainty to a Kd value is usually a priori unscientific and unjustifiable}.” (Emphasis added).

8.10 The EU JRC report (of October 2009) outlines this problem at some length. It says the Kd value is not recognised as not reflecting in situ conditions and therefore does not “have any prediction capabilities”. Nevertheless, it says, Kd values are still widely used in performance assessment calculations. “\textit{In practice}”, continues the report, “\textit{it is impossible to parameterise all these variables over the whole domain to be investigated}”.\textsuperscript{140}

8.11 In other words, whilst sorption is regarded by the nuclear industry as a simple parameter that indicates the extent to which radioactive atoms escaping from a disposal facility will be taken up by the solid surfaces it would meet on its journey, in fact the complexity of the natural world and the sheer volume of data and computations required to quantify this parameter appropriately are beyond the capacity of current computers.


\textsuperscript{133} These were as follows: (i) the uranium may not have been fully crystalline (ie it may have had an irregular structure) (ii) the uranium compound present may have been “non-stoichiometric”—(ie—the relative amount of the components in the relevant compound wasn’t a simple ratio) (iii) colloids—ie large unwieldy compounds, and (iv) the presence of uranium (V)—a type of uranium compound in which five of the uraniums electrons are involved in it’s bonding relationship with other chemicals.

\textsuperscript{134} D.Swan and C P Jackson (SERCO) ”Formal Structured Data Elicitation of Uranium Solubility in the Near Field—Report to Nirex” (SA/ENV/0920 Issue 3—March 2007— page 6

\textsuperscript{135} The exception would be radio nuclides that are part of the inert (or “noble”) gas series. One such example is “radon”.


\textsuperscript{138} The “Nuclear Energy Agency” is part of the “Organisation of Co-operation and Development” (OECD)


9. CELLULOSE AND PLUTONIUM

9.1 In 1989, the International Atomic Energy Agency (IAEA) identified a specific problem relating to the increase in the solubility of radionuclides caused by organic breakdown products that were sufficient to increase the radiological impact of a repository above the regulatory target dose. A likely source was thought to be decomposition products of “cellulose”—the woody compound used to make paper. Cellulose break-down products have been observed to increase radionuclide solubility by up to 10,000 fold, with plutonium being a particular problem.

9.2 In July 2003, isosaccharinic acid (ISA) was reported as the most important breakdown product of cellulose. A plutonium/”ISA” chemical species was identified as amongst the most stable of the “complexes” studied. However, the research did not appear to offer any answers but instead to merely express the same problem in more elaborate language. So, although the plutonium/paper mix has important implications for radioactive doses in the long term, the nuclear industry appears to have focussed its effort on describing the problem rather than resolving it.

10. THE GAS PROBLEM

10.1 In February 2006, Nirex identified the need to carry out more research on the potential for large doses due to the production and release of methane gas from decaying radioactive waste emplaced in a backfilled repository. The possibility was examined that Carbon-14, instead of being lodged in the cement backfill, would be able to escape from the facility as methane gas (CH4) by travelling quickly upwards through fractures and pores in the overlying rocks until finally reaching the surface environment and entering the food chain. If this were to happen, then the impact on risk according to Nirex could reach a figure as high as one in a thousand (ie one person in a thousand contracting a fatal cancer, a non-fatal cancer or inherited genetic defect as a result of such exposure as opposed to the target of one in a million). Furthermore, this particularly high risk could occur just 40 years after the burial facility had been backfilled and closed as opposed to the thousands of years currently predicted to allow decay of the waste products to lower and “tolerable” levels. It was concluded that if calculations confirmed that methane could indeed act in this manner over such a short period of time, then there may be a need to adjust the site selection criteria.

10.2 Clearly, if methane were to be a problem in this way, site selection criteria would need to be adjusted to make sure that gas would not be allowed to escape. But a contradictory site selection criterion arises in relation to the hydrogen gas issue. When the iron present in steel corrodes under “anaerobic conditions” (conditions in which oxygen is not present), hydrogen gas is released. Because of the need to avoid a build up of underground pressures from gas generation, the requirement for a route to release hydrogen gas has been central to calculations carried out by Nirex on the “viability” of disposal. The requirement to contain methane gas, yet to ensure that hydrogen is allowed to escape, are contradictory criteria which seriously undermine the radioactive waste disposal concept.

10.3 When Nirex carried out an initial review of their research programme in 1985–86, the significance of the “gas issue” was identified. Twenty year later, in a March 2008 report for the European Commission’s project on the “Performance Assessment Methodologies in Application” to Guide the Development of the Safety Case (PAMINA), Simon Norris from the NDA called for more research on the gas issue. Similarly, the October 2009 “EU JRC” report referred to: “The response to an IAEA Review of Deep Repository Post-Closure Safety R&D and Site Assessment Programmes of UK Nirex Limited”. (p 3)

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11. TECHNIQUES USED IN CALCULATION OF RISK

11.1 When the nuclear industry refers to the “parameters and equations” used in their risk predictions, one imagines a calculation which is similar to a straight-forward piece of algebra. In fact the methodology actually adopted is generally based on the use of “probability density functions” (pdfs) and the so-called “Monte-Carlo” approach. A “probability density function” is used to set out a statistical description of the range of possible data points for one given radioactive element and also the likelihood that a given parameter (for example radionuclide solubility or sorption) will possess this value.

11.2 The true range of data points is, quite routinely, extremely large (of the order of “one to 10,000” units—or even “one to 100,000,000” units). Furthermore, the distribution of the parameter value within this range is, generally speaking, not set out as “normal distribution” commonly found in statistics. The selection of data from this large range is fed into the computer used to calculate the predicted risk using the “Monte Carlo” method, ie almost randomly from between the two points.

11.3 Much of the data used is not actually measured, but is obtained through “data elicitation by expert judgement”. “Expert elicitation” refers to a method of “synthesising data” based on the judgement of experts—in other words “educated guessing.” The Dutch research organisation “RIVM” in a report specifically on data elicitation, concluded:

“With respect to the evidence base, it seems obvious that, at some point, the scientific evidence base would be so thin as to render quantitative expert judgement useless.”

Thus, if the data isn’t there—it simply isn’t there.

11.4 The fact that such methodologies are quite routinely used by the nuclear industry in order to produce predictions is alarming and demands an examination of whether the previous and existing work that has been carried out to predict repository safety actually has any sort of reliable basis under which a disposal license could be applied for.

12. PROBLEMS MAY NEVER BE RESOLVED

12.1 Resolution of the problems raised at the Nirex RCF Inquiry, and more recently by the EA and EU JRC, is not a simple matter of providing sufficient funding for researchers over the next few decades. It may, in fact, not be possible to resolve all of the issues. Further research may not produce the answers or it may identify further serious problems that had not been previously identified. As implied by the Nirex Inquiry Inspector, it may be a case of “the more you know, the more you realise what you don’t know”.

12.2 A consequence of the fact that there are still major technical issues to be resolved is that, as Clive Williams of the EA specifically stated in November 2009:

“…work may or may not indicate that an acceptable safety case can be made”

12.3 In other words, it may not be possible to make a safety case for deep geological disposal. So the Government’s confidence that effective arrangements to dispose of waste from new reactors will exist is premature. The fact that money and effort invested in future research may not indicate that safe disposal is possible was referred to extensively in the EA’s response to an NDA RWMD consultation on its research strategy launched in May 2008. Annex D lists some of the EA’s comments.

13. HEALTH RISKS

13.1 What is critically important to realise is that the technical problems and uncertainties described by the EA, the EU JRC and in particular the uncertainties regarding radionuclide properties detailed above, such as their solubility and sorption—or even their presence as a gas—could mean estimated contamination levels calculated for a deep geological disposal facility are in error by a factor of 10,000 to 1,000,000, which clearly has implications for the risk estimates.

155 With the caveat that more likelihood is given to the “mid-range” points
157 ibid page 22
158 E-mail to Adam Scott CORWM (ii) Secretariat & Dr Rachel Western 16 Nov 2009
13.2 In March 2008 the Health Protection Agency (HPA) held a consultation on Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Waste. In response to the consultation one NWAA member said:

“[I]t is imperative that the HPA takes full cognizance of the difficulties to be actually reaching the targets that they set out. If the HPA do not do this, it would be very easy for the Nuclear Industry, or the Government, to imply that these standards had been met although it was very clear that it was not the case.”

HPA’s response to this point was that it is the responsibility of the developer of the disposal facility to make a sufficiently robust safety case. It does not offer any advice on how to deal with the technical problems and uncertainties described above.

13.3 Under present legislation, the nuclear industry would require authorization from the EA in order to be able to go ahead with the burial of nuclear waste. The Agency published its Guidance on Requirements for Authorisation (GRA) in February 2009. This sets a limit on the risk that may be caused by the burial of radioactive wastes of 10^-6 (ie one in a million). This means a risk of one in a million per year, for the person at greatest risk, of either non-fatal cancer, fatal cancer or inherited defects.

13.4 The EA calculates the radiation dose which it believes will result in this level of risk. If the probability of receiving the dose of radioactivity is one, then the amount of radioactivity that would lead to a risk of “one in a million” (per year) would be approximately 20 micro sieverts per year (20µSv/yr). But risk is related to the chance of something happening, so if the EA can be persuaded that the probability of receiving a particular radiation dose from the waste facility would be less than one, then the EA would be prepared to authorise a dose greater than 20µSv/yr.

13.5 The EA's GRA goes beyond radiological protection issues, for example, by explaining the regulatory process and describing what is expected in an environmental safety case from the developer and operator of a disposal facility. Central to the GRA is the notion that it is feasible to generate a reliable calculation of the risk that would arise from the disposal of radioactive waste, and, therefore, that it is possible to ensure that the risks that would arise from the burial of radioactive wastes would be at or below “one in a million”

13.6 However it can be seen that the forecast of disposal risk is subject to errors of many orders of magnitude, and that demonstrating that the EA target would be met is simply not scientifically demonstrable or achievable in theory or practice. It is in the nature of chemical elements and also geological and biological systems to behave in a variable and hence unpredictable manner such that they make reliable risk/time calculations into the far future not only difficult but virtually impossible. Thus is hard to see what information could be used as a basis for the claim that the radiological impact from a repository would not exceed the target.

14.0 FINLAND

14.1 The Government states that:

“The reference design currently being used by NDA for the purposes of estimating the costs of a GDF [Geological Disposal Facility] envisages spent fuel being packaged in copper canisters prior to disposal.”

14.2 The Government’s evidence (produced as part of the Nuclear NPS consultation) refers very specifically to the Finnish disposal project which is heavily based on the use of copper. For example, paragraph 121 of the Government’s summary of evidence states that STUK, the Finnish Radiation and Nuclear Safety Authority, presented their preliminary safety assessment for the expansion of the Finnish
disposal facility to accept spent fuel in June 2009. Posiva is the Finnish nuclear waste company, jointly owned by the two Finnish nuclear utilities. It is responsible for implementation of the final disposal of spent nuclear fuel and the related research, technical design and development activities.

14.3 Dr Johan Swahn, the Director of MKG\textsuperscript{171} in Sweden wrote (in December 2009)\textsuperscript{172}:

"There is no way that anyone can honestly claim that Posiva has a completed robust safety case. The Posiva safety case has not been developed independently, but relies entirely on the Swedish safety case work. The final test of the Swedish safety case will not be done until the Swedish Radiation Safety Authority gives an approval of the safety analysis...This will not be the case before 2013–14." (Emphasis added)

"Already now there is concern from the authority about the barrier systems of copper and clay. It is not clear if all relevant copper corrosion processes are known and the risk for clay erosion is still not understood. So an approval is not at all certain. And nothing can today be claimed to be robust." (Emphasis added)

14.4 Annex E includes a summary of key points to emerge from the latest review of the Posiva Safety Case on behalf of the Finnish Radiation and Nuclear Safety Authority (STUK). The STUK consultants conclude that Posiva seem to have no sense of the utility of the data that they have gathered within a reliable prediction of disposal risk. Clearly when the Government claims that:

"STUK did not identify any reason why the project couldn’t move forward"\textsuperscript{173} it does not provide an accurate representation of the STUK evidence base.

14.5 It is particularly worth noting that recent research suggests corrosion of the copper canisters may prove to be more of a problem than previously expected.

"According to a current concept, copper canisters of thickness 0.05 m will be safe for nuclear waste containment for 100,000 years. We show that more than 1 m copper thickness might be required for 100,000 years durability."\textsuperscript{174}

Clearly, if such thicknesses of copper were required to ensure safe long term isolation of canisters, the cost and availability issues alone would render the entire disposal concept unviable.

15. SPENT FUEL FROM NEW REACTORS

15.1 Spent or waste nuclear fuel generated by new reactors currently looks unlikely to be reprocessed (ie subjected to a plutonium separation process). The nuclear industry plans to operate the proposed “New Build” reactors in such a way that more electricity is generated from a given tonnage of uranium. As a result, the waste fuel produced (known as “high burn up fuel”) would be physically hotter, and also far more radiotoxic. As a result, such fuel would have to be stored for around 100 years to cool down after removal from a reactor. Consequently, as the new reactors are planned to have a life of 60 years, the sites designated for new reactors would probably also be required to act as nuclear waste sites for up to 160 years.\textsuperscript{175}

15.2 Little information has been given about how spent fuel would be stored and managed at the reactor sites over this length of time. For example, it is not clear whether a spent fuel packaging plant would need to be built on site at some point in the future. On-site spent fuel management arrangements may not be acceptable to the local communities, and may also be unsafe due to weather effects that may arise due to climate change.\textsuperscript{176} The nuclear industry has not necessarily agreed with the Government’s base case on on-site storage, and therefore spent fuel could start to be moved off-site to a central interim facility sooner than in 100 year’s time with storage or processing imposed on some other unsuspecting community.

15.3 The Government is relying mainly on the NDA’s so-called “disposability assessments” to reach its conclusion that it is “satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider this question.”\textsuperscript{177} These disposability assessments will be submitted to the Generic Design Assessment process for review by the EA. The EA review will not be available for public comment until the Agency carries out its Part 3 consultation exercise which is expected in Spring 2010, long after the National Policy Statement and Justification Consultations have closed on 22 February.

\textsuperscript{171} “Miljöorganisationernas kärnavfallsgranskning”—the Swedish NGO Office for Nuclear Waste Review
\textsuperscript{172} E-mail to Dr Rachel Western of Nuclear Waste Advisory Associates, 18 December 2009
\textsuperscript{173} The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence, DECC November 2009 para 121 https://www.energynpsconsultation.decc.gov.uk/nuclear/managemntdisposalwaste/summaryevidencepaper/
\textsuperscript{175} The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence, DECC November 2009 para 53. https://www.energynpsconsultation.decc.gov.uk/nuclear/managemntdisposalwaste/summaryevidencepaper/
\textsuperscript{176} At the time of writing, Cumbria has just been hit by extremely severe flooding.
\textsuperscript{177} Draft Nuclear NPS para 5.8.20
15.4 There will, as current planning arrangements stand, be no opportunity for communities selected for new nuclear power stations to consider whether they wish to volunteer to host a long term radioactive waste facility for up to 160 years: it would simply be imposed upon them. Therefore the social conditions (the principle of volunteerism) recommended by CoRWM (ii) would not have been met.179 This is a further reason why it is not possible to conclude that effective arrangements will exist.

16. Radioactive Wastes from Uranium Mining and Processing

16.1 The above discussion has focused on radioactive wastes arisings from the so-called back end of the nuclear fuel chain, ie radionuclides created following the irradiation of nuclear fuel in reactors. In so doing it follows the course set out in the Nuclear NPS. But the largest amounts of radioactive wastes also arise in the mining, milling and processing of uranium, as well as in its enrichment and fabrication into fresh nuclear fuel. The Nuclear NPS, specifically Section 3, makes no mention whatever of this front-end waste management burden.

16.2 Given that all the uranium used in non-military nuclear fuel is imported into the UK, it is important---on equity and sustainability grounds—to assess the environmental, radiological and other health impacts of the source of this uranium. Inexplicably, the 200 page Appraisal of Sustainability: Radioactive and Hazardous Waste179 makes no mention of the dangers and management challenges of uranium procurement and processing.

16.3 In comparison in another report,180 which has been presented as technical support to the Justification decision documents, this issue is addressed. Thus, although the Government themselves did not see fit to consider the Uranium issue, their Consultants did think that it was relevant.181 The authors report an analysis performed for Sizewell and include a table showing the potential dose impact from the whole of the nuclear fuel chain. The figure quoted as the contribution from uranium mining and milling is almost 92% of the total health detriment from the nuclear fuel chain (expressed in terms of years of life lost).182

16.4 The UK has not examined fully within any major forum the issues arising from uranium mining. Calls were made by the Planning Inspectors at both of the last two Public Inquiries into proposed nuclear reactors (Sizewell B 1983–85183 and Hinkley Point C 1988–89184) that such an analysis should be carried out, given that:

(a) uranium mining carries the highest average occupational radioactive exposure in the nuclear energy industry;

(b) uranium mining and processing is a major source of radioactive wastes;

(c) uranium mining causes very significant impacts on human health and the environment, and

(d) the mining and processing of uranium not only affects this generation but will affect many future generations.

16.5 Michael Barnes QC (the Inspector at the Hinkley Inquiry) recommended that if future proposals were put forward:

“...the applicants should use their best endeavours to present information to any future inquiry on conditions for workers and the public in the countries concerned who might be affected by the mining and processing of uranium for the project.”185

Moreover he noted that he was echoing the conclusion by Sir Frank Layfield in the Sizewell B Inquiry report, and said he shared Layfield’s tentative disquiet on uranium mining. Layfield had also recommended that applicants present information in respect of the conditions for workers and the public who might be affected by mining and processing of uranium.

16.6 As the Government has changed the planning process with the introduction of the Planning Act, we believe the Nuclear NPS itself, as well as the proponent companies in their Justification documentation, should have included such material (importantly based on independent sources), as recommended by the...
two inquiry inspectors. Indeed, one of our associates made a 74,000 word submission\(^\text{186}\) to both the Strategic Siting Assessment and Justification consultations, both making this point, and filling in the information gap. It remains a major omission of the Nuclear NPS and its associated documentation.

16.7 The price that would be paid for uranium is not only financial. Many additional costs such as people’s health and environmental degradation have been externalised and are not taken into account. These need to be included in a full evaluation of the use of uranium as a fuel. Without a full evaluation of the impact of uranium mining, including an Appraisal of its Sustainability, the Nuclear NPS is not fit for purpose.

17. Conclusions

17.1 Neither the scientific nor the social requirements included in CoRWM’s recommendations have been met. Therefore it is not possible to conclude that effective arrangements “exist or will exist” to manage and dispose of nuclear waste from new reactors.

17.2 The Nirex application to begin excavation work at the site of their proposed nuclear waste disposal site was rejected following intense scrutiny at a Public Inquiry held in 1995–96. The proposal was rejected in large part on generic scientific grounds. These scientific and technical problems have yet to be resolved.

17.3 A very limited amount of progress appears to have been made since the work that was carried out for the 1990s project.

17.4 Both the EA and the EU JRC have listed a series of major knowledge deficiencies with regard to a series of technical issues. These issues include problems identifying the correct parameters for radionuclide solubility and sorption; specific problems related to cellulose increasing the solubility of plutonium; problems with gas generation and conflicting aims of, on the one hand limiting the escape of radioactive gases, and on the other allowing gases to escape to avoid a build-up of pressure.

17.5 Some of the methodologies used in risk calculations are highly questionable.

17.6 Further research may not serve to produce the required answer, in fact it may identify further serious problems that simply had not previously been thought of. It is also possible that further work may indicate that an acceptable safety case cannot be made.

17.7 Approval of the Finnish nuclear waste repository is by no means certain and cannot be used to support the Government’s case.

17.8 The EA’s review of the “disposability” of the new type of waste fuel likely to be produced by new reactors will not be available for public comment until May 2010. Therefore, there will be no opportunity for communities selected for new nuclear power stations to consider whether they wish to volunteer to host a long term radioactive waste facility. Under Government proposals nuclear stations would act as radioactive waste sites for over 160 years into the future thus bolstering the conclusion that the social requirements of CoRWM (i)’s recommendations have not been met.

17.9 A full Appraisal of Sustainability of uranium mining and processing has not been carried out.

17.10 In short, the Government’s conclusion “…that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations” is not supported by the evidence. The Nuclear National Policy Statement is, therefore, not “fit for purpose”.

January 2010

Annex A

ENVIRONMENT AGENCY COMMENTS ON NIREX “VIABILITY” REPORT, NOVEMBER 2005

CARBON-14

“In the case of Carbon-14 (C-14), two issues are not mentioned in Section 9.2, although they are covered briefly earlier in the report. These include the need to build confidence in estimates of the release rates of C-14 labelled gases, particularly where these estimates depend on models of microbiological processes. Further, a key assumption is that all C-14 labelled carbon dioxide does not escape from the repository, but reacts with backfill via a carbonation reaction. In our view, more confidence is needed that complete reaction of carbon dioxide will occur in cracked backfill or that the gas pathway would not lead to unacceptable consequences were this not to be the case. For example, if gases flow along partially sealed cracks, it might be difficult for the gas to access unreacted backfill. These issues are all important to developing a better understanding of the radiological consequences that might arise from the gas pathway. We agree with Nirex that there may be scope for managing any residual issues by appropriate measures.” (pp 10–11) [Emphasis Added]

\(^{186}\) Uranium Exploitation and Environmental Racism: why environmental despoliation and the ignorance of radiological risks of uranium mining cannot be justified by nuclear fuel production Response to the Justification Consultation, by Dr David Lowry, 25th March 2009, http://www.nuclearwasteadvisory.co.uk/page.asp?Id = 51
ADDITIONAL ISSUES

The Environment Agency Nuclear Waste Advisory Team says the following are some of the other key technical challenges that remain (Headings added by NWAA).

1. **Longevity and Degradation**

   “The need to better understand package longevity and corresponding degradation mechanisms over a long period of storage and hence any requirement to produce improved packages for certain waste streams or to make provision for reworking.”

2. **Groundwater Flow**

   “Developing a good understanding of groundwater flow and radionuclide transport at a specific site, including the representation of flow and transport in fractured rocks.”

3. **Soluble Compounds that Weren’t Originally Anticipated**

   “A fuller understanding of the impact of organic complexants and colloids as well as Non—Aqueous Phase Liquids (NAPLs—which are addressed in Section 9.2).”

4. **Gas/Groundwater Flow**

   “Understanding the potential coupling between gas and groundwater flow.”

5. **How Much Can the Facility itself be Relied on to Hold the Radioactivity**

   “Developing a better understanding of the evolution of the “near field” and its role in limiting radionuclide release, which should be closely linked to the consideration of possible design optimization.”

6. **The Need for Long Term Experiments**

   “The need for long-term experiments to demonstrate the behaviour of near-field components;”

7. **Possible Impact of Presence of Nuclear Weapons Materials**

   “Building more confidence in the safety case for criticality.”

8. **Whether Sealant Will Be Adequate in the Long Term**

   “Developing a clear strategy for repository sealing that is demonstrated to function adequately in the long term.”

9. **Allowing for Processes to Change over Time**

   “Building an understanding of time dependent effects and their consideration in a justifiable way in assessment models.”

10. **Getting the Data Right**

    “Demonstrating an adequate understanding of the values of key parameters.”

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**Annex B**

THE ENVIRONMENT AGENCY’S LIST OF NINE “MAJOR KNOWLEDGE LIMITATIONS ON THE TECHNICAL ISSUES”, AUGUST 2009

From:

Technical issues associated with deep repositories for radioactive waste in different geological environments Science summary SC060054/SR1, Environment Agency, August 2009


See also Table 6.5, Pages 141–143

Technical issues associated with deep repositories for radioactive waste in different geological environments. Science report: SC060054/SR1


The Technical issues were identified:

— influence of different wasteform types on the design of the Engineered Barrier System (EBS);
— interactions between engineered components;
interactions between the EBS and the host rock;
— impact of groundwater/porewater on EBS materials (including the impact of saline water);
— duration for which EBS materials maintain their function (durability);
— interactions between gas and groundwater (or porewater);
— characterising the site adequately;
— demonstrating long-term stability; and
— impact of resaturation of the repository.

Annex C

GEOLOGICAL DISPOSAL OF RADIOACTIVE WASTE: MOVING TOWARDS IMPLEMENTATION, BY W E FALCK AND K F NILSSON, EUROPEAN COMMISSION JOINT RESEARCH CENTRE, INSTITUT FOR ENERGY, OCTOBER 2009


The following is a list of the technical problems identified:

1. BARRIERS

Geological disposal relies on a sequence of complimentary and/or redundant barriers… namely the waste form, the container, the buffer/backfill and the host rock. Assumptions have to be made about how each natural and engineered component will perform its function.\textsuperscript{187}

2. FRACTURES

In granites discrete migration pathways will exist, but the frequency and length is difficult to assess quantitatively.\textsuperscript{188} Therefore in fractured systems—more reliance has to be placed on the materials that make up the disposal facility—waste packages, buffer/backfill and other engineered elements of the repository itself.\textsuperscript{189}

3. RADIONUCLIDE INVENTORY

Radioactive wastes have been building up for up to 60 years.\textsuperscript{190} Radionuclide content of these wastes is either not known—or not known precisely.\textsuperscript{191} To obtain this info on the radionuclide contents of the wastes is often regarded as too dangerous or too expensive.\textsuperscript{192} Estimation techniques are being developed.\textsuperscript{193}

Recently different radio-nuclides have been recognised as important in the risk calculation (eg selenium.) A better understanding of the chemistry of these “new” radio-nuclides is needed.\textsuperscript{194}

4. STEEL AND CLAY

The Vitrified High Level Waste (HLW) containers are assumed to be steel—however there are now concerns about the chemicals that would form when this steel corrodes. It is now being realised that these chemicals could interfere with the surrounding clay. The clay had been meant to provide a barrier—but the reactions between the clay and the corrosion chemicals corrosion might prevent this.\textsuperscript{195} The behaviour of steel corrosion products in contact with clay needs more research.\textsuperscript{196} Corrosion of ferrous components will change the geochemical environment and may be a possible source of gases producing significant amounts of hydrogen.\textsuperscript{197}

Although the report states that “experts seem to agree” that the underlying function is not at risk as a result of this corrosion, the paper cited as evidence of this to remains unpublished.\textsuperscript{198}

5. WASTE AND SURROUNDINGS

The Interaction of spent fuel with other components of the near field needs to be investigated.\textsuperscript{199}
6. **New Fuel**

New reactor types and changes in fuel design will necessitate research. Higher Burn-Up and Mixed Oxide (MOX) fuel require new container design and more research on how such containers would behave on disposal. (Considerations are higher temperature and higher risks of brittleness due to increased exposure to radioactivity).

7. **Glass and Clay**

The interactions between the glass matrix in vitrified waste and clay backfill are difficult to assess at high temperatures.

8. **Steel, Cement and Clay**

The introduction of foreign materials such as alkaline cement is being reconsidered as the benefit of lowering radionuclide solubilities and corrosion passivation is offset by difficult to predict detrimental effects on clay-like materials in the repository system.

An excavation in clay would need steel and concrete to keep it open (during operation) — There is a “growing consensus” that “only a minimum of additional foreign material should be introduced, at least into a facility built in clay.”

9. **Possible Container Failure**

Research on the failure of waste containers is ongoing. Work on corrosion rates of steel and copper is still required.

10. **Gas**

Corrosion gases generated and their migration is an important area of study.

11. **Clay and Problems Due to High Temperature**

The role of clay backfill in a High Level Waste (HLW) disposal facility is meant to be to “hold-up” the overlying rock; to stop leaks; and to “take-up” or (through “sorption”) radionuclides. However, these safety functions are “challenged” by the inevitable drying of the clay after the emplacement of hot waste canisters. The OECD’s Nuclear Energy Agency is working on a report on clay as a barrier.

12. **Clay and High Temperature**

High temperatures would affect the chemical, flow + mechanical properties of clay. It is intended to keep the surface temperature of containers below 100°C at the time of emplacement. The waste storage period and the repository layout are critical to achieving these temperatures.

High temperatures and the presence of corrosion products would alter clay chemistry and therefore possible clay flow characteristics. A new research programme is being set up on this.

13. **Problems Due to Corrosion**

Corrosion and what happens to the corrosion products “is not yet fully understood” and is due to be the subject of new research.

14. **Problems with Clay**

While many of the basic phenomena in clays are understood their quantification for given cases “remains difficult.” While the response of bentonite clay to changing conditions such as water saturation, temperature salinity and pH are reasonably well understood, the combined effects and possible interactions between different mechanisms are still difficult to predict quantitatively. More research is needed.
15. **ROCK DAMAGED BY EXCAVATION**

   Properties of the damaged area of rock around an excavation continue to be studied in detail—as it would have an effect on how much water could leak through the rock.\textsuperscript{216}

16. **“CONSTRUCTABILITY”**

   More research is being done on construction issues including the issue of “constructability”.\textsuperscript{217}

17. **COMPROMISE NEEDED DURING CONSTRUCTION**

   Construction safety measures such “rock anchors” introduce “additional foreign material”—that would have to be considered in the long-term risk assessment. This means that there would be the need for a compromise.\textsuperscript{218}

18. **OXYGEN**

   The impact of the oxygen that would be present during operation (both chemically and mechanically) is being researched.\textsuperscript{219}

19. **IMPACT OF “OPEN” PHASE**

   New proposals to keep the excavation open (for retrievability or extended underground storage) have raised new issues—such as the collapse of the excavation and also the chemical effect of the air (which will contain oxygen and also humidity—and so would lead to “weathering”). The implications of this have not been fully investigated.\textsuperscript{220}

20. **FR Actures—Problems Getting Data**

   It is difficult to find out the frequency, spatial spread, and location of fractures in rock.\textsuperscript{221}

   Experiments are underway to try and develop methods for measuring the properties of rock fractures—including their ability to allow water to flow through them.\textsuperscript{222}

21. **FR Actures—Regional Flow**

   The regional flow through fractures “cannot be known with certainty”.\textsuperscript{223}

22. **TIME AND “SCENARIO” PROBLEMS**

   Even more difficult than regional flow are the difficulties of working out changes over time—or changes due to different predictions (scenarios) of what might happen in the future.\textsuperscript{224}

   Predicting future ice cover (which would have an impact on underlying flow system) is “fraught with many uncertainties”.\textsuperscript{225}

23. **CLAY AND CHEMISTRY**

   Salty and alkaline water can allow more water to flow through clay.\textsuperscript{226} Possible chemical changes in clay—which may affect its ability to take up (“sorb”) radio-nuclides—are not quantitatively understood.\textsuperscript{227}

24. **FR Actures and Sorption**

   Owing to generally lower geochemical retention capacity in granites compared with clays, safety cases would need to rely more on materials used in the disposal facility.\textsuperscript{228} The retention capacities of fractured rocks are lower and more difficult to predict quantitatively over the long term.\textsuperscript{229}
25. **Chemical Data—Wrong Conditions**

   Most of the fundamental chemical research of the series of chemicals that includes uranium and plutonium has been carried out under conditions that are "far from those occurring in nature".\(^\text{230}\)

26. **Gaps in Chemical Data**

   There is a project underway identifying the gaps in chemical data.\(^\text{231}\) Not only are there gaps in the knowledge base about the chemistry of uranium and plutonium, but there are also gaps in chemical data for common major elements.\(^\text{232}\)

27. **Problems with Equilibrium Temperature Correction**

   In a chemical reaction there is a measure of how far a reaction will go from turning the reacting chemicals at the start to the product chemicals at the finish. This quantity is "Constant" under given conditions (such as temperature)—and is known as the "equilibrium constant". However the report notes that a major gap throughout the chemical databases is the "temperature correction" for reactions that take place at different temperatures than the conditions under which the equilibrium data has been measured.\(^\text{233}\) There is a gap in the chemical data for the temperatures between 25°C and 150°C (the expected temperatures).\(^\text{234}\)

28. **Problems with Data for "Salty Water"**

   Another chemical consideration is the effect of "salty water" which can have a considerable effect on how chemicals react together—this effect is difficult to predict. This is "another well known gap" in the chemical dataset for disposal.\(^\text{235}\)

29. **Pu/U Series Data**

   More work is planned on the chemical dataset for the plutonium/uranium series of chemicals.\(^\text{236}\)

30. **Sorption Data—Known to be Wrong**

   The take up of radio-nuclides from water onto solid surfaces (known as "sorption") has been studied for decades.\(^\text{237}\) The “batch” experimental technique has been used to measure this phenomenon—but however it was soon realised that this technique generated data that was “far from any realities in the field”\(^\text{238}\). Furthermore—the usual method for evaluating the data—through producing just one value to represent all of the different results “was recognised as not reflecting the field conditions—or having any predictive capability”. Despite these problems—the same methodology continues to be used. This is because the computers used to calculate disposal risks—are simply not capable of coping with data requirements that would be needed describe sorption more realistically.\(^\text{239}\)

31. **Studies in Natural Systems often not Possible**

   Uranium has been widely studied in natural systems—but many other radio-nuclides do not occur in nature—and therefore cannot be studied in this way.\(^\text{240}\)

32. **Lack of Data on Reaction Rates for Natural Systems**

   There is a severe lack of data on the rate of reactions for natural systems. (Natural systems in this context are mineral surfaces, groundwaters and underground chemicals such as “colloids”. Microbes are also a consideration.)\(^\text{241}\)

33. **Oxygen and “Mobility”**

   Different forms of a given chemical element present in radioactive wastes can have very different tendencies to escape (i.e. “mobilities”). The presence of oxygen and hydrogen is assumed to play an important role in this.\(^\text{242}\) Although it is thought that there wouldn’t be oxygen gas underground—in practice it is very difficult to carry out experiments (either in the lab or underground) without oxygen being present.\(^\text{243}\)
A hole in the ground, created for the disposal facility, would have oxygen in it. This would be out of keeping with the chemistry of the surrounding rock and also would mean that the radio-nuclides would tend to be in their more mobile form. Risk calculations for disposal are based on the assumption that the radio-nuclides do not have access to oxygen. However, for fractured rock in particular, there is concern the initial oxygen present in the excavation may mean that the radio-nuclides may remain in their “mobile” form—(ie the chemical form that they adopt when oxygen is present). This issue remains to be studied in depth.

34. **VERY BIG CHEMICALS (COLLOIDS)**

Radio-nuclides are able to attach to very big chemicals (known as “colloids”)—and be carried away by the flowing water. These chemicals have proved to be difficult to study, both because their behaviour varies so much, and also because the very process of sampling and analysing them changes their behaviour. Due to the fact that work in this area has concentrated on uranium (due to difficulties found with working with other radio-nuclides) there are considerable knowledge gaps remaining. A solution to these problems is not straight-forward, and much more experimental work is required.

A particular reason why the attachment of radio-nuclides to big chemicals is of concern is that disposal risk calculations often assume that radio-nuclides will find themselves in a pore in the rock—and then stay there. However—as these “colloids” are so big they may not fit into the pores. This would “considerably speed up” the rate of colloid travel—and thus the rate of the radio-nuclide it was carrying with it. The quantity of radio-nuclides held by the “colloids” is “difficult to predict and is the subject of continuing studies”.

35. **MICROBES**

Research on the interaction between microbes, large chemicals, and radionuclides is not very well understood. The potential importance of microbes has long been underrated. The lack of attention is in spite of the fact that over the past twenty years microbes have been found at great depth. Overall the role of microbes in proposed disposal systems is not fully understood.

36. **HYDROGEN GAS—POSSIBLE OPENING UP OF FRACTURES**

A disposal facility could produce a considerable amount of hydrogen. It is still not clear whether the pressure build up could open fractures—and so provide fast migration pathways. The complexity of the system involved is not understood and has been earmarked for further study.

37. **DISPOSAL FACILITY AND DISTURBANCE TO NATURAL SYSTEM**

A disposal facility would be a disturbance to the natural—mechanical/flow/heat/and chemical processes. The mechanical, hydraulic, chemical and thermal processes would all be interacting in order to dissipate the various human-made disturbances. This system of interaction “deserves further investigation”.

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**Annex D**

**RESEARCH MAY NOT SOLVE THE PROBLEMS**


(The headings and the emphasis are added—and were not in the original document.)
NOT ALL RESEARCH OUTCOMES WOULD BE “ACCEPTABLE” WRT DISPOSAL

“4.3 Setting pre-defined research objectives and clear criteria for evaluating the output of R&D are essential to gain public confidence. A successful strategy to communicate the significance of the research findings will be vital. It is particularly important to counter any suspicion that research findings will be deemed ‘acceptable’ regardless of what the research actually identifies.” (page 4—para 4.3)

TESTING IS NOT THE SAME AS “CONFIRMING”

“4.8 All references to underground R&D activities are stated to be to ‘confirm’ aspects of site performance (‘confirmatory tests’). No mention is made (in Figure 3.2 or elsewhere) of the role of URLs to enable trialling, testing or demonstrations of competing techniques.” (page 5 para 4.8)

CONFIRMATION BIAS

“4.9 The words ‘confirm’ or ‘confirmatory’ appear 15 times throughout the document. NDA should provide assurance that it can manage issues associated with “confirmation bias”. [1] (page 5—para 4.9 )

[Footnote 1].

“Confirmation bias results in a situation where, once a view has been formed, new evidence is generally made to fit. Strong initial impressions structure the way that subsequent information is interpreted.”

Research may identify additional questions

“Further research has the potential to increase uncertainties, eg by revealing unforeseen complexities or additional processes influencing the system under study. While a well defined and executed research programme can answer fundamental questions, uncertainty is a normal characteristic of science, and as such, additional questions (and uncertainties) are often raised. It is the management of these uncertainties, eg prioritising and deciding how to address them that is important.” (page 6)

RESEARCH/SYSTEM DEVELOPMENT — RELATIONSHIP NOT EASY TO TRACE

“Much R&D has been commissioned over the last 20 years but its impact on the evolution of NDA’s facility design is not easy to discern … The claimed link between R&D and the development of the DSS [Disposal System Specification] and facility design needs further substantiation. Similarly for the feedback between the generic safety assessments and R&D.” (pp 6–7 Re: Section 3.1.1)

Annex E

A SUMMARY OF KEY POINTS TO EMERGE FROM A REVIEW OF THE POSIVA SAFETY CASE ON BEHALF OF THE FINNISH RADIATION AND NUCLEAR SAFETY AUTHORITY (STUK).

The most recent disposal safety case published by Posiva—the Finnish disposal agency is:

POSIVA 2006–05


In April 2008, a review of this was produced for “STUK”, the Finnish regulatory agency:


Michael Apted et al (April 2008)

Key points from this review include:

RELEVANCE OF DATA TO SAFETY—NOT CLEAR

safety importance of processes and data needs to be set out (p1) and the definitions of the safety functions of the different parts is vague (p7). The report does not set out clearly which outcomes would lead to unacceptable safety hazards. (p8)

“analyses of the safety importance for many of the evolutionary processes and associated data are absent” (p9)

“it remains unclear whether Posiva really understands and can prioritise the safety-importance implications of acknowledged uncertainties in the normal evolution processes.” (p5) (see also p10)

POSIVA HAVE NOT DEMONSTRATED “SAFE DISPOSAL”

although the Posiva proposal is expected to lead to safe disposal—“this remains to be demonstrated by Posiva” (p10)

“A main concern with the report is that it represents a mostly qualitative analysis” (p9)

“there does not seem to be coordinated efforts to explore if there are as-yet unrecognised processes” (p5)
LOW LEVEL OF CONFIDENCE IN FLOW DATA

“in the case of flow and salinity modelling, the uncertainties are so substantial that the level of confidence in the results seems low” (p5)

(NB—given the role of flow in the carriage of radionuclides back to the surface this lack of confidence seems particularly significant)

BASIS OF SOME DATA INADEQUATE

some of the data used is out of date (p2) and some underlying reports have not been published (p7)—in addition the justification of some conclusions is not cited “so the conclusions are no more than working hypotheses” (p7)

ASSIGNING VALUES

STUK referred to the “seeming arbitrariness” (p8) of assigning values to missing information

(NB—this should be compared to the Nirex (Nov ’05) Viability report—in which parameters were chosen in order that the EA target would be met.)

URANIUM

SKB have reported on the extreme safety importance of assigning a low value to the rate that Uranium Dioxide dissolves—however Posiva have only considered the chemistry of this reaction in a qualitative manner (p2) (see also p9)

(NB. Page 48 of the Posiva Environmental Impact Assessment—for the Expansion of the Repository for Spent Nuclear Fuel 2008—states that uranium dissolves very slowly in water in the conditions that would be expected. This should be compared to the variability of measured Uranium concentrations of 100 million)

BUFFER EROSION

the extreme safety implications of buffer erosion (during the glacial phase) should not be understated (p2) furthermore Posiva do not consider buffer erosion at all in the geochemical part of the report (p9)

EXCAVATION DAMAGE ZONE (EDZ)

“The issue of the EDZ (excavated damage zone) appears to be underplayed” (p5)

(NB—the EDZ issue was particularly significant in the 1990s Inquiry)

ALKALINE WATER

“The issue of hyperalkaline waters and their geochemical interaction with bentonite and rock remains open” (p6)

(NB—this is a particularly important issue for the UK—as the Government plan that HLW should be “co-disposed” with ILW. As ILW disposal is planned to be largely cement based & cement is expected to give rise to a significantly alkaline environment—then it can be seen the implications for HLW disposal must be considered. The significance of this issue is also outlined in the Oct ’09 EU JRC report.)

Further points to be considered:

— system developments over time that do not meet “normal evolution” (p1) (see also p10);
— design and emplacement malfunctions (p1);
— full implications of changes in the “temperature/water system/mechanical/chemical” conditions (p1)—this area of work should be “substantially improved” (p7);
— most recent information on the glacial phase (which is presently inadequately considered) (p2) In fact Posiva do not consider the evolution of subsequent glacial reports anywhere in the report (p9);
— Posiva need to consider the issue of natural resource exploration and exploitation. (p9);
— in numerous places Posiva refer to the fact that decisions on materials and design parameters are not yet fixed (p8); and
— possible interactions between bentonite and iron or copper are not addressed“ (p6).

SCIENTIFIC METHOD

NB—in analysing the Posiva safety case—STUK’s conclusions do not follow “scientific method”.

Thus, STUK conclude:

“By evaluating the safety consequences of such ‘unexpected’ conditions, some of these may be recognized as inconsequential and others may require further study in order to confidently establish that the overall safety requirements are met” (p3)
It is well recognized by the Environment Agency (in the UK) that “further study” into areas of uncertainty may not result in the “confident establishment” that a safety case may be met.

In fact it may result in the opposite conclusion—*ie* that a safety case may not be met.

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**Memorandum submitted by People Against Wylfa B**

The draft national nuclear policy statement is based on sweeping statements and unfounded pre judgements. It is difficult to believe how the Department of Energy and Climate Change has released such a blinkered and faulty policy statement.

This consultation is not a genuine one. As in the case of each consultation on nuclear power since the second energy review in 2006, this consultation has favoured nuclear power in a totally unbalanced manner. Although Greenpeace won a High Court action against the government in spring 2007 on the consultation faults of the second energy review, the government has consistently whitewashed nuclear power. Following the judgement in favour of Greenpeace in the High Court, Tony Blair immediately emphasised it was merely a matter of correcting the consultation process and that the need for nuclear power stood. He then went on to undermine the further consultation process by making pro-nuclear statements. It is important to note all this as background since it has created the faulty context for the draft national nuclear policy statement.

Nuclear power is justified in this statement by underlining its development is a matter of national need. Our nation in PAWB is Wales, and the main voice for our democracy is the National Assembly. In June 2007 in response to a question by Mick Bates AM on nuclear power, Rhodri Morgan AM, Wales’ First Minister at the time said there was no need for new nuclear power stations in Wales since we have plenty of other energy sources to make us more than self sufficient. This view was repeated many times by Rhodri Morgan and Jane Davidson AM, the Assembly government’s Environment Minister. During the summer of 2009, Jane Davidson wrote to the Department of Energy and Climate Change pressing for a public enquiry into the justification process for nuclear power on the basis of her concerns about the doubly hot and radioactive nuclear waste that would be produced from new reactors. It is the Assembly government’s aspiration to develop Wales as a centre of excellence for the various renewable energy technologies, and it fears that could be totally undermined if nuclear power were developed. Therefore, there is no need for nuclear power in Wales. The Department of Energy and Climate Change needs to recognise Wales’ national identity and its new democracy and stop acting as a colonial master. Wylfa should be removed from the list of possible sites for new nuclear reactors, as this dirty, expensive and dangerous technology is not needed in Wales.

Alongside the lack of respect to Wales’ national needs, there is absolutely no analysis in your statement of the social and linguistic effect building a new nuclear power station would have on Anglesey’s Welsh speaking communities. In the 2001 census, Anglesey’s percentage of Welsh speakers was a little over 60% of the whole population. Gwynedd only has a higher percentage of Welsh speakers. The effect of building the original Wylfa station in the 60s was the Anglicisation of the northern and eastern communities of Anglesey. Gordon Brown said that as many as 9000 people were needed to build a new nuclear power station. If this figure is correct, can you imagine the social and linguistic impact such an influx of workers would have on Anglesey? Your draft statement is therefore fundamentally flawed with no socio-linguistic analysis. Consequently, Wylfa should not be included as a possible site for building new nuclear reactors.

We would like to draw attention to some points in the draft national nuclear policy statement. You say in 2.3.1 without any irony:

“Nuclear power is low carbon, economic, dependable and safe”.

This is a completely sweeping statement. We shall deal later with the clauses which state that nuclear power is low carbon and economic. The government’s view that nuclear power is safe and dependable has to be challenged. We would like to remind you that over 350 farms in the uplands of North Wales are still subject to animal movement restrictions as a result of the Chernobyl nuclear disaster. The health effects of this disaster will be felt in European countries for many years again. It is only a matter of luck that there have not been very serious results to accidents in the British nuclear industry. We refer to an accident at Wylfa in July 1993, when a fuel grab fell into the reactor core. Radioactivity was released into the atmosphere and Nuclear Electric was prosecuted for that offence in Amlwch Magistrates Court. They were prosecuted further in Mold Crown Court for safety breaches by the Nuclear Installations Inspectorate and ordered to pay a fine and costs of £500,000. Safety standards at Sellafield are not satisfactory. As recently as October 2009, the NH wrote to Sellafield Ltd. warning them that the possibility of a serious accident there was far too high. You should remember the liquid nitric acid leak containing plutonium and uranium from THORP in Sellafield undetected between August 2004 and April 2005 and equivalent to half an Olympic swimming pool. This happened despite the presence of closed circuit television. You should also bear in mind the substantial leak of radioactive water from Sizewell A and the following prosecution. A leak which lasted 14 years at Bradwell nuclear power station ultimately led to a prosecution by the Environment Agency.

It is said in 2.3.5:

“Nuclear fuel fabrication is a stable and mature industry.”
A sentence like this calls into question the whole credibility of the national nuclear policy statement. It is incredible that the 200 page "Appraisal of Sustainability: Radioactive and Hazardous Waste" doesn’t even mention the dangers and management challenges of mining and processing uranium. Dr David Lowry published an important report “Uranium exploitation and environmental racism: why environmental despoliation and the ignorance of radiological risks of uranium mining cannot be justified by nuclear fuel production”. It is appaling that such important work has not even been considered by DECC. Dr Lowry’s work can be accessed on the Nuclear waste Advisory Board website at www.nuclearwasteadvisory.co.uk/uploads.

It is claimed as following in 2.3.9:

“Nuclear power is proven technology. Nuclear power is also a proven technology that can be deployed on a large scale”.

No nuclear power stations have been built in Britain since the second half of the eighties at Sizewell B. The gap has been even greater in the USA where no new nuclear power stations have been built since the late 70s. In spite of the talk of nuclear technology’s maturity, a generation has passed without building a single new station. Looking at Finland’s experience where the state power company is building an EPR reactor with the French nuclear company, Areva, at Olkiluoto, progress is very slow. Building commenced in 2005 hoping for the station to be ready by April 2009. The work is now over three years behind schedule and the original cost of 3.2 billion euros has shot up to 5.8 billion euros. It is a similar story in Flamanville, Normandy where another EPR is being built. There, it is acknowledged that the timetable has slipped by two years. It is blind optimism on the government’s part to believe that nuclear power can be developed on a large scale considering the slowness and cost of the two nuclear projects in Finland and France.

We draw your attention to 3.8.17 as follows:

“It is possible to envisage a scenario in which onsite interim storage might be required for around 160 years….However this is based on some conservative assumptions, and there are a number of factors that could reduce, or potentially increase the total duration of onsite spent fuel storage”.

PAWB like all anti-nuclear campaigning movements are very concerned about the storage of nuclear waste on the sites of possible new nuclear power stations. It is known that this waste would be twice as hot and radioactive as waste produced from present nuclear stations. We direct you towards work by Hugh Richards, the Secretary of the Wales Anti Nuclear Alliance and member of the Nuclear Consultation Group in the form of two reports, “Burying the Truth” and “Too Hot to Handle” which outline the completely unknown territory the British nuclear industry would be entering by using high burnup uranium fuel in new reactors. We also recommend you closely study Hugh Richards’ excellent response on behalf of the Wales Anti Nuclear Alliance to the draft national nuclear policy statement. There is worse to follow.

These sentences in 3.8.20 are astonishing:

“The Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result, the IPC need not consider this question.”.

This is the type of unfounded statement which brings the government and its servants in DECC into disrepute. It is also a premature statement as the Environment Agency has not reviewed the NDA assessments on the waste arrangements of the two reactors under scrutiny, namely the EPR and AP1000. The Environment Agency will not be able to conduct this review until May or June 2010, well past the end of your consultation period. I quote from a letter by Hugh Richards to DECC which proves that this consultation is completely flawed:

“spent fuel requires 100 years cooling before disposal and will have to stored in on site interim stores for a span of 160 years, while the nuclear regulator GDA Step 3 reports on EPR and AP1000 reactors require further work or additional information on “the safety of the long term storage of the fuel before final disposal focussing on the role of the levels of burnup”.

(Nuclear Directorate Generic Design Assessment—New Civil Reactor Build Step 3 Fuel design Assessment of the EDF and Areva UKEPR Division 6 Assessment Report No.AR09/041P).

How can the government claim to be satisfied with waste management and disposal arrangements when other bodies such as the Environment Agency and the NII have not completed assessing these arrangements?

Another matter which doesn’t get enough attention in your statement is the emergency procedures in the case of a serious accident at Wylfa. A PAWB member raised this in the meeting at the Wylfa visitor centre held by DECC on 9 January 2010. The site of the Wylfa nuclear power station is on an unique island location. Anglesey is linked to mainland Wales by the Menai and Britannia bridges. It is a common experience at various times of day throughout the year to be held up in traffic leading to the bridges. Can you imagine the chaos by both bridges if a serious accident happened at Wylfa forcing the island’s population to flee to the mainland? Since you have not seriously looked at emergency arrangements and Wylfa’s unique location, Wylfa should be removed from the list of possible sites for building new nuclear reactors.
The government is remarkably apathetic in its attitude towards the effect of an accident at Wylfa at 4.8.4:

“In the event of an incident there could be a risk to health from exposure to radiation for workers and the public . . . It is Government’s view that these impacts are unlikely to arise. If they do they are likely to be limited due to the existing safety and environmental regulatory mechanisms”.

Once again, this is a premature statement. Nuclear regulators in Britain, France, Finland and the USA are not satisfied by the safety features of the EPR and AP1000. How can the government be so confident in its statements when nuclear inspectors are asking basic questions about the safety features of both reactors currently being assessed? We further note that the earliest date to complete assessment of EPR and AP1000 will be June 2011. It could easily be later than that considering the lack of inspectors working at the overstretched NII.

Another matter raised at the meeting in the Wylfa visitor centre was the content of the German KiKK report. It is the German consortium of RWE and E.ON who are interested in building new nuclear reactors at Wylfa. Why should this German consortium be allowed to build at Wylfa while building new nuclear power stations is contrary to government policy in Germany? The German government accepted the findings of the KiKK report which show that cancer levels among children are substantially higher near each nuclear power station in Germany. Within 5km of each station, an increase of 61% is recorded in solid cancers and an increase of 120% in leukaemia. These conclusions were reached on the basis of information collected between 1980 and 2003. The government’s policy statement does not seriously address the correlation of nuclear power stations and cancer levels in the population. The government should carefully consider the KiKK report and examine the link between the nuclear industry and incidence of cancer.

The issue of earthquakes in North West Wales was raised by a member of PAWB at the meeting in the Wylfa visitor centre. On July 19, 1984 the strongest earthquake of the 20th century in Britain measuring 5.4 on the Richter scale was recorded. The earthquake’s epicentre was beneath Llanaelhaearn on the north side of the Llyn peninsula, Gwynedd. Its effect was felt strongest in North West Wales, but was also felt throughout the rest of Wales and in parts of England, Scotland and Ireland. It was a completely unexpected earthquake, and it also occurred at a completely unsuspected location. Not only did it occur at an unusual depth of 18km, but its location did not correlate with the major mapped faults straddling the Menai Strait (namely the Berw fault in South Anglesey; the Dinorwic fault, along the Menai Strait; the Upper-Dinlle fault, from Caernarfon to Bangor) or with the Mochras fault (along the Cardigan Bay coastline into Tremadoc Bay). Neither the EN-6 statement nor the Applicants Scoping Report contain any information at all on the potential, the risk, or the magnitude of further earthquakes anywhere between the Menai Strait and the Holyhead Deep in the Irish Sea. Historically, an earthquake (estimated magnitude 4.9 on the Richter scale) is known to have occurred on 9 November 1852 in the Irish Sea half way between Holyhead and Ireland. If the government and all the applicants possess an up to date seismic assessment of the Menai Strait—Irish Sea region, why has it not been made public right away. If such an assessment has not yet been completed or carried out, then there is absolutely no sound basis for including the Wylfa site within the national policy statement for further large nuclear power reactors.

We wish to close our submission by returning to the government’s claim that nuclear power is a low carbon and economic option. We wish to refer you to work by a leading member of PAWB, Dr Gerry Wolff from Menai Bridge, Anglesey. Dr Wolff is the author of “Nuclear Subsidies”, a report prepared for the Energy fair group. Dr Wolff’s central argument is that the nuclear industry survives through various public subsidies. If these subsidies were withdrawn, life would be very difficult for the nuclear industry. Without further generous subsidies, new nuclear power stations will not be built. Dr Wolff’s report contains a very positive section outlining how various renewable energy technologies can not only meet all of Britain’s electricity needs, but also all of its energy needs. This section refers to a number of reports and academic papers on the subject. PAWB also believes that we have a historic chance to contribute towards the battle against climate change. This is the fast and effective way to cut carbon emissions into the atmosphere. Nuclear power is not a fast, credible or effective way to counter climate change. A copy of “Nuclear Subsidies” by Dr Wolff was sent to every MP in November 2009. The report can be downloaded from:

www.energyfair.org.uk/home

In conclusion, PAWB believes that the National Nuclear Draft Policy Statement is a woefully flawed and one-side document. Your consultation in Anglesey was not satisfactory. There was some advertising of your meeting at Wylfa visitor centre on 9 January in the local press. However, the location for your exhibition and meeting at Wylfa showed an unfair bias towards the nuclear industry, its employees and ex-employees. It is intimidating for people who oppose the nuclear industry to have to go to a site which is usually avoided. On the other hand, Wylfa employees and ex-employees were on comfortable home ground. Wylfa is at the northernmost tip of Anglesey, 25 miles away from the bridges over to the mainland, thus discouraging people from Gwynedd to attend the meeting. A neutral more central location should have been arranged.
Nuclear power is an exceptionally dangerous, and health threatening technology which should not have a place in the technological developments of the 21st century. The government and whichever government is elected after the general election should abandon its pursuit of nuclear power as a means of generating electricity.

January 2010

Memorandum submitted by People Against Wylfa B (in Welsh)

Mae’r datganiad cenedlaethol drafft ar gyfer gyfrif ynni niwclear dechrau i’r adweithyddion niwclear mewn dull daw blwch anghywths i niwclear niwclear. Ei sylfaeniad, ei adolygiad, ei datgan y niwclear niwclear a diogel niwclear niwclear. Ef ei sylfaen, ei adolygiad, ei datgan y niwclear niwclear a diogel niwclear niwclear.

Nid yw’r ymgynghoriad hwn yn un diliws. Fel yn achos pob ymgynghoriad ar ynni niwclear ers yr ail adolygiad ynni yn 2006, mae’r ymgynghoriad hwn yn flafrif ynni niwclear mewn dull dawbl anghywths i niwclear niwclear. Ef ei sylfaeniad, ei adolygiad, ei datgan y niwclear niwclear a diogel niwclear niwclear.

Cyfiawnheir ynni niwclear y ddefod yno dysgu ei ddefod gyfer yr adweithyddion niwclear newydd.

Cyfiawnheir ynni niwclear y ddefod yno dysgu ei ddefod gyfer yr adweithyddion niwclear newydd.

Ochr yn ochr à’r diffyg parch ar anghenion cenedlaethol Cymru, nid oes unrhyw fath o ddadansoddiai yn eich datganiad o effaith cymdeithasol a iechyd yddodd codi Gorsaf niwclear niwclear gyfer yr adweithyddion niwclear newydd. Ef ei sylfaen, ei adolygiad, ei datgan y niwclear niwclear a diogel niwclear niwclear.

Hoffem dynnu sylw ar rai pwntiau ym y datganiad polisi niwclear cenedlaethol.

Dywedir yn 2.3.1 heb fymryn o eironi.

“Mae yni niwclear yni niwclear yn opsiwn carbon isel, darbodus a diogel.”

Mae’r ogosiaid hwn yn un cwbwl ysgubol. Manylyf y mewn pecyn ar y cymalau sy’n datganiad bod ynni niwclear yn opsiwn carbon isel a darbodus. Hafad cwestiynu agwed ewbl unychrog y llywodraeth wrth ddigristo niwclear niwclear fel dibynadwy a diogel. Hoffem eich aithgo wa bod dros 350 o ffirmydd yu chwilhod Goedole Cymru yu dal a chyfiawnhada i anrhyw defaid yw gywel Cymrafraig yw gywel Cymrafraig. Ei sylfaen, ei adolygiad, ei datgan y niwclear niwclear a diogel niwclear niwclear.

Hoffem dynnu sylw ar rai pwntiau ym y datganiad polisi niwclear cenedlaethol.

Dywedir yn 2.3.1 heb fymryn o eironi.
presenoldeb teledu cylch cyfyng. Dylech gofio hefyd am y gollyngiad siyled o ddwr ymbelydrol ar Sizewell A a’r erlyniad a ddilynodd. Cafwyd gollyngiad o orsaf niwclear Bradwell am bedair blynedd ar ddeg a arweiniodd yn y pen draw at erlyniad gan Asiantaeth yr Amgylchedd.

Dywedir yn 2.3.5

"Mae’r diwydiant cynhyrchu tanwydd yn un sefydlog ac aeddfed.”

Brawddeg fel hon sy’n galw i gwestiwn holl hygrededd y datganiad polisi cenedlaethol ar gynhyrchu ynni niwclear. Mae’n anhygoel bod y ddogfen 200 tudalen “Appraisal of Sustainability: Radioactive and Hazardous Waste” ddim hyd yn oed yn crybwyll peryglon a phrosesu iwrianiwm. Nid pris ariannol yna unig sydd am ddibynnu ar gynhyrchu ynni niwclear.

Ni chodwyd un gorsaf niwclear newydd ym Mhrydain ers ail hanner yr wythdegau yn Sizewell B. Mae’r bwchl hyd yn oed yn fwy ar unol Daleithiau lle na chodwyd gorsaf niwclear newydd ers divedd y saithdeagwedd. Felly, er gwaethaf yr holl sôn am aeddfedrwydd y dechnoleg, mae cenhedlaeth wedi mynd heibio heb godri’r un gorsaf niwclear. O graffu ar brofiad y Ffindir dirleiaeth yna niwclear cynhyrchu ynni niwclear, mae codi adweithydd EPR gyda chymorth cwmni o Ffrainc yr Amgylchedd wedi ddefnyddio o 3.2 biliwn ewro wedi saethu i fyny i 5.8 biliwn ewro. Stori debyg sydd yn Flamanville, Normandi lle codir EPR arall. Cydnabyddir bod yr amserlen wedi llithro yno ddwy flynedd. Optimistiaeth ar ran y llywodraeth yw credu y byddai'r diwydiant niwclear yn ei droedio yng ngwledydd Prydain trwy defnyddio tanwydd dwys neu "high burn up" mewn adweithydd newydd. Cwbl syfrdanol felly yw’r brawddeg canlynol yn 3.8.20:

"Ar ôl ystyried y mater, mae’r llywodraeth honni ei bod yn fodlon gyda threfniadau rheoli a gwaredu gwastra ymbelydrol pan nad yw cyhoeddus eraill fel Asiantaeth yr Amgylchedd a'r Arolygaeth Sefydliadau Niwclear wedi cwblhau asesiadau'r trefniadau hynny. Dywedaf wrth fy mod yr IPC ystyrwyd y cwestiwn hwnn."
Mater sydd dim y cail a dilyn o sylw yn eich datganiad yw trefniadau argyfwng yng achos damwain ddiweddaraf yng nganolffan ymwyllwr yr Wylfa. Cododd un o aelodau PAWB y mater hwn y cyfarfod a genhedlaethwyd yng nganolffan ymwyllwr yr Wylfa ar Iawn 9 gan yr Adran Ynni a Newid Hinsawdd. Mae safle gorsaf y Wylfa yn unrhyw ysynt yr eich bod ar Unwaith eto, dyma ddatganiad cynamserol. Mae'r rheoleiddwyr niwclear ym Mhrydain, Ffrainc, yr Alban a'r Almaen a'drystal i'w dangos bod y diwydiant niwclear newydd wedi mynd ychydig i bob dechrau, ond mae'r rheolydd gyntaf a'r swyddogion ymdrechol y diwydiant niwclear wedi dechrau hefyd o'r cwmniad yna. Yr Almaenig RWE ac E.ON sydd a dim arbenig i codi gorsaf niwclear newydd a thawyd yr Arolygaeth Sefydliadau Niwclear. Yn fanwl ac edrych o'r newydd ar y berthynas rhwng y diwydiant niwclear a rhwylliant, dylai lywodraeth Prydain ystyried Adroddiad KiKK a thagfeydd tra eu ceisio ar yr wyneb. Cylchir gan y llywodraeth yr arolwg yng nganolffan ymwyllwr yr Wylfa ym Mhrydain. Yn ystod y dydd ar hyd y flwyddyn yw cael eich dal mewn ar hyd y llenwi o'i gilydd. Yn ystod y dydd ar hyd y flwyddyn yw cael eich dal mewn ar hyd y llenwi o'i gilydd. Yn ystod y dydd ar hyd y flwyddyn yw cael eich dal mewn ar hyd y llenwi o'i gilydd. Yn ystod y dydd ar hyd y flwyddyn yw cael eich dal mewn ar hyd y llenwi o'i gilydd.
I grynhoi, cred PAWB bod y Datganiad Polisi Cenedlaethol Drafft ar gyfer cynhyrchu ynni niwclear yn ddogfen druenus o unochrog ac anfoddhaol. Ni ddylid codi gorsafoedd niwclear newydd yn unrhywle yng Ngwledydd Prydain. Mae’n dechnoleg eithriadol o ddrud, peryglus a budr na ddylai gael lle yn natblygiadau technolegol yr unfed ganrif ar hugain. Dylai'r llywodraeth hon a pha bynnag lywodraeth fydd yn ei dilyn ar ôl yr etholiad cyredinol hepgor ynni niwclear unwaith ac am byth fel dull cynhyrchu trydan.

Dylan Morgan
Ysgrifennydd/Secretary
PAWB—Pobl Atal Wylfa B/ People Against Wylfa B

Ionawr 14 January, 2010

Supplementary memorandum submitted by People Against Wylfa B

HIGH BURNUP FUEL—ITS NATURE AND IMPLICATIONS FOR STORAGE

A response by PAWB (People Against Wylfa B) to David Anderson MP’s question at the Energy and Climate Change Select Committee, 27th January, 2010

1. Burnup is expressed in thousand MegaWatt days per tonne of uranium. Sizewell B has typically discharged fuel at 30,000MWd/tU compared with the proposed very high burnup spent fuel (60,000MWd/tU)

2. The government acknowledges that high burnup spent fuel from the proposed reactors will be twice as radioactive as that from Sizewell B but the neutron dose rate (which increases by the power of four with burn up) is stated to be ‘not significant for the management of the spent fuel.’ This is extremely misleading as neutron radiation becomes very significant over a 100 year storage period and will greatly increase potential exposure in handling accidents. Whereas a tonne of legacy spent fuel will emit approximately 33 million neutrons per second a barrel of new build spent fuel will emit 80 million neutrons per second after 100 years of thermal cooling, exposing the personnel emplacing new build spent fuel in the period 2125–85 to two and a half times that for personnel emplacing the legacy fuel.

3. Storage—the nuclear regulators point out that “extremely long time periods into the future increase areas of uncertainty not just associated with the spent fuel itself, but with the long-term integrity of containment structures”. Despite this, the draft Nuclear National Policy Statement states: “PWR spent fuel interim dry storage is an established technology overseas where cask storage systems have been licensed for the storage of spent fuels from other modern PWRs”. Such statements cannot be applied to the very long term storage of high burnup spent fuel. After 18 years in cooling ponds the spent fuel from Westinghouse reactors would be transferred to Holtec Hi Storm dry casks, licensed for 20 years in the US and assumed to be used for up to 50 years. No one has any idea how they will stand up to heat and irradiation over a longer period and the effects of heat build up on the long term integrity of the fuel is unknown. AREVA, the French reactor company have designed dry casks but have decided to store their British EPR spent fuel in ponds until it can be conditioned. In France, pond storage for up to 300 years is being considered for high burnup spentfuel. It is vital that the government’s “confidence” in this regard is looked at critically when DECC says “in the USA spent fuel has been safely and securely managed on arising sites for decades and the US Nuclear Regulatory Commission (NRC) has formally expressed its confidence that spent fuel can be safely and securely stored on-site, without significant environmental impact for at least 100 years”. However, the great majority of spent fuel in storage in the US has a burnup of less than 45,000 MWd/tU. A speech by the NRC Chairman in May 2009 revealed concerns about high burnup spent fuel “...there is limited data to show the cladding of spent fuel with burnups greater than 45,000MWd/tU will remain undamaged during the licensing period. Limited information suggests increased cladding oxidation, increased hoop stresses and changes to fuel pellet integrity with increasing burnup up to and beyond 60,000 MWd/tU. These burnup dependent effects could potentially lead to failure of the cladding and dispersal of the fuel during transfer and handling operations”. Further, the IAEA puts worldwide experience into context. “...the use of high burnup and MOX...fuels will lead to higher residual heat and will require long heat decay times, implying longer interim storage period before final disposal.”

4. Finally, Stefanie Murphy one of the OND representatives at the Wylfa public meeting 9 January confirmed that they expected the waste to be stored on-site for up to 160 years, so confirming PAWB’s understanding.

REFERENCES
2 Regulatory Justification of the AP1000 and the EPR. Vol 2—Secretary of State’s Proposed Decision para 4.36.
Ev 456 Energy & Climate Change Committee: Evidence

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iii Nuclide Importance to Criticality Safety, Decay Heating, and Source Terms Related to Transport and Interim Storage of High-Burnup LWR Fuel” I. C. Gauld and J. C. Ryman, ORNL for Office of Nuclear Regulatory Research U.S. Nuclear Regulatory Commission. NRC Job Code W6479 December 2000, Fig 18 Neutron source from 1 metric tonne (t) of PWR fuel; 27.5 GWd/t page 39 http://www.ornl.gov/sci/scale/pubs/cr6700.pdf

iv “Nuclide Importance to Criticality Safety, Decay Heating, and Source Terms Related to Transport and Interim Storage of High-Burnup LWR Fuel” I. C. Gauld and J. C. Ryman, ORNL for Office of Nuclear Regulatory Research U.S. Nuclear Regulatory Commission. NRC Job Code W6479 December 2000, Fig 19 Neutron source from 1 metric tonne (t) of PWR fuel; 60 GWd/t page 40.


vii The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence DECC November 2009, para 41.

viii NRC Chairman Dale E. Klein to the Dry Storage Information Forum Bonita Springs, FL May 12, 2009.


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Memorandum submitted by Planning Aid England

SECTION 2—CONSULTATION PROCESS

Introduction

“Planning Aid” is at the forefront of engaging and giving an equal voice to all affected by the planning process. It seeks to raise awareness of planning and the need for communities and individuals to engage in the planning process. It provides free, independent professional planning advice to individuals and community groups who cannot afford to pay professional fees.

Planning Aid England is part of the Royal Town Planning Institute and operates through a network of nine regional services. Planning Aid is run independently in London, Wales and Scotland. Our regional knowledge, 35 year proven track record and access to almost 1,200 qualified volunteers underpin the strength of the Planning Aid service.

“Planning Aid” specifically helps people whose household income is low and those who are socially excluded. It also provides planning advice to small charities, voluntary and community groups, and tenants’ organisations with limited funds or free reserves, social enterprises and other not-for-profit businesses.

Planning Aid England and Planning Aid London are independent of government. This independence allows us to act both as a “critical friend” to government and as a trustworthy source of advice and assistance to communities and individuals.

Planning Aid England and Planning Aid London are playing a positive role in raising awareness of the content and importance of the National Policy Statements (NPS) consultation process with communities and individuals. We are also providing support to community groups who wish to respond to the consultation.

The Planning Aid England Response to the Energy National Policy Statement Select Committee

The Planning Aid England response is confined to matters relating to the consultation process and how this impacts upon communities and our key stakeholders.

Our response is structured around the questions supplied by the Select Committee Clerk on 4 January 2010, in advance of our anticipated attendance on 6 January.

1. What are witnesses’ concerns with the adequacy of the process?

Good, inclusive consultation brings benefits to all involved. Whilst acknowledging that it is not possible to please everyone, it is important that as wide a range of views as possible are received if the outcome is to be respected and deliverable. That said, there are enormous challenges of engaging the public in matters at a national level, and which as yet do not affect them directly.

Why is this consultation so important to communities? In addition to establishing the national need, the Overarching Energy NPS and associated technology specific NPS in essence amount to a checklist which establishes, for each type of Nationally Significant Infrastructure Project (NSIP):

— what applicants should consider in preparing their proposal;
— what the IPC should look for; and
— what mitigation is considered reasonable.
In terms of the Energy NPS, it is important that the consultation process recognises the diverse types of community which may have an interest in the NPS. For example there are the communities who:

- live in those areas which may be subject to future applications;
- may be dispersed, but have a shared interest eg the fishing community where coastal developments are proposed;
- may visit areas where new energy NSIPs may be proposed, for example tourists; and
- communities who may be affected by associated developments some distance away from the main NSIP site.

Each of these communities will have a different perspective on the issues and concerns which they would wish to see considered by the IPC when determining any future NSIP application. What they share however is the need to make their views known as part of this consultation, as failure to do so will mean that raising these issues at a later stage, for example when consultation is taking place on a Nationally Significant Infrastructure Project (NSIP) application, will be ruled “out of bounds”.

It is therefore critical that from a community perspective, the issues identified are the right ones—have any been omitted, are the “local” matters which the applicants should assess and the Infrastructure Planning Commission (IPC) should consider the right ones, are the mitigations identified reasonable etc? If these are not adequately reflected in the NPS, then applicants will not address these in their proposals, and IPC will not be able to consider such issues, if raised by communities, when deciding a NSIP development.

The NPS will also have an indirect impact on planning policy and planning decisions (under the Town and Country Planning Act) at a local level as they will become material considerations in the determination of relevant planning applications and the development plans may need to be amended to reflect the NPS. As such it is important that local communities are aware of this, and have the opportunity to provide informed comment on the content of the NPS.

2. What are the challenges of good public engagement in consultation?

National policy consultations are a challenge. An additional difficulty for this consultation is the lack of knowledge and understanding in the wider community of the Planning Act 2008 and how this will affect certain types of infrastructure projects—this makes community consultation much harder.

It is also very hard to raise awareness and enthusiasm within communities when there is no current application (and indeed there may never be an application within their locality or area of interest) around which they can focus their comments.

With regard to the NPS consultation, Planning Aid has worked with communities to help them to think through and develop an informed response. This support has primarily focused on areas identified in the nuclear power NPS, with the notable exception of a community group in the Dungeness area who wish to see the site included in the NPS as a suitable location.

Our approach when working with our target communities is based upon a process which encourages groups to think through their areas of concern if a NSIP proposal was to come forward which affected them, how these might then be overcome by the promoter and the benefits which could result from a development. They are then encouraged to look at the NPS to ensure that it asks potential applicants to take account of the relevant community concerns/issues as part of their submission, that the IPC are asked to take account of these in their decision making and that the mitigation measures proposed reflect the way in which adverse impacts on local communities can reasonably be reduced. This is clearly easier where there are already location specific proposals.

Where communities are aware of the consultation, the volume of documentation, particularly for the nuclear sites, has presented a significant challenge to community groups.

It is also important that the public are made fully aware of what is, and what is not, “up for debate” in the consultation. In this case, communities need to understand that the Energy NPS do not introduce new policy; rather they translate existing energy policy into a framework to guide applications to the IPC and for IPC decision making. Failure to ensure that this is fully appreciated may result in responses which focus on the wrong issues at the expense of those which are of relevance to this consultation process.

3. How might the consultation process be improved at this stage?

Planning Aid is pleased that DECC are adding further national (Manchester) and local nuclear (Hartlepool and Hinkley Point) consultation events to those identified at the outset of the process.

We believe however that this could be further supplemented with local events in areas where it is known that other energy related NSIP proposals will come forward. These local events would bring added value in terms of consultation feedback to the Department as they would allow real issues which have the potential to be of importance to communities and which relate to the different technology specific NPS to be captured.
The IPC publishes on its web site a programme of projects for which it expects to consider applications. This list currently contains 17 projects, fifteen of which are energy projects. Four nuclear projects are included in this list and in these locations communities have the benefit of a DECC local consultation event which explains the NPS process to them in greater detail.

Whilst it would not be reasonable to consider additional events in the vicinity of all energy related projects on the list, as this would add an unreasonable burden of consultation, locations could be selected to reflect clusters or different types of NSIP applications currently registered with the IPC. For example an additional event could be held in mid Wales where five wind farm proposals have been registered with the IPC as potential applications and where local communities are already considering issues, impacts and mitigation.

Finally when undertaking any additional community consultation, it is important that the opportunity is not lost to ensure that communities focus their energies and responses on those aspects of the NPS which are “up for debate”. Our experience would suggest that this distinction is not always fully appreciated by local groups.

4. Planning Aid have been helping to retrospectively improve the process—What has Planning Aid been doing?

Our independent role and respected expertise in community engagement has allowed Planning Aid to work alongside the Department to support the consultation process and promote awareness of this consultation within the wider community and our target groups.

A key challenge has been the volume and complexity of the consultation material. Planning Aid England and Planning Aid for London produced six A4 two side summary sheets—one for each energy NPS. This was facilitated by DECC who supplied draft copies of the NPS (except for the nuclear NPS, where the draft text from the exhibition boards was supplied) in advance of the launch to allow these summary sheets to be published at the same time as the start of the consultation was announced. A similar summary sheet was also produced for the draft Ports NPS. A copy of each of the Planning Aid England and Planning Aid London draft Energy NPS summary sheets is appended to this submission.

A special purpose web site was developed by Planning Aid England and Planning Aid for London which contains basic information about the Planning Act 2008, the consultation process, downloadable copies of each of the Planning Aid NPS summary leaflets and a series of frequently asked questions and answers. Paper copies of the A4 summary sheets were also sent by post to stakeholders and others without internet access. Awareness of these leaflets and the web site was raised through a cascade of emails, sent to coincide with the Secretary of State’s announcement of the start of the consultation, to Planning Aid volunteers, stakeholders, and community groups who were asked to forward them to anyone they felt may have an interest in the consultation.

By 4 January 2010 there had been 91,068 hits on the Planning Aid NPS web site and a total of 8,569 Summary Sheets had been downloaded from the site. This number of downloads represents the “tip of the iceberg” as those downloading the documents are encouraged to copy, print and circulate to a wider audience, thus cascading information further. Planning Aid England and Planning Aid London have both established a dedicated phone lines for enquiries on NPS and a special email address.

Planning Aid England has also delivered five training events for staff and volunteers (further events are planned for early 2010). These events are aimed at raising awareness of the implementation of the 2008 Planning Act in general and the NPS consultation for Energy and Ports in particular. Circa 120 people have already attended these events. In addition articles on the NPS consultation, the importance of engagement and where to find information have been produced for the Planning Aid regional newsletters—these are distributed to volunteers, local authorities and community groups.

5. Does the DECC consultation meet government guidance on good consultation?

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<tr>
<th>Code of Practice Consultation Criteria</th>
<th>Comment/notes</th>
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<tbody>
<tr>
<td>1. When to consult—formal consultation should take place at a stage when there is scope to influence the policy outcome</td>
<td>NPS are in draft form. DECC have made clear that the NPS do not contain “new policy”—energy policy has previously been consulted on. There is scope to influence the advice which the NPS will set out for applicants and the IPC relating to local impacts.</td>
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<tr>
<td>2. Duration of consultation exercise— consultations should normally last for 12 weeks and consideration should be given to longer timescales where feasible and sensitive</td>
<td>The consultation period lasts for 15 weeks.</td>
</tr>
<tr>
<td>3. Clarity of scope and impact—consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals</td>
<td>Draft NPS documents are clear about consultation process. PA raised awareness through summary sheets which were prepared with the support of DECC and through information on a special web site.</td>
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### Code of Practice Consultation Criteria

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<td>4. Accessibility of consultation exercises—consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach</td>
<td>The NPS are generally well written and use reasonably accessible language. The main challenge for consultees is the amount of material covered by the NPS; however there is no easy solution to this. The PA summaries provide a limited overview of each NPS and provide a starting point for raising awareness within communities.</td>
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<tr>
<td>5. The burden of consultation—keeping the burden to a minimum is essential if consultations are to be effective and if consultees’ buy in to the process is to be obtained.</td>
<td>Responses can be completed on-line and also in hard copy.</td>
</tr>
<tr>
<td>6. Responsiveness of consultation exercises—consultation responses should be analyse carefully and clear feedback should be provided to participants following consultation</td>
<td>This stage has not yet been reached.</td>
</tr>
<tr>
<td>7. Capacity to consult—officials running consultation should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.</td>
<td>As the consultation has progressed, advice has been sought from Planning Aid and the responses acted upon by DECC, for example the need and general location for an additional national consultation event, the ease of use of the DECC website, the need to find alternative ways of raising awareness within communities without good broadband access.</td>
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6. **What are the risks if the consultation is seen to be inadequate?**

Planning Aid England and Planning Aid for London have played a positive and valuable role in the process of raising awareness of the draft Energy NPS consultation process with communities and in doing so, have brought real and measurable added value to the process.

There are two key risks to be aware of, firstly communities need to understand what is, and what is not, “up for debate” in the consultation. In this case, it is the translation of existing energy policy into a framework to guide applications to the IPC and for IPC decision making. Failure to ensure that this is fully appreciated may result in responses which focus on the wrong issues at the expense of other issues which are of relevance to this consultation process.

A second potential risk is that community responses will not be sufficiently broad based or balanced to inform the sound development of the final NPS. If communities who may be affected by a NSIP proposal in the future do not ensure that the “framework” set by the NPS for applications and IPC decision making reflects those issues which they believe should properly be considered, or the mitigation required is inappropriate, then these matters will be considered “out of bounds” at the project stage and cannot be re-opened for debate.

Good consultation brings rewards to all involved. Community engagement in the consultation process is important with local knowledge enabling communities to look at the NPS in a way which other stakeholders may not, thus adding a different “user” perspective to the pool of responses.

*January 2010*

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**Memorandum submitted by Planning and Environment Bar Association**

1. This submission is made on behalf of the Planning and Environment Bar Association (“PEBA”). Our members are barristers specialising in the fields of planning, environment, highways, rating, and other matters relating to local government.

2. In representing its members PEBA liaises with Government departments and agencies, organisations such as the National Planning Forum and other professional bodies. PEBA has frequent contact with the Planning Inspectorate and PEBA representatives have met officials of the Infrastructure Planning Commission (“IPC”) to discuss the procedures the IPC will follow when dealing with applications for development consent.
3. PEBA made representations to the Government and opposition parties about the Planning Bill. When the Planning Bill was before the House of Lords, a representative of PEBA met the responsible Minister, as well as peers leading for other parties, to discuss the Bill’s procedural provisions.

4. PEBA supports the Government’s aim in creating a single consent process for nationally significant infrastructure projects, which is to ensure that applications for such projects are processed expeditiously. We see National Policy Statements (“NPSs”) as an important part of the structure. They aim to set a framework of general national policy, leaving the IPC’s examination to focus on the specifics of a project.

5. However, while the consent procedures for major projects should not be delayed unnecessarily, speed should not be at the expense of proper examination. Projects of sufficient importance to come before the IPC will nearly always be of substantial complexity. Consideration of the acceptability of a project in the location proposed will require detailed scrutiny, if its acceptability is to be properly assessed. That may well mean oral questioning of the experts who have given their views on relevant aspects, for example flooding, noise, landscape, and impact on heritage assets.

6. PEBA is grateful for the opportunity to give evidence before the Energy and Climate Change Committee on the draft NPSs relating to Energy.

7. We do not seek to comment on the general policies in the draft NPSs, for example relating to the need for new nuclear power. We restrict our comments to the reference to specific sites in EN6.

8. EN6 identifies a number of sites as “potentially suitable” for development of a nuclear power station. EN6 also deals with alternatives. It is stated that the Government has concluded that none of the three locations considered by Atkins is a credible site for the deployment of new nuclear power stations by the end of 2025.

9. NPSs will be crucial to the IPC’s determination of applications for development consent. The effect of section 104 of the Planning Act 2008 (“the 2008 Act”) is that applications must be decided in accordance with any relevant NPS save in certain exceptional cases.

10. Section 104(9) states that the fact that an NPS identifies a location as potentially suitable for a development does not prevent one of the exceptional cases applying. However, the effect of identification of a site in an NPS as potentially suitable, or its exclusion as a possible alternative, will be to set up a strong presumption, which it will be hard to shift before the IPC.

11. That makes it vital that there is an appropriate and robust process for the identification of sites within NPSs as potentially suitable, or their exclusion as alternatives.

12. That means, to begin with, a process of consultation, in relation to each site being considered, which is appropriate to the characteristics of the site, and to the size and importance of the project. Interested persons must have the chance to make a considered response in sufficient time to influence decision making. That requires adequate notice of any consultation exercise to be given, and the possible proposals to be explained in sufficient detail. We do not comment on the process that has been followed in relation to any particular site mentioned in EN6, but we note that there have been criticisms in some cases.

13. Further, so far as we are aware there has been no opportunity for questioning of the experts responsible for the judgments on which conclusions in EN6 are based, by supporters of sites or objectors to them.

14. In those circumstances, it will be vital for the IPC to scrutinise any applications for development consent that are made to it with the utmost care, ensuring that where necessary experts are questioned, whether by the IPC itself or by the parties. Further, in applying section 104 of the 2008 Act and deciding whether any of the exceptional cases set out in the section applies, the IPC will need to take account of the extent to which there was informed consultation and debate about the site’s merits in the process leading to the publication of the relevant NPS.

January 2010

Memorandum submitted by Radiation Free Lakeland

Radiation Free Lakeland was formed in November 2008 following Cumbria County Council’s “expression of interest” in the geological disposal of nuclear waste. Supporters are people from all walks of life in Cumbria and further afield whose aims are: (a) to ensure the risks from nuclear waste are minimized and (b) that no more nuclear waste is produced.

See page 16
The DECC exhibition and presentation which precedes the “Site Consultation” public discussions reiterate deliberately misleading statements. These statements include assertions that nuclear power is:

- Carbon free /Climate friendly.
- Safe for the Environment.
- Safe for human health.
- Economic.
- Sustainable.
- Home grown.

1. Carbon Free/Climate Friendly . . .?

1.1 Every nuclear power plant requires a dedicated back up of energy—in fact they need an “over supply” of energy to prevent catastrophe during operation and waste management. In the case of Sellafield’s waste management the Fellside CHP plant does this job. Following a Freedom of Information request it was revealed that the amount of gas bought in to ensure “security of supply” to Sellafield last year was £30 million (FOI NDA REPLY 9781940). Any gas left over is sold on to the National Grid. Sellafield stopped producing electricity in 2003. The CO2 emissions from Fellside since then are in excess of three million tonnes. When asked, the NDA could give no reply as to how a secure energy supply to new build would be met or how Sellafield’s own energy requirement would be met post fossil fuel.

1.2 The Nuclear Fuel cycle produces greenhouse gases thousands of times more potent than carbon dioxide. Following a Freedom of Information request from Radiation Free Lakeland (FOI—NDA 10689349) it has come to light that Sellafield (no longer producing electricity) quadrupled its emissions of hydrofluorocarbons (HFCs) from the period 2007 to 2008. HFC’s are hundreds and can be thousands of times more powerful than carbon dioxide. The reporting threshold is 100kg but Sellafield produced over four times this amount in 2008 alone.

1.3 Apart from hydrofluorocarbons and other potent greenhouse gas emissions, the nuclear cycle absolutely relies on the production of chemicals such as concentrated nitric acid in large quantities. Nitrous oxide (N2O) is produced by nitric acid production and is not only 310 times more powerful than CO2 but it lasts over 100 years in the troposphere. According to the Nuclear Decommissioning Authority, Sellafield is home to the most dangerous concoction of tens of millions of gallons of nitric acid (1086.7 m3) in High Level Liquid Waste tanks holding “nitric acid solution containing fission products, some actinides and some solids”. Fossil fuel and the internal combustion engine has done much to trash the environment but fossil fuel is well and truly trumped by nuclear power at the top of the polluting industrial food chain and reliant on all other polluters for its existence.

2. Safe for the Environment . . .?

2.1 Following Freedom of Information requests from Radiation Free Lakeland the Nuclear Decommission Authority have revealed that:

“The Abstraction license issued by the Environment Agency to the NDA allows abstraction of a total of 6,637,307 m3 of water per annum, but the maximum abstraction in any 24 hour period must not exceed 18,184m3”

This equates to over four million gallons abstracted from Wastwater every day, essential to cool the nuclear waste (and provide nuclear workers and equipment with power showers etc). More water is abstracted from the Calder and Ehen with discharges to these rivers. While the Lake District is known for its freshwater resources—this kind of relentless use and abuse is unsustainable especially when the resource is fresh water—the most precious and essential prerequisite for life. Wastwater was formed a relatively short time ago—10,000 years—nuclear waste remains dangerously “hot” for substantially longer. When asked, the NDA could give no indication of how new build water supplies would be met. Seawater is too corrosive for many nuclear processes.

2.2 With regard to nuclear radiation and wildlife the nuclear guru James Lovelock has said, “If you wanted to preserve the biodiversity of rainforest, drop pockets of nuclear waste into it to keep the developers out. The lifespan of the wild things might be shortened a bit, but the animals wouldn’t know, or care. Natural selection would take care of the mutations”. For “rainforest” substitute “Cumbria”. James Lovelock’s blase´ prediction is backed up by evidence: “Hesse-Honegger discovered a shocking degree of deformation in bugs from fallout areas in Sweden. From 1986 until 2007, she systematically examined the morphological appearance of various types of true bugs around the world. She collected more than 16,000 Heteroptera, examined them in detail, identified different types of malformations and produced over 300 detailed illustrations. In areas around nuclear power plants and nuclear reprocessing facilities in Switzerland (Aargau), France (La Hague), and Germany (Gundremmingen), for example, severe disturbances and malformations were found in true bugs and other insects” Courtesy of Verlag Helvetica Chimica Acta (Chemistry & Biodiversity 2008, Vol 5, issue 4, p 499–539)
3. Safe for Human Health . . .?

3.1 The German company RWE is tendering for nuclear build here in Cumbria while effectively outlawed from new build in Germany largely as a result of health concerns. In Germany, the German people object strongly to proposals to extend the life of existing plants—new build in Germany is off the agenda. This is chiefly as a result of the KIKK studies, showing a direct link between proximity to nuclear installations and cancer. As Dr. Ian Fairlie reports in the New Scientist article 26 April 2008 “the KIKK studies (a German acronym for Childhood Cancer in the Vicinity of Nuclear Power Plants), whose results were published this year in the International Journal of Cancer (vol 122, p 721) and the European Journal of Cancer (vol 44, p 275). These found higher incidences of cancers and a stronger association with nuclear installations than all previous reports. The main findings were a 60% increase in solid cancers and a 117% increase in leukaemia among young children living near all 16 large German nuclear facilities between 1980 and 2003. The most striking finding was that those who developed cancer lived closer to nuclear power plants than randomly selected controls. Children living within five kilometres of the plants were more than twice as likely to contract cancer as those living further away, a finding that has been accepted by the German government”.

3.2 The Radiation Linked Diseases Compensation Scheme based at Sellafield is there to compensate nuclear workers, but as the KIKK studies show the surrounding population up to 50k is also adversely affected by nuclear installations. While routine emissions are damaging to human health—the prospect of a serious accident would be catastrophic. In the same month that the Norwegians were told by the industry that a hypothetical “accident” such as a loss of cooling water to the waste tanks “could not happen”—the hypothetical accident became a reality. On 1 April 2009 there was a loss of cooling water to the High Level Waste tanks—the problem was hours away from being catastrophic. This loss of coolant to HLW tanks is designated as the “Reference Accident” (worst credible accident) for Sellafield’s Emergency Plans. The worst-case scenario would be public evacuation from Glasgow to Liverpool (perhaps permanent). The Norwegian report concluded that if just 1% of the tanks’ inventory was accidentally released, the radioactive fallout in Norway would be five times greater in the areas worst affected by the Chernobyl accident. If 10% of the tanks’ contents were released, the fallout would be fifty times the country’s maximum post-Chernobyl experience.

4. Economic . . .?

4.1 Others will speak of the tens of billions required for new build and the hundreds of billions required for decommissioning. Radiation Free Lakeland would like to highlight just some of the hidden economic costs of nuclear. For example a staggering £30 million every year on gas to Sellafield. Sellafield has the obscene luxury of paying nothing—zilch—for its in excess of 4 million gallons of fresh water a day—around the same amount of water as three Cumbrian towns would use. In Cumbria, individual household water bills are rising year on year.

4.2 For the last 10 years there has been an unprecedented increase in taxpayers money filtering through the Nuclear Decommissioning Authority to many essential services in Cumbria such as Citizens Advice, Schools and Hospitals. The NDA claims that its considerable largesse running into tens of millions is helping communities suffering from the economic shock of nuclear closure. With the sale of “NDA” land (land acquired with public funds) for potential new build this largesse has instead become a “slush fund” used with the rather abusive aim of grooming communities into passive acceptance of nuclear. For example, the NDA has released information, in response to a Freedom of Information request showing that £34 million has been given to hospitals, colleges, and wildlife and heritage groups since 2005. Cumbria County Council has a staffer sponsored by the NDA, as does Made in Cumbria, established to help small businesses involved in the food and craft sectors.

4.3 Money has been given to a lifeboat appeal, footpaths, and a harbour wall scheme amongst other things. The Citizens Advice Bureau in Copeland has received almost £80,000. In addition to the £34 million, the NDA will be “investing” £10 million over three years in the University of Cumbria. According to The Guardian, the NDA is spending taxpayers money on “social” projects “as if Christmas has come early”.

Cumbrians are being “bought off” with their own money. Apart from the University of Cumbria, money is going to other organisations which should be properly funded by central government—Cumbria’s nine cottage hospitals received £18 million. Money the NDA and other nuclear companies are disbursing in Cumbria is going to organisations that Cumbrians are relying on to be impartial and vocal watchdogs on nuclear issues. Cumbria Wildlife Trust’s work on the Biodiversity Action Plan was part funded by Sellafield Ltd. Friends of the Lake District and the Lake District National Park Authority both work in partnership with Cumbria Vision on various projects such as the Lake District World Heritage Project, and the Cumbrian Biodiversity Action Plan. Cumbria Vision is the main economic development agency in the County, and is promoting the West Cumbria Energy Coast Masterplan, which received £250,000 from the NDA.
5. Sustainable . . .?

5.1 The most widely accepted definition of sustainability can be traced to a 1987 UN conference. It defined sustainable developments as those that “meet present needs without compromising the ability of future generations to meet their needs” (WECD, 1987). The Golden Rule of Sustainability is “do unto future generations as you would have them do unto you”. “Sustainable means using methods, systems and materials that won’t deplete resources or harm natural cycles” (Rosenbaum, 1993).

5.2 With these principles of sustainability in mind the question should be posed:

Is nuclear power the biggest threat to Cumbria’s future food security?

— Windscale Fire—Contaminated Lakeland Food—Systematically Destroyed.
— Chernobyl—over 20 years ago—353 British farms including in Cumbria are still under Restrictions.
— Routine Emissions

“New evidence of an association between increased cancers and proximity to nuclear facilities raises difficult questions. Should pregnant women and young children be advised to move away from them? Should local residents eat vegetables from their gardens? And, crucially, shouldn’t those governments around the world who are planning to build more reactors think again?”

2008 New Scientist—Dr Ian Fairlie—Consultant on radiation in the environment

6. Home grown

6.1 New nuclear would “boost energy security”

Regarding “energy security,” the known UK resource of uranium is on Orkney where the Orcadians successfully won a battle in the 1970s to keep their uranium in the ground. A direct consequence of nuclear fanaticism in Britain is having devastating effects worldwide. From the Grand Canyon to Lapland to Australia, indigenous communities around the world are fighting thousands of uranium mining claims.

Even if nuclear was everything that DECC falsely claim—that still would not justify new build in Cumbria or elsewhere in the UK. Energy needs can be met without the nuclear drain on resources.

7. Conclusions

7.1 People could be forgiven for assuming that the Department of Energy and Climate Change was created with the cynical remit to push for new nuclear build and “geological disposal” at ANY cost—of health, safety, or trashing of the climate and environment. DECC have asked that people/organisations do not publish their responses to the draft Nuclear National Policy Statement until the select committee has “appraised them”. Is this to ensure that the Site Selection “Consultations”—some of which have already taken place, can happen without the hindrance of dissenting voices being heard? At the Site Selection “Consultation” Meetings the DECC exhibition and officials are blandly reiterating all the nuclear fantasies contained in the draft (dodgy dossier) Nuclear National Policy Statement.

7.2 Our response is NO—Radiation Free Lakeland opposes in the strongest possible terms the draft Nuclear National Policy Statement. Cumbrians should be assured of infrastructure such as schools and hospitals without being bribed into “geological disposal” and new nuclear build in the vicinity of the worlds most ferociously radioactive stockpiles of nuclear waste. It seems that the process of “consultation” is Decide, Announce and Defend the DECC’s remit of promoting nuclear power.

January 2010

Supplementary memorandum submitted by Radiation Free Lakeland

ADDITIONAL EVIDENCE TO WRITTEN SUBMISSION—INSURANCE

As a wildlife artist I have to take out at least £5 million of public liability insurance every year. This is needed before I can attend shows in Cumbria as an exhibitor. For example Cumbria’s County Show will have a marquee of exhibitors doing rather benign and joyous things such as charcoal drawing with children, making walking sticks or sticky toffee pudding. The marquee may have around 60 exhibitors. The full public liability insurance for that marquee in the case of accident or incident such as an easel falling over will be far more than the nuclear industry is now required to insure itself for in the case of an accident with the High Level Liquid Waste Tanks at Sellafield. The nuclear industry has been given an indemnity by government which allows it to operate with pitiful public liability insurance of £140 million or to put it another way the same insurance as 28 artists are required to have in order to attend the County Show. In the case of a serious accident at Sellafield the taxpayer would foot the bill which could run into trillions. This is an obscenity on a grander scale to taxpayers footing the bill for MP’s duck pond houses. The extraordinary thing is that while the nuclear industry is not required to insure itself for radioactive waste liability—the Department of Energy and Climate Change is promoting the building of high burn up fuel reactors that will produce radioactive waste much more hazardous than the existing waste.
An industry at the very top of the polluting food chain is given special treatment by government— with a potentially unlimited draw on the public purse, while an artist—a fairly benign occupation—would not get away with not having adequate insurance arrangements to step inside a show marquee.

ADDITIONAL REFERENCES
Marianne Birkby Wildlife Artist—MADE IN CUMBRIA
PUBLIC LIABILITY INSURANCE
Public & Product Liability to an indemnity of £5 million pounds for all Made in Cumbria members selling at UK direct sales events, has been obtained from AXA Insurance via Talbot Insurance Brokers Ltd, Kendal on policy number MR COM 1760165 for the period ending 31/1/2009.

Sellafield has public “blank cheque”
The Independent Monday 4 August 2008 By Michael Savage The consortium with a £20 billion contract to clean up Britain’s Sellafield nuclear plant has been handed a blank cheque by the Government to pay for future accidents there. “There is no commercially available (nuclear) insurance” Malcolm Wicks
http://www.independent.co.uk/news/uk/home-news/sellafield-has-public-blank-cheque-884231.html

Memorandum submitted by C Reed
CASE AGAINST KIRKSANTON NUCLEAR POWER STATION
1. SUMMARY
1.1 Towards the end of the 1987 movie Wall Street the character Gordon Gecko (representing the unacceptable face of capitalism) is having a discussion with his protégé Bud Fox (who is having serious doubts about Gecko’s methods). At one point Gecko says to Fox: “you’re not naive enough to believe we’re living in a democracy are you?”

1.2 I think these sentiments resonate with the way the Government is attempting to use the Planning Act 2008 to ride roughshod over the environment, local communities and UK, European and International law.

1.3 I am strongly opposed to the proposal to build a nuclear power station at Kirksanton. My main concerns are as follows:

(a) There would be a severe detrimental impact on a wild and remarkably beautiful landscape.

(b) It would have a severe detrimental impact on England’s most beautiful and best-loved National Park, the Lake District, which is protected by the 1995 Environment Act.

(c) It would have a severe detrimental impact on wildlife and plant habitat currently protected by UK, European and International law.

(d) It would be a greenfield development in a rural area and it would irrevocably change the character, quality and tranquility of the landscape for the local community and for visitors to the area.

(e) It would severely damage the tourist industry in the immediate area and it would alter the perception of the Lake District National Park as a tourist destination.

(f) The Government’s planning process is severely flawed and it is un-democratic and un-British.

(g) The Government’s documents are unfairly biased in the way that information is presented.

(h) There is sufficient evidence to suggest that the Kirksanton site would not be deployable by 2025 which is one of the Government’s main requirements for development.

1.4 The proposed build of a Nuclear Power Station at Kirksanton is causing considerable stress and upset to a lot of people. I do not believe the Kirksanton site is viable and it should be removed from the Government’s list of potential sites. This should be done as soon as possible to prevent further unnecessary upset to people.

2. DESTRUCTION OF LANDSCAPE
2.1 Select Committee Visit

2.1.1 I feel that the Select Committee need to see first-hand the landscape that the Government are proposing to destroy. It is important to visit on a nice clear day when the surrounding Lake District mountain tops are visible. The best place to get an appreciation of the landscape would be from Kirby Moor with the fell road between Kirby and Ulverston being a convenient viewpoint.
2.2 **The Proposed Site**

2.2.1 The site would occupy an area of 131 hectares which is approximately 180 football fields. The reactor height would be approximately 200 feet. Sea defences would consist of a wall of between 13’ and 20’ high—this has been referred to as akin to the Berlin Wall.

2.3 **The Effect on the Lake District Landscape**

2.3.1 The proposed Kirksanton site would result in a severe detrimental visual impact on a large part of the south west area of the Lake District National Park.

2.3.2 The views from Black Combe, White Combe and Great Burney looking out from the Lake District National Park over the Duddon Estuary are truly exceptional views. They would be spoilt by a Nuclear Power Station at Kirksanton.

2.3.3 Possibly the best view in the whole of England is the view from the fells above Kirby to the east of the Duddon Estuary looking over the estuary to Kirksanton, the Irish Sea, the Isle of Man, Black Combe and all the way round to the highest mountains in England. It is a little known view and would be spoilt by a Nuclear Power Station at Kirksanton.

2.4 **The Effect on Silecroft Beach**

2.4.1 Silecroft beach is an extremely beautiful and unspoilt beach that borders the full western boundary of the proposed site. The beach extends for approximately six miles from Haverigg Point to beyond Gutterby (four miles of the beach lies within the Lake District National Park).

2.4.2 A Nuclear Power Station would be visible from the full six mile length of this unspoilt beach. The proposed wave protection defences of between 13’ and 20’ in height would also have a severe detrimental visual impact on the beach.

2.5 **The Effect on the Duddon Estuary Landscape**

2.5.1 The Duddon Estuary basin is unique within England. There is nowhere else in England where mountains as high as the Lake District’s Black Combe are so close to the sea. There is nowhere else in England where a magnificent estuary and wetland is surrounded on all sides by such high mountains. This landscape would be spoilt by a Nuclear Power Station at Kirksanton.

3. **Impact on Wildlife and Plant Habitat**

3.1 The Duddon Estuary adjacent to the proposed Kirksanton site is a European Special Protection Area (SPA), and International Ramsar site. It also contains a European Special Area of Conservation (SAC) at Duddon Mosses as well as UK Sites of Special Scientific Interest (SSSI).

3.2 Morecambe Bay adjacent to the proposed Kirksanton site is a European Special Area of Conservation and it also contains the Morecambe Bay Special Protection Area and Ramsar site.

3.3 The Duddon Estuary contains some special wildlife and plant habitat in a magnificent and unique landscape. This is a fragile and precious environment, which is why the area is protected by UK, European and International law. A Nuclear Power Station at Kirksanton would not only affect the animals and plants of the Duddon Estuary it would also spoil the enjoyment for the people who enjoy this area for its wild beauty.

3.4 If we can’t protect these areas what message does it send to our children? How can we hope to persuade other countries to protect their wild areas if we fail to protect our own? What sort of world do we want to leave for our children and future generations?

3.5 We are only temporary custodians of the world we live in. Certainly our energy needs are important. But if we are clever enough to be able to split the atom surely we can find other ways to meet our energy needs without destroying the environment.

4. **Impact on Local Communities**

4.1 **Effect on a Quiet Rural Area**

4.1.1 The proposed Kirksanton site would be a greenfield development. This in itself goes against a stated aim in the Government’s own Appraisal of Sustainability objectives which is “to avoid the use of greenfield land and encourage the re-use of brownfield sites.”

4.1.2 The area surrounding the proposed Kirksanton site is a quiet, rural area. The villages of Kirksanton, Silecroft and Haverigg could be described as “sleepy” villages which is the very reason that most of the locals choose to live in the area.

4.1.3 Building a Nuclear Power Station at Kirksanton would have a devastating impact on the lives of the people who live in the area. The noise and disruption of the build phase would last for at least six years. When operational the peace and tranquility of the area would be lost forever.
4.2 *Opposition is Not NIMBY-ism*

4.2.1 The proposed Kirksanton site is in the backyard of the Lake District National Park which, as the word “National” indicates, belongs to the people of this country.

4.2.2 It is in the backyard of the Duddon Estuary which is a unique and extremely beautiful landscape and wildlife habitat. It has some magnificent views of the Lake District National Park. These views rank amongst the best in the country.

4.2.3 It is in the backyard of Silecroft Beach which is a truly exceptional beach stretching for six miles from Haverigg Point to beyond Gutterby.

4.2.4 The Lake District National Park, Duddon Estuary, and Silecroft Beach are free and can be enjoyed by all of society—rich & poor, young & old, black & white—the scenery doesn’t discriminate.

4.3 *The Need for Jobs*

4.3.1 One of the arguments put forward by supporters of the Kirksanton site is that it would bring jobs to the area. I would agree that jobs are important. However, any developments must be in keeping with the character of the area. It is also worth noting that there are only approximately 130 people currently unemployed in Millom. Given the will and investment it should not be difficult to find alternative employment for these people. For example, the development of the Marina at Barrow-in-Furness will require many local people.

4.3.2 If a Nuclear Power Station is built at Kirksanton there is a strong possibility that Haverigg Prison would have to close. This is because the Prison is adjacent to the proposed site and it would not be possible to evacuate the inmates if there was an emergency. Closing the Prison would result in the loss of 300+ local jobs.

4.4 *Sustainable Future*

4.4.1 The Planning Act 2008 requires any significant new developments to be sustainable. The lifetime of a nuclear power station is 60 years—then what do the local people do for jobs?

4.4.2 The Copeland economy is already too heavily dependent on the nuclear industry. It seems at times that we are being bullied into accepting more nuclear with the threat that “if you don’t accept nuclear then West Cumbria will die.”

4.4.3 We need jobs and investment that are sustainable and more in fitting with our environment.

5. **Impact on Tourism**

5.1 **Effect on Tourism in Millom**

5.1.1 Over the last few years Millom (two miles east of proposed site) has been working to develop the local tourist industry. A quote from the Millom website reads: “Millom today provides access to unspoilt golden sands with unrivalled panoramic views of the nearby Lakeland hills and fells. It boasts the facilities of a town and the opportunities of the unspoilt countryside.” This proud claim would no longer be true if a Nuclear Power Station was built at Kirksanton.

5.1.2 Many local jobs depend on tourism. There are caravan parks at Silecroft at the north end of the proposed site and at Haverigg at the south end. There are a number of B&Bs in the area. Local shops get a boost from tourism particularly in the summer months.

5.1.3 The area provides a cheap holiday for many young families and less “well-off” families who can’t afford expensive holidays abroad. Who wants to bring their children to play on a beach next to a Nuclear Power Station? Is it right that we deny access to a beautiful area to the less “well-off” members of society?

5.1.4 The Millom tourist industry would be destroyed if a Nuclear Power Station was built at Kirksanton.

5.2 **Effect on Tourism Further Afield**

5.2.1 A Nuclear Power Station at Kirksanton would damage the perception of Copeland, the Furness Peninsula and the Lake District as a tourist destination both in this country and abroad. It would also adversely affect other developments such as the proposed Marina at Barrow-in-Furness.

5.2.2 The Western Lakes contain some beautiful mountain and coastal scenery yet tourist numbers are much less than the central lakes. This is probably due to the proximity of Sellafield. Whilst I am not arguing the pros and cons of Sellafield here I would suggest that building a Nuclear Power Station at Kirksanton would further damage the perception of the area.
6. **The Government’s Planning Process is Deeply Flawed**

6.1 *Timescale is Too Short*

6.1.1 The timescale for local communities and other groups to consider a proposal such as a Power Station at Kirksanton is far too short. The volume of Government documentation to be read, assimilated and a response provided is overwhelming in the time available.

6.1.2 The documents people opposed to the Kirksanton site need to read include: EN-1 (93 pages); EN-6 (94 pages); Appraisal of Sustainability Main Report (136 pages); Appraisal of Sustainability for Kirksanton (64 pages); Habitats Regulations Assessment for Kirksanton (47 pages). To argue a case against the Government people also need familiarity with such things as: the Planning Act 2008; the Environment Act 1995; alternatives to nuclear; concerns over radioactive waste storage etc etc.

6.1.3 Yet the time between the Draft National Policy Statements for Nuclear Power being published on 9 November 2009 and the deadline for comments being submitted to the Select Committee is only nine weeks. It is only 15 weeks from the date the draft policy statements were published to the Government’s deadline on 22 February 2010 for comments on the Nuclear National Policy Statements.

6.2 *Cost of Legal Challenge*

6.2.1 The Government is riding roughshod over UK, European, and International environmental law. However, local communities opposed to the Government’s planning proposals do not possess the financial means to challenge the Government in the courts.

6.3 *Government Riding Roughshod over the Environment Act*

6.3.1 The Government state in their National Policy Statement for the Kirksanton site that “Fully effective mitigation of adverse visual effects during the construction and operational phases is highly unlikely” [EN-6 para. 5.11.88]

6.3.2 The Environment Act 1995 states that the purpose of National parks is to (a) to conserve and enhance the natural beauty, wildlife and cultural heritage; (b) to promote opportunities for the public understanding and enjoyment of the special qualities of those areas by the public.

6.3.3 Plain common sense together with the Government’s own assessment of the Kirksanton site indicate that effective mitigation is not possible (even assuming cooling towers are not constructed). To build a nuclear power station at Kirksanton would be a clear violation of the Environment Act.

6.3.4 The Environment Act was created for the benefit of the public and to protect the environment from developers. However, the biggest danger to the environment turns out to be our own Government.

6.3.5 If an Act of Parliament is to have any meaning then the proposed development at Kirksanton should be rejected immediately. Failure to do so will only cause the general public to lose more confidence in how the country is run.

6.4 *Violation of UK, European and International Law*

6.4.1 The Habitats Directive and Birds Directive are European laws that have been created to protect important European wildlife and plant habitat. These European directives have led to the Duddon Estuary being classified as a Special Protection Area (SPA) and Special Area of Conservation (SAC). The Duddon Estuary is also a Ramsar site which is an international law aimed at protecting wetlands of international importance. The Duddon Estuary also contains UK designated Sites of Special Scientific Interest (SSSI).

6.4.2 Morecambe Bay is also a SAC, SPA and Ramsar site.

6.4.3 If these laws are to have any meaning then the Kirksanton site should be rejected.

6.5 *Invoking IROPI is Illegitimate*

6.5.1 The Government is quoting “Imperative Reasons of Overriding Public Interest” in order to get its own way. The legality of this is at best dubious and quite possibly illegal. If allowed to go unchallenged it sets a dangerous precedent.

6.5.2 The Government uses as justification for IROPI that there is a lack of alternatives [EN-6 para. 5.11.66]. However this is not true. Energy demand could be reduced by energy saving measures (which the Government seem reluctant to adopt) and there are other alternative means of energy supply.

6.5.3 It could be equally well argued that it is in the national interest to protect our National Parks and to conserve our wildlife and plant habitat.

6.5.4 It could also be strongly argued that it is the Government’s negligence that has created the concerns over future energy supply. The Government has known for a long time that existing nuclear power stations were reaching the end of their life. If it was in the national interest to secure our future energy supply why have they left it so late to act?
6.6 Lack of National Debate on Nuclear Policy

6.6.1 There appears to have been very little national debate on (a) whether or not the public want nuclear, (b) the alternatives to nuclear, and (c) if we do want/need nuclear then where as a nation are we willing to site new nuclear power stations.

6.7 The National Policy Statements are Unfairly Biased

6.7.1 There are many examples of misleading, biased and erroneous statements in the Government’s National Policy Statements. The following example is taken from [EN-6 para. 5.11.83] and refers to the proposed Kirksanton site.

6.7.2 The Government state that “there could be opportunity for the development to sit within a strong new landscape framework with the creation of tree belts, lakes and replacement public rights of way.” This is biased in that it creates the impression that the current landscape can be significantly improved when in fact the reverse is true—the current landscape will be spoilt forever. It could equally have been written along the lines of “the development will result in a severely detrimental and irrevocable change to the character, quality and tranquility of the landscape.”

6.7.3 There are many other examples of biased and misleading statements in the National Policy Statements.

7. Not Deployable by 2025

7.1 There is little or no evidence presented by RWE or the Government to suggest that the Kirksanton site could be operational by the Government’s own target date of 2025.

7.2 In the time frame both the energy utilities and reactor suppliers are unable to simultaneously build nuclear power stations in the UK, Europe and worldwide due to financial risk exposure, availability of skilled workforce and qualified sub-contractors, and bottlenecks with supply of certain materials (eg Japan Steel Works are the sole maker of certain reactor parts).

7.3 The Kirksanton site is the least favoured site of RWE which recently announced the Wylfa and Oldbury sites as the sites they will develop. Braystones is another proposed site. What are RWE’s outline financial and project plans for developing all of these sites by 2025?

January 2010

Memorandum submitted by the Renewable Energy Association

1. The REA welcomes the Government’s planning reforms. Bringing greater consistency to decision making for large energy projects, and setting out government policy clearly so that generic issues need not be revisited for each project is a very worthwhile objective.

2. The REA’s main complaint is that these benefits are unlikely to be felt at the local authority level, where the need for consistency and efficiency is far greater. Much of the renewable energy proposed will continue to be smaller in scale and local in nature.

3. Unless the opportunity is taken to influence the Town and Country Planning Regime in this direction these reforms will make relatively little difference to the deployment of renewables, other than indirectly, through helping speed up the building of electrical transmission and distribution infrastructure.

4. The creation of a highly consultative pre-application process with a structured consenting timetable with clear deadlines for the IPC is supported by industry. The streamlined nature of the process reflects the urgency for large renewable energy without degrading the need for consultation. However it is worth pointing out that it is within DECC’s gift to speed up the Section 36 consenting route should it wish. The Section 36 team, being within DECC, obviously have a very clear understanding of the need and urgency for large renewable energy, given that DECC is the department charged with meeting the UK’s 15% renewable energy target by 2020.

5. Given that the threshold (50MW) was unlikely to be reduced, which would have brought more projects out of the Town and Country Planning Act regime and within the IPC regime, we felt that the next best thing was to seek for the NPS to have a more explicit role in influencing local authority decision making.

6. To achieve this, the renewables NPS needs to be written with this objective in mind. It therefore needs to cover all renewables technologies (not just wind, biomass and energy from waste). It also needs to require Local Authorities to make it a material consideration in their decision making. It needs to have equivalent status to a Planning Policy Statement until PPSs 1,10, 22 and 23 in particular can be re-written to fit with the NPS.
SCOPE AND RELEVANCE TO LOCAL AUTHORITIES

1. To influence the TCPA regime the NPS should have covered all renewable electricity technologies, even those which would be unlikely ever to come before the IPC. It should have clearly set out those issues that are generic and on which policy has been decided nationally (which therefore do not need to be considered by planners) and those issues which are likely to be relevant and location specific (which they should consider).

2. Given the need to boost the UK’s share of renewables in heat, the guidance should also be widened to incorporate thermal renewables, and infrastructure associated with the upgrading of biogas and syngas for injection into the gas network.

3. Furthermore local authorities should have been required to follow the advice in the NPS, and project developers should have had means of recourse, whereby a project developer can challenge the local authority if it is not following National Policy.

4. The wording of the NPS could be more robust with respect to local authorities. For example Para 1.2.1 suggests that the guidance “may be helpful” to local planning and “may also be a material consideration”. Once the guidance is made relevant to Local Authorities, the NPS should make clear that it should be followed. It should ideally have the status of a PPS or at least it should be stated that its status is “a very important material consideration” or “more than a normal material consideration”.

5. As there will not be time to incorporate other technologies in this draft, paragraph 1.7.1 of EN-3 could mention that the intention is to include them in the next iteration.

STATEMENTS OF NEED

6. The summary of need should explicitly refer to the mandatory target of 15% of total energy coming from renewables by 2020, and explain clearly how if deployment in the heat sector falls short, the electricity component will have to grow.

7. The need for renewable electricity projects cannot be overstated, given the target, the current level of deployment and poor progress to date. Para 1.1.1 of EN-3 should set out targets explicitly and the fact that a six–seven fold increase in renewable electricity generation is anticipated. Reference should be made to the wide gap between previous, less ambitious targets and actual achievements to emphasise the scale of the challenge.

8. Pages 15–22 justify the conclusion that the UK needs a diverse mixture of all types of power generation. However, the way in which the text is written suggests that the IPC might be being invited to make a judgement on the degree of need, whereas this is not the objective. The text should be clearer on this.

9. Clarity on the need is very welcome, although should be more strongly worded for renewables. It should also be made clear that all types of project are needed, both large and small, power and heat, including indirect heat via biomethane injection to the gas network. This should be very material for local authorities. It would also be useful to include the words “Therefore, when considering a prospective energy project, either the IPC, or in the case of smaller-scale energy proposals, the relevant local planning authority, can begin assessing proposals on the basis that the national need has been established”.

COMMENTS ON BIOMASS

10. We very much welcome the statement in the overarching document that more bioenergy is possible and desirable (page 13). There are plans for around 4GW of large biomass plant based at sea ports, importing by products from forestry plantations that would otherwise not be utilised. As the container ships are very large and efficient, the long distance over which the material is imported results in minimal carbon emissions. Furthermore because these plant are fuelled by imports, they do not have a negative impact on smaller decentralised, typically heat only or CHP plants which use fuelwood sourced from within the UK.

11. There is also a role for larger power plant at around the 50MW scale, which may take domestic biomass materials, some of which are encompassed by the waste framework directive (such as demolition/construction waste wood).

12. It is worth making the general point that the larger the scale, the more efficient the conversion efficiency. But large plant are often criticised if they are not CHP. However a combination of small scale heat only or CHP decentralised biomass, coupled with larger power only plant is likely to be more deliverable and only marginally less environmentally desirable than the holy grail of all plant being CHP.

13. Pyrolysis and gasification technology, whilst mainly being developed in the energy from waste sector (see below) is, of course, also applicable to biomass.

264 The Tees Valley project estimates that the carbon emissions from long distance travel accounts for around 35g CO2 per KWh electricity generated. This contrasts with coal fired plant which emits 880g CO2 per KWh at source, which does not take into account of the fact over 70% of the UK’s coal is imported.
Comments on Energy from Waste

14. The guidance in both EN-1 and EN-3 refers in several places to whether energy from waste plants are eligible for ROCs or not. This is not material. Whether they qualify for ROCs or not, they still qualify towards meeting the UK’s mandatory renewable energy target. PPS1 Climate Change Supplement already has introduced the concept of “renewable and low carbon energy” to deal with the fact that energy produced from waste will include some that is of fossil origin. This is however “low carbon” partly because it has previously had a productive life (unlike virgin fossil fuel) and also because its use enables the use of substantial quantities of short-cycle carbon biomass waste.

15. Para 2.5.2 of EN-3 says that “where in accordance with the waste hierarchy” energy from waste will play an increasingly important role in meeting the UK’s energy needs. Adherence to the waste hierarchy is not particularly applicable to biomass waste materials, as energy recovery can be a superior environmental option to “recycling” or “reuse”.

16. Page 11. Para 2.5.24 “Biomass or waste combustion plants are likely to generate considerable transport movements.” However in the context of many EFW facilities this may not entail any more transport movements than taking the material to a landfill site, it is just that the transport movements may occur in a different location.

17. We do not recognise the description of pyrolysis in EN-3 para 2.5.11 or pages 14 and 15. First pyrolysis is not combustion—it is a process which creates a fuel (gas or liquid) and a biochar (itself a valuable commodity, as explained below) from biomass whether that be of waste or other origin. The fuel can then be combusted either at the pyrolysis site (usually in gas engines) or remotely having been stored and transported, possibly via the gas mains. Secondly the equipment is smaller and modular, in contrast to grate systems which are larger “one off” installations. Buildings are around 15 metres in height with chimneys in the teens or twenties of metres, even for relatively large 10MW + installations. Thirdly, payback is much quicker meaning 25 + year waste supply contracts are not needed. The modularity is such that a unit could be redeployed to different sites throughout its life.

18. Residue management—page 18 of EN-3. Pyrolysis biochar has advantages. It can be used as a soil conditioner and will assist the bringing into use of waste and contaminated land for the growing of biomass fuel, particularly if it is mixed with compost products of other waste management activities. This could be a virtuous circle with, say, former landfill sites being treated with waste derived biochar and compost to produce biomass in turn used as a supplement to waste derived biomass in pyrolysis and gasification plants. Such use of biochar is also shown to sequester carbon in soil and substrate.

19. Pyrolysis and gasification are done to waste and other biomass to release energy and are not waste disposal activities in their own right—they largely complement other waste management activities. This distinguishes them from mass burn incineration which, as was shown by the judgement in the recent Capel case, cannot be considered “recovery” unless the generation of energy is the main purpose of the project.

20. Transport 2.5.25 of EN-3. Waste arises in a dispersed fashion and it may be counterproductive to bulk it up to the extent required for water or rail transport. Insistence on this could serve only to concentrate road vehicles at the loading point.

Other Comments

21. There is no mention of hydropower whatsoever in the Renewables NPS. Its absence is particularly stark in para 3.4.3.

22. The IPC should not be in the position of second-guessing what the Environment Agency might say. Para 4.10.8 states “The IPC should not refuse consent unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.” This should be deleted.

23. It is recognised that NPSs are about large scale infrastructure and that many of the comments above on biomass and energy from waste concern smaller scale projects. These projects in themselves are, however, a part of a new system of infrastructure. Taken together the infrastructure for receiving and treating waste, producing energy, managing residues (including potentially by their use to produce supplementary biomass feedstock and by so doing remediating contaminated land and sequestering carbon in it) could be considered a significant integrated project and a streamlined consent giving process for all aspects of that would speed delivery of climate change avoidance targets.

Wave and Tidal Energy

24. Whilst the IPC is required to make decisions on wave and tidal energy over 100MW the draft guidance does not cover it. There is no explanation as to why it is missing, nor when it will be incorporated.

25. The bullet point on wave and tidal on in para 3.4.3 states that “Para 1.3.5 explains how this NPS relates to wave and tidal generation.” However para 1.3.5 has no reference to wave and tidal generation.

265 Eg para 3.4.3 in EN-1 and 2.5.2 and 2.5.9 in EN-3.
Para 4.18.12 mentions Marine Conservation Zones. Marine renewables developments and Marine Conservation Zones can happily co-exist. We refer you to the joint REA—English Nature statement, appended with this evidence. Paragraph 1.2.2 does not give any further guidance on this. The NPS should make clear that being in an MCZ does not necessarily detract from the conservation objectives of MCZ, indeed it could even enhance it.

The proposals outlined on pages 62—63 could entail a great deal of expense. The REA would like to see the costs of environmental impact assessment and modelling costs should be proportionate to the size of the project. We have suggested that this should be capped at should be capped, as a percentage of the project budget.

Comments on Wind Energy and Spatial Planning

We have not addressed the sections on wind and offshore wind. However we do wish to make a general criticism of the areas of search approach to planning. We realise that this is not directly relevant to the IPC and welcome that the draft NPS says “Whether or not an application conforms to the guidance or the targets will not, in itself, be a reason for approving or rejecting the application.” (para 2.2.1) We do, however, wonder about the significance of the following paragraph, as it seems to suggest that boundaries of areas of search might be particularly important and relevant.

For information we set out our arguments below why we feel such an approach is not helpful in the UK, as we wish to draw this to the Select Committee’s attention. We would be interested to know if the IPC has a view on the wisdom of this approach.

Our objections to the concept of “areas of search” stem from the basic premise that project developers are best placed to identify potential sites. There could never be the same extent of expertise within the local authority, across the range of technologies involved, to undertake the task as well as a project developer. Indeed, in those areas where local authorities have undertaken such exercises in the past, project developers have often found it to be unhelpful.

— Clearly defined criteria-based policies above identify the areas and circumstances in which RE development is unlikely to be acceptable—the logical corollary to this is that RE development is generally acceptable in all other circumstances. Areas of search do not therefore particularly add to this. Indeed they would be likely to have the effect of eliminating areas which are outside the “area of search”.

— The “area of search” approach is used mainly for wind. Defining “areas of search” for different renewable energy sources would imply picking what technology occurs where. It is the Government’s policy not to pick winners, but for the market to determine which resources are developed. The planning system should not obstruct this policy. Moreover, any technical information is only as good as the work on which it was based—which is often highly assumptive in its nature—and as technology changes so more areas become feasible for development of different technologies.

— We are concerned about the amount of effort required from local planning authorities in defining areas of search. This may considerably slow down the process of preparation and adoption of development plans and, in turn, frustrate planning applications. There is also scope for objectors to sensitise local communities if their area has positively been selected as an area suitable (eg) for wind energy development.

— By its very definition an area of search is a preferred area for development. This renders it less easy to get planning permission for otherwise perfectly acceptable projects outside areas of search.

— Taking minerals as an example; areas of search for minerals can only be in areas where gravel exists. Applying areas of search will inevitably increase the price of the land concerned, because it limits the resource available. Renewable energy needs to be produced as cheaply as possible and cannot afford extravagant land prices.

January 2010
Memorandum submitted by Rother District Council
THE DEPARTMENT FOR ENERGY & CLIMATE CHANGE (DECC)
CONSULTATION RESPONSE TO DRAFT NPS—EN–6 ON NUCLEAR ENERGY WITH PARTICULAR REFERENCE TO THE EXCLUSION OF DUNGENESS

INTRODUCTION

1. Rother District covers the eastern third of East Sussex and borders Kent and Shepway District to the east. Dungeness Power Station is located several miles into Kent. Rother District falls well within the 25 miles drive to work area of the power station.

2. This response has been prepared in consultation with Cllr Brian Kentfield (Chairman of Planning Committee) and Cllr Paul Osborne (Cabinet Lead on Plan Policy).

EXECUTIVE SUMMARY

3. Dungeness Power Station currently employs approximately 1,000 people. It is a major local employer and has significant benefits for the local economy. It is considered that future socio-economic benefits, particularly in the Rother District, have not been given sufficient weight in the decision making process to exclude Dungeness.

COMMENTS

4. The draft Nuclear NPS (EN–6) follows the Government’s Strategic Siting Assessment (SSA) process and lists 10 sites that the Government has judged to be potentially suitable for the deployment of new nuclear power stations by the end of 2025. These are all locations where existing nuclear power stations are located. Dungeness had been nominated by EDF Energy as a candidate site for a new station and this nomination has been supported by Rother District Council. However, because the site did not meet SSA discretionary criterion D6: “Internationally designated sites of ecological importance”, the Government has stated that it is not satisfied that Dungeness is potentially suitable for the deployment of a new nuclear power station by the end of 2025. Consequently Dungeness is the only nominated site not included in the draft Nuclear NPS.

5. In addition to their main function as energy suppliers the power stations have been a longstanding driver of growth, prosperity, skills and educational attainment and have been highly supportive of social and environmental action on the locality. With the current decommissioning of A Station and future decommissioning of B Station (planned for 2018 but possibly with production extended to 2023), the exclusion of a future power station at Dungeness will have not only a critical impact on the locality, by limiting the potential for socio-economic development locally, but could also limit the country’s capacity to produce non-carbon based electricity.

6. Dungeness has been a major power source for the region for the last 40 years which have been major drivers for growth, prosperity and skills development sub-regionally. The site currently employs approximately 1,000 staff in the following breakdown:

   A Station, currently decommissioning, employs:
   361 full time posts (incl. nine graduates)
   13 agency staff
   69 contractors

   B Station currently employs:
   553 full time British Energy employees in Jan 09
   211 full time contract staff
   23 apprentices in total

7. B Station’s wage bill contribution to the sub-region (most employees live within 25 miles of the power station; which includes Rother District as well as Dover and Hastings) is in excess of £30 million per annum.

8. Rother District Council strongly object to the exclusion of Dungeness as a future site for a nuclear power station on the grounds of:

   — The regional/local socio-economic benefits of developing Dungeness should be given more weight.

9. Rother District Council would also support Shepway District Council’s objection to the exclusion of Dungeness as a future site for a nuclear power station. These reasons are summarised below:

   — It is premature to conclude that the direct loss of vegetated shingle habitat from the Special Area of Conservation cannot be adequately compensated and that Natural England’s objections cannot be addressed and there is no evidence that a combination of measures including avoidance, mitigation and compensation is not viable.
   — Notwithstanding any ecological concerns there is an Imperative Reason of Overriding Public Interest (IROPI) which justifies the inclusion of Dungeness.
   — Dungeness can be brought forward more quickly than the other identified sites.
— That the Dungeness site can make a meaningful contribution to the UK’s non-renewable capacity by 2025 and that it has not been assumed that the other nominated sites will be sufficient to meet this target or indeed that all those sites will receive development consent from the IPC.
— That reaching conclusions prior to the consultation is premature.

January 2010

Memorandum submitted by the Royal Academy of Engineering

Response from:
— The Institution of Chemical Engineers.
— The Institution of Civil Engineers.
— The Institution of Engineering and Technology.
— The Institution of Mechanical Engineers.
— The Royal Academy of Engineering.

The Royal Academy of Engineering, the Institution of Chemical Engineers, the Institution of Civil Engineers, the Institution of Mechanical Engineers and the IET are pleased to submit a joint response to the House of Commons Energy and Climate Change Committee on the National Policy Statements for Energy Infrastructure.

The response was formulated by consulting with experts in the field from all the organisations listed above. It deals mainly with the general engineering aspects of the consultation from a multidisciplinary perspective.

1. INTRODUCTION

1.1 Our organisations welcome the opportunity to respond to the Energy and Climate Change Committee’s inquiry into the proposals for energy national policy statements (NPSs). If the UK is to meet the emissions reductions targets set out in the Climate Change Act while maintaining a secure and affordable energy supply, significant amounts of new energy infrastructure will need to be built in the coming decade and beyond. Clearly, if this is to be achieved in a timely and efficient manner, the planning regime will play a crucial role. The current system has been shown to have some major failings, resulting in lengthy delays for a number of applications for planning consent. The urgency of the issue means that this situation cannot be allowed to continue and we support the efforts being made by Government to overhaul the system following on from the Planning Act (2008).

1.2 The urgent need to reform the planning system should not, however, be used as an excuse to create shortcuts around democratic processes. The wholesale changes expected in the energy system will require difficult and complex decisions to be made, many of which are liable to be unpopular to sections of the public at both the local and national level. It is therefore of the utmost importance that the consultation process for the NPSs is seen to be sufficiently comprehensive in order for the new framework to gain public legitimacy. Without this, the Infrastructure Planning Commission (IPC) will be unable to function effectively and the NPSs themselves could face judicial review.

1.3 This response will focus on the general features of the proposals and any issues that have a specific engineering aspect. A more detailed response will be submitted in response to the current Department of Energy and Climate Change consultation. Our aim will be to ensure that the draft NPSs are technically sound and fit for purpose.

1.4 The scale of the documentation in itself poses a problem. Organisations with experience of engaging in Government policy consultations will be well placed to engage as they will already be aware of many of the issues and already hold views on the related documents such as the Planning Act and the Low Carbon Transition Plan. Smaller organisations and individual members of the public will not be so well placed to comment even though the issues under consideration, especially in the areas of renewable energy and nuclear power, are of national concern.

2. THE NEED FOR NEW ENERGY INFRASTRUCTURE

2.1 The challenges ahead for UK energy policy require a coordinated national strategy and clear implementation plan if they are to be met. We support the basic premises of this policy as described in the NPS, namely that the future energy system must:
— increase efficiency and reduce demand wherever possible;
— be made up from as diverse a range of primary fuels as possible; and
— increase the proportion of low carbon energy.

2.2 This strategy must be implemented quickly and efficiently for a number of reasons, as laid out in the consultation document, and while it is vital to retain the democratic rights of people to have their views heard on any developments that will affect them, it is important that the general principles of the energy strategy
are not repeatedly debated for each individual application, resulting in serious delays the planning process. This does, however, mean that the current consultation process for the NPSs is particularly important as it represents the last chance the public have to influence the national policy the IPC will be acting upon.

2.3 In engineering terms, there are a number of areas of the energy strategy that raise concerns. Consider, for example, paragraph 3.3.23 of EN-1:

"Government believes that although increased energy efficiency, smart demand management and opportunities for increased storage and interconnection are being actively pursued, their effect on the need for new large scale energy infrastructure will be limited, particularly given the prospect of increased need for electricity for heating and transport."

2.4 While we accept the basic premises of this statement, there are a large number of uncertainties implicit in it. Smart grids could have a significant effect on the energy system. Indeed, if large proportions of energy demand from transport and heat are to be met by the electricity supply, the extent to which that demand can be managed will have a major effect on the level of large scale energy infrastructure required. Also, the fact that this electricity supply will need to be low carbon, and therefore include large amounts of renewable energy, will require major upgrades in the transmission and distribution systems in very particular areas.

2.5 The increased demand, met by large amounts of intermittent renewable energy and networks of localised and distributed energy sources will, in fact, only be achievable through increased storage and interconnection in a "smart grid". And the infrastructure required to build such an energy system will not only need to be built in the right place but also at the right time so that assets are not left stranded. In the absence of a fully coordinated build programme, as seems likely in the liberalised energy market, it needs to be accepted that transmission and distribution infrastructure will need to be built ahead of need.

2.6 What these issues highlight is the need for a coordinated, strategic and planned approach to building the UK’s future energy system. But, as it is laid out in the overarching NPS (EN-1), the IPC is simply expected to start its assessment from the basis that there is a significant need for all types of electricity generation, gas infrastructure and oil pipelines. There are no provisions for the IPC to keep track of what infrastructure the public will have to accept that transmission and distribution infrastructure will need to be built ahead of need.

2.7 Therefore, while the NPSs raise a number of engineering issues about energy infrastructure development, as long as the basic requirement for the IPC is to assume that there is a need for all types of generation and networks there is little point in these issues being raised as they would not affect how the IPC deal with applications at the fundamental level.

2.8 The thresholds set for the size of generating plant or electricity lines that the IPC will consider also raises a concern with regard to developing a coordinated energy system. The 50MW/100MW thresholds for the generating plant are reasonable levels to assign any smaller and there would be too many applications for the IPC to process and any larger would miss out some sizable installations. However if, as is intended, the new planning system is to provide a holistic planning regime for major projects, much of the attendant infrastructure—the access roads, water supply, etc.—will fall outside of the IPC’s remit and require separate applications. Certain aspects of this are covered such as grid connection in section 4.9 of EN-1 but even in this case, the framework appears to be somewhat brief. Some clarification on how this would operate in practice would be helpful.

2.9 The 132kV limit on electricity lines also raises concerns as this will restrict the IPC to only considering major transmission lines. If widespread electrification for heat and/or transport is adopted, the distribution system will also need to be significantly upgraded. This is likely to represent an even greater undertaking than the necessary upgrading of the transmission system because the move towards smart grids will fundamentally change the distribution system, because of the significant system implications of electric vehicle and electric heating loads. It could be argued that, although this involves installations that fall well below the current NPS thresholds, it would require change at the national level and hence consideration within the national strategy. How this would work in practice is uncertain but the issue is raised here primarily to highlight the fact that a viable future energy system, particularly one with a much larger electrical capacity and integrated supply and demand management, will be required in a greater diversity of places on a wide range of scales. Coordinating appropriate aspects of this system at the national level (as well as regionally and locally) will be vital. It may be possible to address this issue by further clarification of the “Exceptions” already present in the draft NPS.

EN-1, paragraphs 3.7.1, 3.9.8 and 3.10.8
3. **Carbon Capture and Storage**

3.1 Beyond these general strategic concerns there are a number of other issues that have a specific engineering aspect, particularly regarding carbon capture and storage (CCS).

3.2 Demonstration of “the economic feasibility within the combustion station’s lifetime of the full CCS chain”\(^{267}\) will be almost impossible at the moment. There is no certainty of costs, and any consideration of economic feasibility is critically dependent on carbon price and gas price in the future as these will drive prices in the electricity market and hence revenues. It is likely that some scenarios of these three variables will demonstrate feasibility and others not. Therefore, it seems likely that this will either act as a barrier to proposals coming forward for new coal fired power plant, or become something of a fig leaf, where certain assumptions are taken as more reasonable than others because they produce a “correct” answer.

3.3 Although we understand the desire to get early CCS projects under way in order to learn and to demonstrate technology there is a strong argument that a separate NPS should be developed that addresses the carbon transport infrastructure and carbon storage infrastructure, to allow effective planning of these strategic resources, and for the right market signals to be sent for power plant siting decisions.

3.4 With CCS at such an early stage of development it is clear that the guidelines on how to deal with the technology will continue to be upgraded (refer to paragraph 4.7.16 of EN-1). As such it is difficult to make any more detailed appraisal of the issues until the first demonstration plants provide evidence of the engineering realities of building and operating such plants and transporting and storing the CO\(_2\).

4. **Summary**

4.1 Overall, we welcome the introduction of the new planning regime, the NPSs and the IPC. Any attempt to introduce a strategic view of the key components of energy policy is to be supported. The general needs as laid out in the overarching NPS (and associated documents such as the Low Carbon Transition Plan) are broadly in line with our assessment of what is required from the UK’s energy system. However, it must be remembered that the future energy system will be vastly different to the current system, especially in terms of energy flows, and the engineering realities of building the system will likely throw up some unexpected difficulties. The framework that is put in place now must have the flexibility inbuilt to deal with such eventualities as well as a sufficient overview of how the system is developing to identify problems as they arise.

4.2 One further note of caution; even a successful planning framework will be ineffectual if the IPC and local planning authorities are not adequately resourced, both financially and in terms of sufficiently experienced personnel. In this respect, the Academy is well placed through its networks to identify individuals with expertise in all areas of energy to provide advice where necessary, but staff of the right calibre will be needed across the whole planning system.

*January 2010*

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**Memorandum submitted by the Royal Institution of Chartered Surveyors**

**About RICS**

The Royal Institution of Chartered Surveyors (RICS) is the leading organisation of its kind in the world for professionals in property, construction, land and related environmental issues. As an independent and chartered organisation, the RICS regulates and maintains the professional standards of over 91,000 qualified members (FRICS, MRICS and AssocRICS) and over 50,000 trainee and student members. It regulates and promotes the work of these property professionals throughout 146 countries and is governed by a Royal Charter approved by Parliament which requires it to act in the public interest.

RICS members are involved in a wide range of roles within the energy and planning sectors, including managing the land required for the development of new energy technologies and their related infrastructure connections (eg cables and pipelines), dealing with associated valuation and compensation issues, and managing the construction of infrastructure projects.

**Executive Summary**

— RICS supports a strategic approach to land use and planning and the contribution this can make to a low carbon economy, but is concerned about the disjointed nature of the Government’s overall NPS consultation, particularly as each of the national policy statements is published for consultation in isolation from the other statements.

— In the interests of energy security for the UK, RICS supports the Government’s advocacy, through the National Policy Statements, of a multi-modal energy infrastructure capacity which can meet demand peaks and troughs, and calls for ongoing monitoring of emerging low carbon energy technology which could affect the proposed split between fossil fuels, nuclear and renewables.

\(^{267}\) EN-1, paragraph 4.7.1
— The NPS consultation document’s assumption that much renewable energy technology offers only intermittent generation is not supported by RICS members’ experience in other European countries, where renewables can be relied upon to generate a large proportion of electricity demand and in some cases may respond more quickly to peak demand than conventional plant.

— RICS is cautious over how realistic the Government’s planned nuclear expansion is in the context of national and international nuclear sector skills.

— RICS welcomes the funding for the carbon capture and storage (CCS) demonstration projects, but is concerned that the specified dates for the demonstration projects to be operational and show their economic and technological viability do not seem to allow an adequate timescale for operational testing.

BACKGROUND

RICS’ response to the Energy and Climate Change Committee’s call for evidence is within the context of RICS’ wider views on the requirement for sustainability and climate change adaptation and mitigation to be at the heart of spatial planning. In 2009 RICS published its Global Climate Change Strategy and UK Climate Change Action Plan, and these both set out key areas in which the property profession can support the transition to low carbon economies.

Sustainability at the heart of planning can significantly contribute to mid and long term carbon reduction, from the locations of new homes and workplaces to avoid unnecessary commuting, optimising low carbon public transport systems, and prioritising energy efficient buildings—all measures which result in overall energy savings.

RICS views strategic planning as essential to the vitality of UK Plc, as well as communities and businesses across the UK who need predictability and consistency in planning and infrastructure policy and delivery. RICS is concerned that the right balance must be struck between the needs and views of local communities and the wider requirements of the UK for its continued growth. The 2008 Killian Pretty Review promoted the use of Alternative Dispute Resolution, or mediation, throughout the planning process, and RICS is actively promoting mediation as an essential tool to ensure that the views and voices of all are taken into account. RICS manages a Planning and Environmental Mediation Service, referring cases to a panel of accredited mediators from a number of planning and environment professional backgrounds.

TIMING

The likely timescales presented for the delivery of proposals for nuclear and also other potentially controversial projects may be unrealistic, given the possibility of legal challenge which the NPS and IPC system of policy development and strategic environmental assessment has created.

Although the IPC, supported by the framework of the NPSs, is intended to streamline the planning process, there could be a significant delay in the event of a legal challenge on the basis of a contention that policy has effectively been decided prior to a full and objective assessment of the options, particularly with regard to the presumption of need.

JOINING UP STRATEGIC GUIDANCE FOR THE IPC

Given the need for a joined-up approach to strategic planning in the UK, RICS is concerned that the draft National Policy Statements for Energy and Ports have been published for consultation in isolation from the other National Policy Statements on issues such as roads, rail and airports, which will be published for consultation later in 2010–11.

Much of the energy infrastructure mentioned in the NPS, as well as any new port developments, are reliant on being located on good road/rail links. Until consultees have reviewed the other National Policy Statements it is difficult for them to provide strategic comments with only parts of the full infrastructure policy available. RICS will examine the forthcoming draft NPS on strategic infrastructure in particular to ascertain whether there may be any aspects which are not joined up with this suite of energy NPS.

Similar concerns over the current lack of clear strategic guidance from Government have been expressed by a wide range of people involved in the delivery of utilities infrastructure. RICS is currently collating a research paper, in conjunction with Arup, for The Northern Way. Entitled Utilities as a barrier to regeneration, the report includes comments from those working across the utilities sector in public and private sectors in the North of England, identifies legislation which disincentives energy infrastructure delivery, as well as poor communication from Government regarding strategic planning guidance, as some of the key issues facing the sector.

ENERGY SECURITY

RICS supports national energy security measures and supports the Government’s advocacy of a mixed energy infrastructure which can handle existing and projected demand peaks and troughs. In the context of the decline of indigenous gas and oil resources in the UK, as well as the low carbon imperative, it is critical that further diverse-source energy generation capacity is developed in the short to mid term to avoid significant economic challenges for the UK.
Nuclear Infrastructure Capacity

As part of its planned mix of new energy supplies, the Government states that (EN-1, 3.1) “in principle, new nuclear power should be free to contribute as much as possible towards meeting the need for 25GW of new non-renewable capacity”.

RICS is cautious over how realistic the projected supplies and new nuclear developments are, given the national and international shortages of skilled professionals in the nuclear industry. This view is shared by the House of Commons Innovation, Universities, Science and Skills Committee, where, in its Fourth Report on Engineering: turning ideas into reality (2009), it stated:

“We note the Government’s optimism that delivering new nuclear power stations within 10 years is possible. However, we are not convinced that the skills shortage in nuclear engineering can be bridged quite as easily as some have suggested.”

The UK is one of a number of countries supporting a nuclear energy expansion as part of their drive to lower carbon emissions, and competition for limited resourcing—and associated costs—are likely to be intense.

Carbon Capture and Storage

RICS recognises the vital role carbon capture and storage technology can play in reducing overall carbon emissions for the energy sector, and welcomes the funding being made available by the Government for up to four coal CCS demonstration projects which it states will be operational by 2020. However, RICS notes that in 4.7.15 of EN-1, the text reads that “it is the Government’s expectation that new coal power stations will be fully CCS from day one once CCS has been shown to be economically and technically viable, and that this will be possible from 2020”. The dates for the demonstration projects to first be operational and then show that they are economically and technically viable do not seem to allow an adequate timescale for testing their viability.

Levels of Energy Generation from Renewable Energy

RICS supports the expansion of renewable energy generation capacity, based on its low carbon attributes and the rapid development of technology and skills which is allowing it to contribute substantially to national energy requirements.

In document EN-1, 3.3.25 the text reads that “many renewable technologies only provide intermittent generation”. RICS international members’ experience shows that it is not only possible to allow renewables to meet a large proportion of regional/national electricity demand, and even exceed demand by exporting to neighbouring systems (eg Denmark and Germany), but to also adjust output and thereby contribute to peak demand times.

Experience shows that if wind output is deliberately constrained prior to expected demand peaks, or hydro capacity held in reserve, and instead conventional plant run at a higher level, renewable energy infrastructure can actually respond more quickly than conventional plant in meeting rapid increases in demand when they do occur.

Given the development of energy technology, RICS supports the ongoing consideration of the evolving low carbon energy infrastructure and its appropriateness to meet the needs of higher shares of the UK’s energy demands.

January 2010

Memorandum submitted by the Royal Society for the Protection of Birds

Executive Summary

The challenge of climate change demands nothing short of a revolution in the way we use and generate energy. It is clear that we will need to end our dependency on fossil fuels, massively reduce the amount of energy we use and deliver environmentally sustainable renewable energy. We want this revolution to take place in harmony with the natural environment. The RSPB has argued that the natural environment is not sacrificed in pursuit of wider public policy objectives.

The RSPB welcomed the principle of National Policy Statements (NPSs) when they were first proposed in the Planning White Paper of 2007. However, the draft energy NPSs are highly deficient as planning documents and in terms of compliance with environmental law. In particular, their inadequate approach to need and alternatives will hinder the Infrastructure Planning Commission’s decision-making process, contrary to the intention of the new planning system. There is a serious risk that the NPSs will neither speed the delivery of low-carbon infrastructure nor give adequate protection to the natural environment.
KEY CONCERNS

— The nature of NPSs: the NPSs are more development control documents than strategic policy statements. They are not spatial (except for nuclear) and they are not integrated with each other, especially with non-energy NPSs. Their relationship with the rest of the planning system is unclear, especially in Wales.

— Need: although there are projections of energy demand, there is no attempt to prescribe how much infrastructure or of what type is needed, or where. The NPSs simply state that a lot more of everything is needed, and quickly. As a result, the NPSs assert an overwhelming, urgent need for new infrastructure, which is used to relegate any environmental concerns to issues of local detail.

— Appraisal of Sustainability/Strategic Environmental Assessment (SEA): an analysis commissioned by the RSPB and WWF shows that the appraisals have been carried out very poorly and are not compliant with the SEA Directive. In particular, the objectives of the NPSs have been defined so narrowly as to exclude the possibility of reasonable competing alternatives.

— Habitats Regulations Assessment (HRA): similarly, the strategic HRAs carried out appear to be deficient. The scope of “alternative solutions” appears to be unduly narrow. The NPSs do not provide clear guidance on the proper application of the tests in the Habitats Directive.

— Carbon assessment: no carbon assessment is required for individual projects, and the IPC is essentially “carbon blind” in its decision-making. This places undue faith in the effectiveness of untested Carbon Capture and Storage and other policy interventions to deal with emissions issues, such as from coal and gas fired power stations.

— Impact criteria: the biodiversity criteria need to be robust in the face of the ongoing biodiversity crisis, not weakened to accommodate low-carbon infrastructure at any cost. There is some inconsistency in the way in which biodiversity policy has been incorporated into individual NPSs, and there is a gap in the coverage of generic ecological impacts in the Overarching Energy NPS.

— Nuclear sites: the removal of Dungeness from the list of proposed sites is welcomed. We will provide a more detailed response to the individual site proposals in our consultation response to DECC. More detailed assessments at the project stage will clearly be needed, both to consider the likely effects more fully and to consider the adequacy of mitigation and (where necessary) compensation.

— Consultation and scrutiny: given the timing of the consultation period, and the squeeze on the Parliamentary process caused by the delay in NPS publication and the forthcoming general election, we have concerns about how robust the consultation and scrutiny process will be.

THE NATURE OF NATIONAL POLICY STATEMENTS

1. Environmental groups such as the RSPB have recognised for many years the benefits of strategic planning in guiding developments of all types to the most appropriate locations, avoiding significant environmental harm. Strategic planning can do this in a number of ways; both positively by identifying areas or locations where development is needed, and negatively by identifying areas or locations where development is less appropriate or excluded altogether. Plans may be spatial or criteria-based or a combination of both; however, for plans which are purely criteria-based there is a greater risk that developers will propose poorly located development, only to have their schemes subsequently rejected.

2. The need for strategic, spatial planning is one reason the RSPB and others have called for the introduction of some kind of national spatial framework or strategy for England, along the lines of the Wales Spatial Plan or the National Planning Framework for Scotland. The RSPB considered that the national policy statements could be a step towards this approach by providing a national spatial infrastructure plan for England and Wales.

3. However, with the exception of nuclear, the energy national policy statements are not location-specific. Indeed, they cannot be described as spatial in any sense of the word. Some of the generic criteria may apply more particularly in some places than others (for example, in protected landscapes or wildlife sites). Despite this, the national policy statements’ view of the country is of a blank canvas; one where the Government is generally not concerned where the infrastructure goes, only that it should go somewhere, leaving the Infrastructure Planning Commission to sort out the issues.

4. As the energy national policy statements are not spatial in nature, there is little spatial integration between them, even though they are presented as a suite of documents, with an overarching energy NPS. This lack of integration is even more apparent when set alongside the ports national policy statement, published at the same time. This matters because ports may host various types of energy infrastructure or have others in close proximity, such as oil and gas storage facilities, biomass and nuclear power stations, and may act as the landfall location of submarine cables from offshore windfarms.

5. The relationship of national policy statements with the rest of the planning system is also unclear, particularly in Wales. EN-1 states that it may be a material consideration in decision-making on applications that fall under the Town and Country Planning Act 1990 (ie for projects which fall below the thresholds in
the Planning Act 2008) (para 1.2.1). The “Generic Impacts” section of each NPS is intended to take account of relevant Planning Policy Statements, older-style Planning Policy Guidance Notes in England and Technical Advice Notes in Wales where appropriate (EN-1 para 4.1.2).

6. EN-1 does make clear that, although there may be occasions when the IPC will need to refer to these documents, and to development plans, where there is any conflict the NPS will prevail. However, the relationship with the Wales Spatial Plan (which has no direct equivalent in England) and TAN8 on renewable energy is less clear. TAN8 has an explicitly spatial approach to renewables planning in Wales, which is very different to the approach of its equivalent in England, PPS22. The RSPB is concerned that in Wales, developers may start to bring forward inappropriate proposals in contravention of the approach set out in TAN8. This would undermine many years of work by the Welsh Assembly Government, the result of which is that Wales is predicted to attain its highly ambitious 2020 target for onshore renewable energy generation.

7. In short, the energy national policy statements are more development control documents than strategic policy statements. They could have been the first step towards an integrated spatial strategy, the missing piece of the jigsaw in England’s planning framework. Instead, it is a missed opportunity.

Need

8. The question of need lies at the heart of strategic planning. Regional plans, for example, which have to deal with a number of market-oriented development sectors such as housing, retail and business uses, have to tackle questions such as how much land is needed and in what areas. According to the Planning Act 2008, national policy statements may in particular “set out . . . the amount, type or size of development . . . which is appropriate nationally or for a specified area.” (s 5(5)(a)).

9. The national policy statements (again, with the exception of nuclear), almost entirely duck this question. There are, indeed, projections of demand for different infrastructure types, but the national policy statements do not even give an indicative view of how much is needed, or where. The conclusion is simply that we are likely to need a lot more of everything, and indeed that we should plan for significantly in excess of what we actually need because not all of it may come forward for development, or because there is a need for spare capacity. The IPC is therefore not allowed to question this assumption of need, or that there may be more acceptable alternatives to any given proposal.

10. This has particular implications for proposals which affect Natura 2000 sites, as discussed further below. Generally, though, this means that the national policy statements are a developer’s charter. They are also a blunt tool, establishing an overwhelming need for new infrastructure which is used to relegate any concerns about the natural environment to issues of “local” detail. Even where this detail concerns impacts on internationally-designated sites, the effect of the policy will be to weight strongly the decision in favour of granting consent. While this may speed up consent for some specific proposals, in the longer term this is not an adequate basis upon which to deliver an overall coherent energy infrastructure in a timely way, nor to pursue wider energy policy including its sustainability and climate change objectives.

Appraisal of Sustainability/Strategic Environmental Assessment

11. Strategic Environmental Assessment (SEA) is an internationally-recognised planning tool, the purpose of which is to provide for a high-level of protection of the environment. In discussions on the Planning Bill, the RSPB, supported by legal advice, argued that the SEA Directive (Council Directive 2001/42/EC) required that all NPSs should undergo SEA. The RSPB proposed that this should be incorporated within the “Appraisal of Sustainability”, in a similar manner to how the sustainability appraisal of regional spatial strategies and local development frameworks must incorporate SEA.

12. Although this approach was initially resisted by DECC, it has now been accepted in that the appraisal of each energy NPS states that it incorporates the requirements of the Directive (eg p v, Overarching Energy Appraisal of Sustainability).

13. The RSPB and WWF commissioned an analysis of the energy NPS appraisals by Collingwood Environmental Planning, specialists in SEA, as part of a broader piece of work considering the use of SEA by governments in the UK.

14. The report, which is due to be published in January 2010, assesses the appraisals against the requirements of the Directive. A summary table is annexed to this submission. This includes an analysis of the Ports NPS and the National Planning Framework for Scotland (NPF2) for comparative purposes.

Non-nuclear energy national policy statements (EN 1-5)

15. The requirement of the Directive for plans to consider “reasonable alternatives” is one of the most critical aspects of SEA and should act as a valuable tool for decision-makers in searching for the least environmentally damaging options. However, this is the most significant weakness of the non-nuclear energy appraisals. The objectives of the NPSs have been defined so narrowly as to exclude the possibility of reasonable competing alternatives. The consultants commissioned to undertake the appraisals (Entec) proposed eight alternative strategic options, but these were dismissed by DECC, effectively because they considered them to be incompatible with the objectives of the NPSs (pp ix-x, Overarching Energy NPS Appraisal of Sustainability).
16. Some of the statutory agencies who were consulted on the scope of the appraisals raised a similar concern about the narrow range of alternatives (for example, the Environment Agency, Joint Nature Conservation Committee and Scottish Environmental Protection Agency, in Annex C, Overarching Energy NPS Appraisal of Sustainability). They also seemed to be under the impression that the high-level alternatives considered for EN-1 would be supplemented by more technology and/or location specific alternatives in EN-2 to EN-5.

17. The only alternatives considered (four) were whether to have an NPS at all or to have NPSs with increasing levels of specification. In the RSPB’s view, this borders on the nonsensical, as the purpose of the appraisal is to appraise the policies in the NPS (as required by s 5(3) of the Planning Act 2008), not different ways of doing the NPS or even whether to have an NPS or not.

18. The CEP report concludes: “The opportunity to engage in a real debate and further specify existing policy about energy technologies was completely lost, because the overriding imperative behind the NPS was to speed up decision-making. The term ‘reasonable’ has been interpreted as whether an alternative is considered convenient for Government rather than whether it is a ‘reasonable alternative’ to meet the objectives set by the NPS. These would appear to be quite different things. The nod to the environment is in the form of seeking to minimise or avoid impacts through mitigation, but this misses the opportunity to avoid impacts through the appropriate selection of the most environmentally favourable options in the first place (e.g. a mix of technologies that would have the least adverse impact upon the environment), an essential tenet of the SEA Directive.”

19. A further significant weakness of the non-nuclear energy appraisals is in their identification and assessment of environmental impacts. The quality of the assessment is an essential requirement of the SEA Directive. A critical question is what is being assessed, but the appraisals are not actually assessing the impact on the environment of the NPS, more the impact of the NPS on the consenting process for projects, which is not adequate for the purposes of the Directive.

**Nuclear national policy statement (EN-6)**

20. The appraisal of the nuclear NPS was carried out separately, by different consultants, and to a different methodology. On the issues referred to above, the CEP report concludes that, overall, the nuclear appraisal is satisfactory in coverage and quality despite some omissions or inadequacies. However, there are concerns about the appraisal objectives, which are not sufficiently aspirational; the scoping, which excludes some appraisal objectives without justification, and monitoring, which is not considered at this stage and is therefore excluded from consultation. On these grounds alone, there must be questions about compliance with the SEA Directive.

**Conclusion on appraisal**

21. In short, the appraisals of all the NPSs are inadequate and raise concerns about whether they are legally compliant with the SEA Directive.

**HABITATS REGULATIONS ASSESSMENT**

22. Many Nationally Significant Infrastructure Projects are likely to affect internationally-designated wildlife sites (Natura 2000 and Ramsar wetland sites). The IPC, as decision-making body, is the “competent authority” for the purposes of the Habitats Directive and must ensure that its specific legal requirements are met. This is a means of ensuring that infrastructure is provided in a way that respects the integrity and coherence of Europe’s most valuable sites for biodiversity, and as such is not merely a matter of legal compliance.

23. The RSPB is concerned that the NPSs do not provide clear guidance on the proper application of the tests in the Habitats Directive. In particular, we are concerned about the guidance on alternatives that is provided in section 4.4 of the Overarching Energy NPS. There are two problems with this section: firstly, it glosses over the specific legal requirements which arise under the Habitats Directives (see section 4.4.2); and secondly, the range of alternatives offered is unduly narrow.

24. The NPS does not provide any adequate sector-specific guidance on how the IPC should consider arguments relating to the strict tests on Alternative Solutions, Imperative Reasons of Overriding Public Interest (IROPI), and compensation, for projects that cannot avoid adverse effects on Natura 2000 sites. This is extremely unhelpful to the IPC and could lead to unnecessary breaches of the requirements of the Habitats Directive.

25. The NPS does cross-reference to the general guidance on the Habitats Directive tests set out in the relevant Government Circular (ODPM 06/2005, Defra 01/2005, Biodiversity and Geological Conservation—Statutory Obligations and their impact within the Planning System). However, any decision of the IPC will be taken in the context of the finding of IROPI for the Habitats Regulations Assessment (HRA) of the NPS. The HRA of the NPS is deliberately not a site (or scheme) specific assessment, and only properly applies to justify the NPS; it does not and cannot constitute a finding that there are no alternative solutions and IROPI for each scheme.
26. The NPS correctly states that the IPC will need to satisfy those tests, but does little to guide the IPC on how to tackle these important tests. In fact, the role of the NPS in this context should be to establish the public interest objectives that an individual scheme should be contributing towards. Any scheme that cannot avoid an adverse effect on a Natura 2000 site is required to go through a sequence of legal tests aimed at ensuring the most sustainable solution is found in the interests of society. UK and EU guidance suggests that alternative solutions should be defined broadly and can include different sites, routes or different practicable approaches which would have a lesser impact, such as different technologies.

27. The IROPI test should only be considered once less damaging ways of delivering the public interest objectives have been exhausted. We are concerned that it will be difficult for the IPC to address these points, especially less damaging alternative solutions to meet the public interest objectives, in the face of arguments from scheme proponents that the issue of IROPI for their scheme has effectively been “pre-decided” by the HRA of the NPS.

CARBON ASSESSMENT

28. Article 3 of the Environmental Impact Assessment Assessment Directive (Council Directive 85/337/EEC, as amended) requires qualifying projects to be assessed for their direct and indirect impacts on, among other matters, climate. Most Nationally Significant Infrastructure Projects are likely to qualify under the Directive. However, the Overarching Energy NPS states that, “Given that the Government policies that underlie NPSs have been set in accordance with the Transition Plan and carbon budgets, the IPC does not need to assess individual applications in terms of carbon emissions against the budgets.” (EN-1, paragraph 2.1.5).

29. This means that in effect no carbon assessment is required for individual projects, and the IPC is essentially “carbon blind” in its decision-making. This places undue faith in the effectiveness of untested Carbon Capture and Storage and other policy interventions to deal with emissions issues, such as from coal and gas fired power stations.

IMPACT CRITERIA

30. Part 4 of the Overarching Energy NPS (EN-1) deals with assessment principles and generic impacts of energy infrastructure. Part 2 of EN2-5 deals in a similar fashion with assessment and technology specific information. These sections provide detailed information and criteria for the IPC’s decision-making. They are intended to provide a clear statement of Government policy on a range of issues, including environmental impacts.

31. The RSPB has focussed its attention on the assessment principles set out in sections 4.2–4.4 in the Overarching Energy NPS, section 4.18 “Biodiversity and geological conservation” and corresponding sections in the other NPSs.

32. We make these comments in the context of a continuing biodiversity crisis and the almost certain prospect that the UK will fail to meet its target of halting biodiversity loss by 2010. New targets are likely to be set during 2010, which must recognise that the country’s economic and social health depends in large measure on the health of our ecosystems. The impacts of climate change are already placing further pressure on the natural environment, and it is short-sighted to argue that the need for low-carbon infrastructure, pressing though it is, should override biodiversity protection (EN-1, para 4.18.6).

33. Current Government policy on biodiversity and geological conservation is set out in Planning Policy Statement 9 (2005), which has generally been incorporated into the NPSs. However, there is some inconsistency between NPSs; for example, EN-4 provides useful guidance on mitigation during construction (EN-4, para 2.7.22), and EN-5 does the same for providing information for an appropriate assessment under the Habitats Regulations (EN-5, para 2.3.1). These statements could be usefully included in other NPSs. We will make more detailed comments in our full response to DECC.

34. The Department of Communities and Local Government is currently undertaking a review of PPS9. The RSPB understands that it will be merged with other planning policy statements which deal with the natural environment, and that a consultation draft may be published shortly. We are concerned both that there must be no weakening of the policy and that there must be consistency between the NPSs and the new PPS.

35. We are also concerned about an apparent gap in the coverage of ecological impacts between the Overarching Energy NPS and the technology-specific NPSs. EN-1 sets out the key principles and decision-making process as it affects biodiversity, taken from PPS9. There is also a welcome reference to Government Circular ODPM 06/2005, which sets out statutory obligations. However, EN-1 does not refer to generic ecological impacts which might arise from infrastructure, such as habitat loss, disturbance, barrier effects and so on.

36. This would be acceptable if these points were picked up in the remaining NPSs, but they only consider technology-specific ecological impacts (such as collision risks for wind turbines), and refer back to EN-1 for coverage of generic impacts (where, as noted above, these are not adequately covered). The IPC needs clear guidance on the types of ecological impacts it should be considering, similar to para. 2.12.3 of the Ports NPS (although this list is incomplete).
Nuclear Sites

37. The RSPB welcomes the Government’s decision to drop Dungeness from the list of sites included in the draft Nuclear NPS. We agree with the conclusions of the Appraisal of Sustainability and the Habitats Regulations Assessment (HRA) on this site, and with Natural England’s view that it is likely to be very difficult to mitigate or to compensate for the loss of internationally important shingle habitat.

38. The HRAs carried out for the identified nuclear sites (including possible alternatives) appear in the majority of cases to identify the likely significant effects on Natura 2000 sites. The lack of detail at this stage means it is not fully possible to be sure that all potential effects have been identified. As both the consultants and DECC note, more detailed assessments at the project stage will clearly be needed, both to consider the likely effects more fully and to consider the adequacy of mitigation and (where necessary) compensation.

39. We will provide a more detailed response to the individual site proposals in our consultation response to DECC. In the meantime, we note that the HRAs make no attempt to consider the “least damaging options” when looking across the suite of nuclear sites, including possible alternative sites. It may be necessary to return to discarded alternatives if project-level assessment shows greater than expected impacts on Natura 2000 sites.

Consultation and Scrutiny

40. During debates on the Planning Bill, the RSPB and others objected strongly to the removal of the right to cross-examine evidence during the examination process. In response, the Government has consistently claimed that the Planning Bill improved public involvement in the planning system because there are now three opportunities for influence: in consultation on national policy statements; in pre-application consultation on individual projects, and in the Infrastructure Planning Commission’s examination of projects.

41. The consultation and scrutiny process of the energy NPSs is still underway, but there are already grounds for concern about how robust the process will be.

42. DECC has allowed a 15-week consultation period, but this included the Christmas and New Year holiday period. It also included the period of the Copenhagen summit in December 2009, which fully engaged climate change and energy specialists in many NGOs at a crucial time.

43. DECC has held a number of public and stakeholder events, which are welcome, but we are concerned about reports of poor attendance at some of these events. DECC should be transparent about the numbers attending events and whether they are representative of local communities, and should be prepared to hold follow-up events in localities where turnout was poor.

44. Apart from the nuclear NPS, stakeholder consultation on scoping of the Appraisals of Sustainability and the Habitats Regulations Assessments was limited to statutory bodies. While this is the minimum legal requirement, it was a missed opportunity to engage stakeholders such as the RSPB who have expertise (and relevant data) in this field. This contrasts with DECC’s approach to involving the RSPB and others in the Strategic Environmental Assessments for Offshore Energy and Severn Tidal Power, which has allowed us to engage constructively in these processes.

45. The process of Parliamentary scrutiny has been squeezed by the delay in NPS publication and the forthcoming general election. It is hard to see how the Committee can be expected to thoroughly scrutinise six NPSs in this time, especially as it will not be able to take account of responses to the consultation received after 15 January.

January 2010
Annex: Extract from final report by Collingwood Environmental Planning (January 2010)

Table 1: Summary of comparative review of national planning and policy documents

<table>
<thead>
<tr>
<th>Scotland and SEA</th>
<th>National Policy Statements Appraisals of Sustainability</th>
<th>Key</th>
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<tbody>
<tr>
<td>NPS 2 National Planning</td>
<td>NPS 1 Gas &amp; Oil</td>
<td>NPS 3 Nuclear</td>
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<tr>
<td>AoS/SEA objectives</td>
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**Commentary**

- **NPP2 SEA objectives**: all SEA topics + more detailed sub-criteria, designed to protect and enhance the current state of the environment.
- **Energy AoS objectives** seek to promote sustainable development and cover all SEA topics.
- **Nuclear AoS objectives** seek only to avoid potential adverse impacts without any aspiration to enhance the current state of the environment or promote sustainable development.
- **Ports AoS objectives**, though suggested to be ‘aspirational’, most are aimed at ‘preserving’, ‘protecting’ or ‘avoiding’ negative impacts rather than enhancing and/or improving.

- **NPP2 assessment** – no environmental topics scoped out.
- **Energy AoS** excluded noise and landscape features for not being relevant to a high level appraisal, but scoped back in following the consultation.
- **Nuclear topics** identified in the scoping report apparently were kept, but some of the AoS objectives have been excluded with no justification.
- **Ports AoS** - None of the key sustainability topics have been scoped out from the assessment. General public has only been involved in the consultation on the scope of the NPP2. Only statutory consultees have been consulted on the NPSs.

- **NPP2 - overall, good coverage of baseline information.**
- **Energy AoS baseline data** is satisfactory, although at times superficial and not focused.
- **Nuclear AoS** - description of baseline is clear, providing quantitative information where appropriate for each sustainability topic, but usually very brief and therefore does not seem to provide sufficient information for defining potential impacts.
- **Ports AoS** - an inadequate description of the current state has been given with most of the sustainability topics being described within a single sentence and generic and/or irrelevant to the coast/ports, and no evolution of the baseline evaluation.

- **NPP2 SEA considered two types of alternatives; high level alternatives representing a selection of policies and the project-level alternatives, the number of which has increased throughout the assessment period.** While the former alternatives might be considered reasonable (although not entirely logical), the project-level alternatives are quite inadequate – they are not alternatives to each other, more a wish list of possible developments by interested parties.
- **Energy NPS objectives** have been defined so narrowly as to exclude possibility for reasonable competing alternatives (contrary to consultants’ recommendations). **No alternatives** have been put forward for the technology-specific NPSs.
- **Nuclear NPS** - the hierarchy approach for considering alternatives is welcomed yet the ‘location’ aspect, where all alternative options have been narrowed to ‘suitable’ sites for nuclear power stations highlights that in fact this NPS is operating more at the programme not plan level and in the absence of higher policy level environmental assessment.
- **Ports AoS alternatives** are alternative options to selected policies of the NPS not to the plan itself. **Ports does not consider BAU scenario.**
<table>
<thead>
<tr>
<th>Key</th>
<th>Overall good coverage/quality</th>
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<tr>
<td>Overall poor coverage/quality because of significant omissions or inadequacies</td>
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<tr>
<td>Overall satisfactory coverage/quality despite some omissions or inadequacies</td>
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### Commentary

**Impact identification and assessment**
- NPF2 - relatively good assessment of high level impacts taking into account their potential significance and duration, although rather superficial assessment at project level.
- Energy AoSs - very brief and somewhat opaque description of potential impacts has been provided often concluding that there is no effect for the issue concerned. Moreover, a very superficial assessment of cumulative effects has been undertaken for the NPS 1 AoS, whereas technology-specific NPSs AoSs have not assessed cumulative effects at all.
- Ports AoS is confused, failing to assess significant effects arising from the implementation of Ports NPS; inadequate cumulative effects assessment.
- Poor assessment of Energy and Ports NPSs also linked to sometimes inadequate baseline information.

**Mitigation**
- NPF2 - reasonable outline of mitigation measures, although somewhat general and not clear how successful these measures are likely to be. No mitigation measures provided for additional national developments.
- Energy AoSs emphasise the importance of mitigation rather than suggesting measures to avoid the potential impacts. Only the NPS 4 provides any concrete mitigation measures.
- Nuclear AoS proposes some mitigation measures for topics likely to be significantly affected.
- Ports AoS makes a number of recommendations throughout, not targeted mitigation measures.

**Consultation/participation**
- NPF2 - consultation took place early and all responses have been documented and indications given as to how they have been taken into account.
- Energy and Nuclear NPSs consulted statutory authorities early, but no early public or non-statutory consultation.
- Ports NPS - consulted statutory authorities early, but no early public or non-statutory consultation.

**Monitoring**
- NPF2 - ER provides quite a comprehensive table with the proposed monitoring data, but the data do not specifically refer to the significant environmental effects of the NPF2.
- Energy AoS identifies the effects that need to be monitored yet the proposed measures are not clearly defined and explained.
- Nuclear AoS does not consider monitoring at this stage, rather it proposes the monitoring strategy to be outlined in the AoS Statement, to be published at the same time as the Nuclear NPS, thereby excluding monitoring from consultation and the requirement in Annex I.

**Reporting**
- NPF2 – ER is easily readable, systematic, largely transparent and covers key issues required.
- Energy AoSs and Ports AoS, cover key factors required under Annex I, but generally superficial.
- Nuclear AoS has a good structure to the report yet some key issues like baseline information or mitigation measures are not included in the main report and outlined only in annexes.
- Ports AoS - not easy to follow; lacks clarity in the approach adopted.

**Non-technical summary (NTS)**
- NPF2 NTS well structured and produced as a stand-alone document written in non-technical language, providing a clear summary of the ER.
- Nuclear AoS NTS - a good summary except no outline of the baseline information or mitigation measures (only in annexes of the report), therefore not compliant with Annex I.
- Energy AoS NTSs simply cut and pasted from the main report, and NTS is longer than the report itself for most of the technology-specific energy NPSs. Questionable whether compliant with Annex I.
- Ports’ NTS does not fully summarise the content of the AoS Report, and it fails to summarise the environmental effects, therefore not compliant with Annex I.
Memorandum submitted by the Royal Society of Chemistry

The Royal Society of Chemistry (RSC) welcomes the opportunity to comment on the Government draft National Policy Statements for Energy Infrastructure.

The RSC is the largest organisation in Europe for advancing the chemical sciences. Supported by a network of 46,000 members worldwide and an internationally acclaimed publishing business, our activities span education and training, conferences and science policy, and the promotion of the chemical sciences to the public.

This document represents the views of the RSC. The RSC’s Royal Charter obliges it to serve the public interest by acting in an independent advisory capacity, and we would therefore be very happy for this submission to be put into the public domain.

The document has been written from the perspective of the Royal Society of Chemistry and consequently our comments relate to only parts of the consultation document relevant to the chemical sciences.

1. Do you think that the Government should formally approve (“designate”) the draft Overarching Energy National Policy Statement?

Last year, following an extensive consultation with a global network of scientists, the RSC published Chemistry for Tomorrow’s World, where energy was identified as key area where chemists will help to provide solutions to allow us to move to a more sustainable economy. Efficiency maximisation and environmental damage limitation are important goals that should inform the UK’s energy future. However, in addition, the Royal Society of Chemistry (RSC) also supports the view that a balanced portfolio of energy supply technologies will be required for the ongoing prosperity of the UK. Infrastructure that will support the current energy systems and allow for the necessary technological developments, is an important factor in the delivery of advancing the energy systems in the UK.

Energy production and use is clearly a major component of the generation of greenhouse gas emissions. The RSC is supportive of the Climate Change Act that was introduced in 2008 making law a reduction in Kyoto green house gas emissions in the UK of at least 80% by 2050, and reductions in CO₂ of 26% by 2020 against a 1990 baseline. The resulting “UK Low Carbon Transition Plan: National Strategy for Climate and Energy” and National Policy Statements for Energy have also been received with interest, as chemistry and science will play a major part in the implementation of this strategy.

The RSC encourages the advancement of a variety of energy systems in the UK to provide a stable and environmentally sound source of energy to the nation. Developments in the energy infrastructure and in energy storage are necessary to realise the potential of renewable energy alongside fossil fuels with carbon storage technologies and nuclear energy.

ENERGY SYSTEM INFRASTRUCTURE AND STORAGE

As society moves towards using renewable energy technologies for electricity generation, there will be a need to tackle changes in the energy system infrastructure to balance energy production from a variety of sources and geographical locations. Decentralised energy systems associated with renewable energy sources present a different set of infrastructure challenges and opportunities to the current, more centralised systems. Investment into advanced energy storage technologies will be necessary (eg advanced batteries, electro-chemical storage, super-capacitors), which will present significant opportunities and challenges for chemists. Such storage systems need to be resilient, as they will be important in tackling the intermittency of renewable energy sources and potential changes to electricity transmission and distribution. In addition, low carbon energy vectors will be required for the transport and storage of energy; hydrogen is offering a promising prospect in this respect.

RENEWABLE ENERGY

Energy generated from renewable resources will be fundamental in ensuring a secure and continuous energy supply whilst minimising CO₂ emissions and environmental impact. The UK will need to use a variety of renewable energy resources to meet its target of producing 20% of renewable electricity by 2020.

The RSC published a major inquiry into Chemical Science Priorities for Sustainable Energy Solutions in 2005,268 this report aimed to develop an outlook for chemical science research in the context of energy. It was also intended to provide guidance to funding bodies and policy makers on: the pivotal role that the chemical sciences will play in the transformations needed to achieve a sustainable energy system; and the priority areas that need to be supported to advance the fundamental knowledge necessary to address the key challenges in the energy system. Some of these resources have been considered in the draft NPS such as biomass and wind power.

268 Chemical Science Priorities for Sustainable Energy Solutions, RSC, 2005.
Regarding biomass to generate electricity, the RSC believes that there is considerable potential for developing the use of second generation energy crops such as the grass miscanthus, short rotation coppice (SRC) willow and poplar. These have been shown to reduce carbon emissions significantly when compared with both fossil fuels and first generation crops, and that energy production is the most efficient usage (rather than the production of liquid transport fuels). Additionally if biomass power plants were fitted with carbon capture and storage technology, this would be a method to lower overall atmospheric CO₂ levels.

For every fuel type and utilisation process, it is essential that a full life cycle analysis (LCA) is conducted. This involves measuring all energy and chemical inputs and outputs for the entire process. However, these are meaningless without official standards regarding the factors to be included and assumptions made. It is essential for a European standard to be set if biomass is to be utilised efficiently. Also taken into account should be the environmental impact of growing these crops on native wildlife, soil condition, water sources and the competition with food crops.

In addition to supporting those renewable resources outlined in the draft NPS, the RSC also believes that there is a considerable role in the UK for solar power as a proven and efficient technology. The conversion of sunlight into electricity can be achieved through photovoltaic devices, which directly convert sunlight into electrical current or by utilising solar-thermal systems where energy from the sun is focused to heat water into steam which drives a turbine.

**FOSSIL FUELS AND CARBON STORAGE**

The RSC believes that due to increasing energy demand and supply security, fossil fuels are likely to remain part of the UK energy portfolio for the next 50 years. In order to mitigate climate change, we must reduce CO₂ emissions by using Carbon Capture and Storage (CCS) technologies. The RSC recognises, that under current economic conditions, industry is unlikely to invest in CCS technologies without strong government leadership or support. We believe it essential that any new plants are built “capture ready” so that CCS technology can be added in the future. Conversely it is vital that CCS technologies are designed that can be retrofitted to existing power plants.

It is important to appreciate that carbon storage poses social as well as technological challenges; it cannot be assumed that storing huge quantities of CO₂ in the Earth is publicly acceptable. Therefore, alongside research and development there must also be a programme of stakeholder engagement and education to ensure that the risks and benefits are fully explored.

From the perspective of the chemical sciences, an alternative to long-term storage is developing uses for captured CO₂ as a potential feedstock for the manufacture of useful chemicals, fuels and polymers. There are considerable scientific and economic challenges to be overcome in this area before such processes are feasible on a large scale, but it is important to note that this research offers a genuine use of CO₂ rather than a storage option.

**NUCLEAR ENERGY**

As a low-carbon technology that can help mitigate climate change, it is the RSCs view that nuclear power should remain part of the energy mix, at least until other renewable low carbon sources provide sufficient electricity to meet the country’s needs and emission targets. Despite high construction costs, nuclear power is cheap compared to other low-carbon electricity generation technologies as the operational costs of nuclear power plants are very low, and their operational life long. Nuclear energy production involves various aspects of chemical research and chemists will make their contribution to the safe utilisation of nuclear energy.

An inevitable consequence of nuclear fission power is its legacy of long-lived radioactive waste. There needs to be a commitment to research and development into the long term safety of geological disposal, as well as improved methods and means of storing waste. In terms of long term storage, the RSC believes that a geological depository for the storage of high-level radioactive waste is vital, and offers a lower level risk than surface storage. The position of new storage sites must be met with approval from local communities and undergo public consultation.

The RSC recognise that scientific and technical expertise of the nuclear industry must be rebuilt to build, operate and decommission nuclear plants until it can be shown that additional nuclear power will not be necessary to meet our targets.

*January 2010*

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Memorandum submitted by the Royal Town Planning Institute

The Royal Town Planning Institute (RTPI) is the leading professional body for spatial planners in the UK. It is a charity with the purpose to advance the art and science of town planning for the benefit of the public as a whole. It has over 22,000 members who serve in government, local government and as advisors in the private sector.

While the evidence provided in this submission focuses on the draft energy national policy statements (NPS), many of the issues will apply to the draft ports NPS, and the emerging NPSs for other infrastructures.

The briefing supplied to the Select Committee on the 16th December 2009 is also included at the end of this submission for information.

This paper has been prepared as evidence for the assistance of the Select Committee only and should not be taken as representing the Institute’s final observations on the draft NPS consultations.

General Observations of the Draft Energy National Policy Statements

1. There is generally a lack of clear spatial guidance in the NPSs, particularly in translating the national need for infrastructure into the need to provide a particular type of infrastructure in a particular locality: this makes a robust assessment balancing need with local impacts very difficult. A national spatial planning framework could assist with giving locational guidance for investors, and this could be assisted by a sequential approach to site selection embedded in the NPSs.

2. Interpretation of the NPSs is hindered by their structure, which does not clearly distinguish between what is policy and what is guidance, or evidence/background. Lessons could be learned from the “new style” Planning Policy Statements (PPSs). Similarly, the NPSs should provide guidance for the preparation of policies and proposals for Nationally Strategic Infrastructure Projects (NSIPs) to come through development plans at the regional and local level.

3. Consideration needs to be given to the relationship between each of these NPSs and between them and subsequent NPSs to further reduce the potential for repetition, conflict and the constant review of established principles. This would also contribute toward greater understanding of the NPSs amongst stakeholders and the community.

Select Committee Questions (as supplied on 4 January 2010)

General

Do you think that the Government should formally approve ("designate") the draft Overarching Energy National Policy Statement?

4. The points raised above highlight the key issues that require amendment in the current consultation drafts or to include in future national policy statements. Therefore the RTPI do not endorse the current form of energy national policy statements for formal approval.

Does the draft Overarching Energy National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

5. The draft NPSs does provide sufficient information for the IPC to assess proposals however the RTPI is concerned that in their current form, and without a national spatial strategy, the IPC is considering proposals in isolation of the wider spatial implications of other national policy.

6. The proposed assessment criteria are constrained, and the focus on the application stage means that it is difficult to assess proposals strategically, taking cumulative effects and alternative options properly into account.

Does the draft Overarching Energy National Policy Statement provide suitable information to the Infrastructure Planning Commission on the Government’s energy and climate policy?

7. The RTPI is satisfied that the energy and climate policy is accounted for in the draft NPS however, it does not translate these policies into locational principles.

The RTPI mentions that in parts the NPSs are the same but with different wording. Can you give an example of where the NPSs are repetitive?

8. One such example relates to references to landscape impact in EN-1, 2 and 3 (see EN-1 4.24.18: landscape and visual impact mitigation of energy projects generally, EN-2 2.6.7: visual impact reduction of fossil fuel electricity generating schemes, and c.f. EN-3 2.7.32: impact of onshore wind farms on national landscape designations etc).

9. This example demonstrates slightly different approaches taken to landscape impact in three circumstances (however this does not include every reference to landscape impacts). There is no indication as to why there should be a different approach taken for the different types of energy infrastructure, nor why the approach should be different for any type of NSIP or, indeed, any type of development at all. Existing PPSs provide much of this information and should either be referred to, or be directly translated into the
NPS to avoid conflicts when interpreting existing government policy. Where the NPS departs from existing application of national policy for a particular type of infrastructure (from a PPS or any other national policy), the NPS should highlight the reasons for the diversion.

**Consultation Process**

*What are witnesses concerns with the adequacy of the process?*

10. RTPI is here to assist the committee with the content of the NPSs and how they will be applied, rather than examine consultation on the NPSs. We note that:

- different types of people respond to consultations in different ways and will have different experiences of the process: we do not consider that there are concerns about the consultation process from the point of view of professional stakeholders, such as our members, other than with the volume of documentation for these consultations; and

- our views with regard to community consultation accord with those of Planning Aid.

*What are the challenges of good public engagement in consultation?*

11. The particular challenge is in engaging “ordinary people” with abstract concepts of national policy for which they cannot be expected to envisage an immediate impact on their life or neighbourhood.

12. Given the lack of site designations (other than the nuclear NPS), it is particularly difficult to engage people when there is very limited idea of what type of development is likely to happen where.

*How might the consultation process be improved at this stage?*

13. The RTPI endorses the Planning Aid submission with respect to this question.

*We know that PAE have been helping to retrospectively improve the process. What have we been doing?*

14. The RTPI has not been involved with the consultation process.

*Does the consultation meet government guidance on good consultation?*

15. The RTPI have not identified a particular failure, but support Planning Aid suggestions for enhancements.

*What are the risks if the consultation is seen as being inadequate?*

16. Primarily the concern is that decisions based on policy are delayed at application stage and/or challenged through the courts.

**Case for Site Specificity**

*What is the potential impact of a lack of site specificity for the five non nuclear NPSs?*

17. It is recognised that site-specific policies are easier to determine for some project types than others, and it is appropriate for there to be a spectrum ranging from actual site designation (eg with nuclear plants), through locality-specific policies and “areas of search”, to non-specific criteria-based policies.

18. There are examples in national, regional and local planning policies that could assist. For example:

- the sequential approach to site identification for housing (PPS3) and retail (Planning Policy Statement 6 Planning for Town Centres—now Planning Policy Statement 4 Planning for Sustainable Economic Growth);

- identification of towns suitable for urban extensions (without necessarily dictating a site, or even direction of growth), common to many Regional Spatial Strategies; and

- areas of search for minerals extraction in minerals plans.

19. Being site-specific, or narrowing the field of search, enables investors to make more informed decisions, and makes consultation easier and more meaningful.

20. It would be appropriate for non-site specific NPSs to give more detailed guidance on identifying appropriate sites to meet needs, either through development plans (sub-national or local) or, perhaps, through subsequent locationally specific NPSs.
What might a National Spatial Strategy consist of? What would the benefits of this approach be?

21. The main purpose of a National Spatial Planning Framework (NSPF)\(^{271}\) is to enable the alignment, in an open and transparent way, of strategic investment decisions on housing and economic growth with the infrastructure needed to support them.

22. A NSPF would include broad expectations (not necessarily targets) for growth in different areas, and would enable a translation of the national need for infrastructure to target the locations for delivery to meet local/sub-national need.

Do you feel the approach to the SSA process will lead to open and effective decision making by the IPC?

23. There is a need to keep the sites selected through the SSA under review: as contexts and technologies change, and as local impacts are considered through the NSIPs process, different sites may be considered more or less appropriate. The SSA process has been an effective starting point for this, and it is important to ensure that the selection of sites for nuclear power continues to be undertaken in a holistic and strategic manner, presumably now through reviews of the nuclear NPS based on the SSA methodology (refer to our response).

ACCOUNTING FOR CUMULATIVE CARBON EMISSIONS

What do you think of the government’s rationale for not making explicit reference to the carbon profile of new energy infrastructure in the NPSs? What is the potential impact of this?

24. The RTPI has supported the Low Carbon Transition Plan, and have no further comments to make on these issues.

JUSTIFYING NEED

Does the NPS adequately set out the need for new nuclear and fossil fuel generating capacity?

25. Generally, the need for this capacity is adequately set out in the draft NPS, but the need is not necessarily translated adequately into geographic areas.

26. Some aspects about the relationship between the need for different types of generation are not entirely clear, and we believe there is a case for keeping need under review as technologies and other contexts change.

The overarching NPS states that the IPC should not address technical or financial feasibility proposals. Do witnesses agree with the government’s approach?

27. It is the RTPI’s general view that normal planning practices should apply, and that technical or financial feasibility of a particular proposal should not be assessed by the IPC. However, there may be a case for considering feasibility when comparing alternative schemes, or when monitoring delivery against meeting the need for generation capacity.

IMPLICATIONS FOR THE REST OF PLANNING

What should the relationship be between the NPSs and the rest of the planning system?

28. The structure of NPSs needs to be aligned more carefully with the “new style” PPSs, in which policy, guidance, background and assessment criteria are carefully separated, and which provide distinct policy/guidance for making decisions on consents and for local policy-making. The latter is disappointingly lacking in the NPSs as they are currently drafted.

29. In many respects, it is in the overlaps and variances between the policies and processes of the town and country planning and NSIP regimes that potential weaknesses may surface. A National Spatial Planning Framework that sets out the broad principles for both NPSs and PPSs is in our view the best immediate and long-term remedy.

30. The NPSs disappointingly repeat and reinterpret established planning policy in PPSs/PPGs—particularly, for example, PPG2 on Green Belts and general principles on design etc in PPS1, when it may have been more straightforward simply to specify that the IPC should make decisions in accordance with PPGs/PPSs—unless directly and explicitly superseded by an NPS.

Should the NPSs have any bearing on applications that fall outside the NSIP criteria?

31. The RTPI believes that this approach seems reasonable, particularly where a non-NSIP development similar to an NSIP, or which supports an NSIP, is determined with a NPS as at least a material consideration. The primacy of an up-to-date development plan should not be over-ruled, however.

\(^{271}\) The RTPI has published research into the key drivers of national spatial planning which can be accessed here: http://www.rtpi.org.uk/download/748/Uniting-Britain.pdf
Do you believe that the energy NPSs should each contain separate assessment proposals for the impacts of new developments or should they focus primarily on policy?

32. Both. They should focus on policy, and contain separate assessment criteria related to the policies.

What would the benefits be of a simple overarching NSIP process document as suggested by the RTPI?

33. Primarily, the benefits would include the reduction of repetition and the risk of conflict in the interpretation of policy, establishing overarching principles that would apply to all types of infrastructure, and reducing the burden of consultation on later NPSs. Where a specific case can be made that a particular infrastructure type should be treated differently, this can be done through the NPS consultation. It should also be possible to make amendments to such an overarching NPS if necessary as the result of consultation on an NPS for a particular infrastructure type that is more broadly applicable.

SUBMISSION TO THE ENERGY & CLIMATE CHANGE COMMITTEE SELECT COMMITTEE

The Royal Town Planning Institute (RTPI) is the leading professional body for spatial planners in the UK. It is a charity with the purpose to advance the art and science of town planning for the benefit of the public as a whole. It has over 22,000 members who serve in government, local government and as advisors in the private sector.

While the evidence provided in this briefing focuses on the draft energy national policy statements, many of the issues will apply to the draft ports NPS, and the emerging NPSs for other infrastructures. The following represents the key headlines of evidence that the RTPI is intending to present in the oral evidence session on the 6th January 2010 at the Select Committee for energy NPSs. A subsequent submission prior to the session will give more detailed information on these and, potentially, additional issues.

National Spatial Strategy

1. The draft national policy statements (NPSs) only consolidate existing Government policy and outline a framework for assessing development proposals. As a result they lack the spatial element of policy necessary for meaningful and informed decisions to be made about the location and/or routing of the envisaged infrastructures. A pre-requisite for this is a national spatial strategy to co-ordinate the appropriate location and timing of infrastructure with the broader growth, development and conservation needs of the nation.

2. NPSs outline the need for infrastructure, but then leave it to the market to come forward with proposals for the location and type of energy infrastructure, effectively putting at risk the impetus to ensure energy security of supply.

3. The location of such important infrastructure has a significant impact on the development of the entire country. Such important location decisions cannot be dealt with adequately through individual assessments (as proposed in the NPSs), left to be proposed by the market, or indeed at the regional or local level, as commercial conflicts may override the national good. It is, therefore, important that an integrated assessment of the spatial consequences of major infrastructure projects should be carried out at the national level.

4. The effectiveness of the planning system depends on the clarity of the national policy context within which all plans, whether national, regional or local, must fit. The relevance of national policies depends on their sensitivity to the great spatial variation in the needs and opportunities throughout the country. Against this background, the RTPI has always regarded a national planning context as an integral part of the hierarchy necessary for an effective planning service.

5. The national spatial strategy should be accompanied by a delivery plan that identifies committed and potential funding, together with the expected timing of development to enable the transparent and efficient delivery of infrastructures (including any public private partnerships).

6. NPSs must have a spatial element, and this implies a connection both between the various energy NPSs and with other NPSs. However, they do not so far integrate with policies in the ports NPS. The RTPI believe Government should undertake a strategic assessment of suitable locations/areas for all infrastructures based on best practice sustainability and climate change considerations to ensure NSIPs are delivered to meet in the right areas the needs of the nation. This will effectively mean NPSs are all strategic location- if not actually site-specific.

Policy content

7. As drafted, the draft NPSs do not introduce new policy, as they are only intended to provide a framework for the IPC to make decisions based on the infrastructure “need” and how to weigh up impacts. However, the implications for planning policy will be in how the IPC weigh national policy with existing regional and local policy when taking decisions on major infrastructures.
8. NPSs are proposed to be taken as material consideration for lower level planning decisions and this will have implications for regional and local planning. Local development frameworks and regional spatial strategies will also need to consider the implications of each development consent for major infrastructure and this provides yet another significant basis for Government to prepare a national spatial strategy.

**Structure and Navigation of NPSs**

9. The draft NPSs do not clearly articulate what is actually to be consulted on given the level of existing policy contained in the document to enable effective consideration of the issues.

10. There are sections within the NPSs which are repetitive, and some where they are almost the same but with slight different wording. This may lead to confusion. This is particularly evident in the sections relating to weighing impacts and mitigation measures.

11. The IPC should be afforded a clear policy statement that reflects Government policy and provides a clear means of implementation for consistent decision making for each of the NPSs for different types of infrastructure.

12. The draft NPSs would do well to follow the approach being applied to new PPSs of producing clear strategic policies in the actual NPS, backed up by detailed technical guidance in separate documents. Much of the guidance/advice contained in the draft energy PPSs, especially the overarching NPS, appears to have the potential to apply to entirely different infrastructure types, and consideration needs to be given to whether a single overarching NSIPs process guidance document may be necessary.

**NPS Consultation Procedure**

13. Because of the strategic and high-profile impact of nationally significant infrastructure projects it is important that consultation procedures meet and exceed basic requirements, and seek to continuously improve.

14. The RTPI therefore recommends that Government considers:

- Continuing to seek to draft policies using clear and accessible language, and supports this by reducing the volume of documentation where possible and, importantly, providing accessible summary documentation.

- Improving the clarity of what matters are being consulted on (see point number 9 of this briefing).

- Ensuring that consultation event venues are in well-visited locations accessible by a variety of means of transport, and are publicised in advance through local authorities and other groups where possible.

- Optimising the effectiveness of consultation and consultee buy-in by keeping the burden of consultation to a minimum.

January 2010

**Memorandum submitted by RWE npower**

1. RWE npower supports and welcomes the draft National Policy Statements (NPSs) and believes they will provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications for energy infrastructure.

2. The NPSs, as currently drafted, provide a robust and stable policy framework which will help to give energy developers greater confidence to invest, balanced with an appropriate level of detail to enable the IPC and all stakeholders to assess both the compliance with national policy and the genuine issues that could affect a local community.

**INTRODUCTION**

3. RWE npower ("RWE") welcomes the opportunity to submit evidence to the above Inquiry. RWE npower plc, part of the German-based RWE multi-utilities group, is a leading UK integrated electricity generating and electricity and gas supply company, which owns and operates several major coal-fired, oil-fired and combined cycle gas turbine electricity generating stations in England and Wales. It has also formed a joint venture (Horizon Nuclear Power) with E.ON UK plc for the possible development of nuclear power stations at two sites in England and Wales. In addition, it has an interest in two further sites potentially suitable for new nuclear power stations. RWE Innogy is a major and developing renewables energy business which operates in the UK under the name of “npower renewables”. Its activities include offshore and onshore wind power development and operation, together with the development of wave, tidal and hydro energy schemes. Our evidence to the Committee presents the view of all RWE’s interests in the UK.

4. RWE is supportive of the Planning Act 2008 and views it as an integral part of the solution to the challenge of meeting the Government’s energy policy goals of addressing climate change through a move towards a low carbon economy, whilst ensuring the continued security of the UK’s energy supplies. RWE
is particularly mindful of the Government’s Low Carbon Transition Programme and the Renewable Energy Strategy, as well as the statutory target under the Climate Change Act 2008 of reducing greenhouse gas emissions by 80% by 2050, together with the target of achieving 15% of all energy from renewable sources by 2020 in accordance with the EU Renewable Energy Directive.

5. In order to help meet these targets and to seek to avoid the anticipated “energy gap” towards the end of the next decade, RWE is currently intending to invest around £1 billion per annum over 10 years from 2008–18 in lower carbon energy sources. Further investments in nuclear power will cost several billions more. Such levels of investment are only feasible against the background of a stable long-term policy framework and a planning regime that is timely, certain and effective—a regime which RWE believes the Planning Act 2008 reforms are capable of delivering.

NATIONAL POLICY STATEMENTS—GENERAL

6. RWE therefore welcomes the publication of the draft National Policy Statement (NPS) documentation. The NPSs are central to the Planning Act and are crucial to the success of meeting the Government’s energy policy goals. However, NPS’s will not, on their own, resolve the delays associated with the current system of planning for new infrastructure projects—the effective and successful operation of the Infrastructure Planning Commission will also be crucial.

7. A particular strength of the NPSs is the recognition of a national need for new low carbon generating capacity and the associated need for investment in the associated electricity and gas networks. RWE is firmly of the view that all available low carbon technologies will be required if the UK is to meet its energy policy objectives of achieving environmentally sustainable, secure and affordable supplies of electricity. Once designated, the NPSs will help avoid each application having to justify the strategic need for each individual project and enable all parties to focus on assessing the local impacts of a proposal and whether these can be satisfactorily resolved or mitigated.

8. RWE welcomes the scrutiny of the NPSs by this Committee, together with the ongoing public consultation, and believes this will lead to greater efficacy and legitimacy in the consideration of and status for the designated NPSs. This is extremely important as the NPSs need to provide clarity and robustness on potential impacts and how they should be addressed, so as to enable the IPC to undertake timely and effective assessment of individual applications.

OVERARCHING NPS—EN-I

9. This NPS sets out the Government’s energy policy priorities, together with the need case for each technology and RWE is supportive both of the need for a very substantial amount of new capacity and the view that a wide range of energy technologies is necessary for the foreseeable future. We are of the view that given potential major concerns surrounding security of supply and the need to greatly increase generation from low carbon sources, the need case for new energy infrastructure should be given more emphasis both generally and also in terms of the weighting which the IPC is to grant “need”—this appears to vary from need having been demonstrated (3.1) to the IPC “taking need into account” (4.1.1(iii)). It is our view that need, having been demonstrated in accordance with the NPSs, should then be accorded very substantial weight in any decisions made by the IPC.

10. EN-I, together with the other NPSs does not appear to consider the period post-2020 (for renewables and gas) and post-2025 (for nuclear and coal). Given the nature, scale and timescales of the investments required, the NPSs need to recognise that investment will be required beyond these timescales, as confirmed by the Climate Change Committee report which considers potential investment in the period 2030 to 2050.

11. Although the Planning Act aims to create an holistic planning regime, with the purpose of enabling the cumulative effect of different elements of the same project to be considered together, it is important that EN-I recognises that flexibility may be required in respect of the planning approach to different aspects or components of a project, particularly where different aspects of a project may, in themselves, be a nationally significant infrastructure project. In such cases, these different aspects may be undertaken by different legal entities with different regulatory and commercial backgrounds. We therefore welcome the wording in 4.9.1–4.9.3, but it should be noted that the need for separate applications may apply in some cases to other components than the grid connection.

12. RWE supports the approach to Alternatives set out in EN-I (at section 4.4) on the basis that it understands this section to be stating that no assessment of alternatives should be required by the IPC, other than as required by the requirements of the Habitats Regulations or the Environmental Impact Assessment Regulations. Any consideration of alternatives should be set in the context of the scale and urgency of the UK’s need for energy infrastructure.

13. With regard to the relationship between the IPC and pollution control and other environmental consenting regimes, RWE is pleased to note that EN-I directs the IPC to work on the assumption that the relevant pollution control regime will be properly applied and enforced. It is not normally possible to apply for permits or consents under other regimes, such as pollution control, prior to a Development Consent Order being granted and any attempt by a planning regime to await determination of such permit or consent will only exacerbate the delays which the new planning regime is seeking to mitigate.
FOSSIL FUEL ELECTRICITY GENERATING INFRASTRUCTURE—EN-2

14. RWE supports the content of EN-2 and particularly welcomes the recognition that site selection should be left to applicants and not the Government.

15. Whilst we appreciate that the draft NPS merely reflects current Government policy on CCR and does not introduce any new requirements we are concerned about the application of the policy which, given the state of CCS development, could easily lead to inappropriate requirements for new generating stations.

16. We fully accept that all new fossil-fuelled power plants should be CCR but it is important that application of the CCR policy does not place unnecessary additional costs or risks onto projects in anticipation of future developments that may or may not be realised. The Government’s intended light touch approach, if in that developers should demonstrate no barriers exist to an eventual CCS retrofit, must be retained and requirements must reflect the early stage of CCS technology development.

17. We remain sceptical that the coal-fired CCS policy of demonstration, mandatory retrofit and/or unspecified operation constraints will actually encourage early demonstration of the emerging technology and, in contrast to CCR, it is difficult to see how a light touch approach can be applied. However, we would advocate that developers are given adequate time to develop CCS technologies to commercial scale and that maximum advantage is taken of what flexibility there is in the Government’s CCS policy to allow this to happen. Care will be needed to ensure that decisions taken with regard to the expected pace of development by 2020 or 2025 enhance, rather than reduce, the chances of coal playing an important part in the future UK energy mix.

RENEWABLE ENERGY INFRASTRUCTURE—EN-3

18. RWE broadly welcomes and supports EN-3 although it will be making some detailed comments in the formal NPS consultation process.

19. RWE supports and endorses the statements in 2.1.2 of EN-3 to the effect that (other than in relation to offshore wind) site selection is a matter for the applicant and that each proposal should be considered on its merits against the criteria and considerations set out in the NPSs.

20. One key issue is the role of the NPS under the Town and Country Planning Act 1990 (as amended). In order to meet the Government’s renewable energy target many renewable schemes will need to be brought forward which, although not nationally significant infrastructure projects within the Planning Act 2008, share the same characteristics and impacts of developments covered by EN-3. EN-3 (para 1.2.4) currently states that it “may” be a material consideration in decision making on an application under the TCPA. RWE is firmly of the view that this should be strengthened and that the NPS should be applied to such applications. Indeed, we believe that all the NPSs should be afforded an equivalent level of consideration in the TCPA regime.

21. Paragraph 2.1 states that the need for renewable energy has been demonstrated but the NPS then fails to state what weight should be attached to that need when making decisions. We would propose the IPC should accord very substantial weight to the need for new renewable energy development.

ELECTRICITY NETWORKING INFRASTRUCTURE—EN-5

22. RWE supports the broad content of EN-5, although it has a concern that where an application for such infrastructure is submitted separately to a related project, then EN-5 does not emphasize the need case in a manner consistent with the emphasis it is given in EN-1.

NUCLEAR POWER GENERATION—EN-6

23. RWE welcomes the contents of EN-6 and Annex A (“Impressive Reasons of Overriding Public Interest”) which support EN-6 in identifying the urgent national need for new low carbon electricity generating capacity including nuclear. RWE believes that the appropriate specific criteria that the IPC should take into account for new nuclear power stations is laid down in EN-1 and EN-6.

24. We welcome the identification of specific sites that are potentially suitable for deployment by 2025 and support the detailed sustainability and ecological assessments (ie., the Appraisals of Sustainability and Habitats Regulations Assessments) which underpin the NPS and its site specific sections.

25. We consider the Government’s preliminary conclusion on the sites in which RWE is interested, both in its own name (Braystones and Kirkstanton) and through its interest in Horizon Nuclear Power (Wylfa and Oldbury) to be valid. We feel the potential positive and negative impacts of developing at these sites have been set out in clear terms in EN-6 and its accompanying documentation, along with the potential for dealing with those impacts appropriately.

26. We have no specific site-related comments with regards to the suitability of the other potential sites included in the draft Nuclear NPS. However, we do welcome the preliminary conclusion that a number of sites may be potentially suitable for the development of new nuclear power stations. As the Government recognises in the draft NPS, it is by no means certain that every candidate site would eventually achieve
development consent. We therefore agree it is appropriate that sufficient sites are included in the designated Nuclear NPS to enable new nuclear to fulfil its potential role as a major contributor to carbon emissions abatement and to the security of electricity supplies.

27. At an overarching level, we feel that the draft Nuclear NPS overstates the distinction between Greenfield sites and others; to the possible detriment of the Greenfield sites. We would point out that all development (even when in close proximity to an existing site) will take place on land which is currently undeveloped. In some cases (eg Heysham) that land is not even in the ownership of the nominating developer, and its characteristics are probably less understood than the Greenfield sites which have been nominated. RWE therefore encourages assessment of each site on its technical merits rather than on an artificial distinction between Greenfield and others.

28. We have no specific comments to offer on the Government’s considerations of alternative sites. We do however have confidence that the NPS process to date, including the SSA process and rigorous sustainability and habitats regulations assessments, has led to the identification of a list of suitable potential sites deployable by 2025. As noted earlier, and building on the need case set out in EN-1, EN-6 is also further underpinned by Annex A, which sets out the Imperative Reasons of Overriding Public Interest (IROPI), for concluding that the sites identified as potentially suitable should be available for development according to IROPI.

29. Consistent with paragraph 11 above, it is important that a clear division between the regimes for planning and regulation of the nuclear industry is maintained. We would also emphasise that the IPC should not review or revisit any regulatory decision that has already been made in relation to the proposed development and that it need not consider matters which are within the remit of the nuclear regulators.

Conclusion

30. RWE supports and welcomes the designation of the draft NPSs and believes they will provide a coherent and practical framework within which the IPC can assess future planning applications for energy infrastructure. As currently drafted they provide a robust and stable policy framework (particularly given the emphasis attached to the Statements of Need) which will help to give energy developers greater confidence to invest, balanced with the appropriate level of detail to enable the IPC and all stakeholders to assess both compliance with national policy and the genuine issues that could affect a local community.

January 2010

Memorandum submitted by SBGI’s Gas Storage Operators Group

PLANNING ACT 2008—DRAFT ENERGY NATIONAL POLICY STATEMENTS

SBGI’s Gas Storage Operators Group (GSOG) represents nearly all of the companies currently involved in the development and operation of natural gas storage facilities both onshore and offshore in the UK (16 companies in total as listed in the Appendix). The views of the GSOG expressed herein have been assembled through discussion at the Group’s meetings and through comment by Members on a draft of this written evidence.

GSOG would like to thank the Energy and Climate Change Select Committee for the opportunity to submit written evidence into the Committee’s inquiry into the draft National Policy Statements (NPSs) for the energy sector.

GSOG has contributed to the development of the draft NPS and is willing to continue to advise Government of the industry’s views to ensure that the future consenting regimes for onshore gas storage facilitate the timely delivery of this much needed nationally significant infrastructure.

GSOG SUPPORTS THE REFORM OF THE PLANNING SYSTEM AND THE INTRODUCTION OF ROBUST NATIONAL POLICY STATEMENTS

The majority of the onshore gas storage projects proposed in the UK in the past 10 years have experienced significant delays through the planning process. For many energy companies this has deferred, if not completely deterred, investment. GSOG has therefore long supported the reform of the planning regime through the Planning Act 2008 which will hopefully enable more timely and certain investment in gas storage.

In order to deliver the required substantial investment programme in the UK’s energy infrastructure, the UK needs a stable long-term policy framework, which clearly sets out the Government’s energy policies and priorities for all stakeholders.

GSOG therefore welcomes NPSs as the primary basis for decisions by the Infrastructure Planning Commission (IPC) on nationally significant infrastructure projects (NSIPs). We also support their use as material considerations for both local planning authorities on smaller-scale energy projects.
The GSOG believes that NPSs are fundamental to establishing a stable policy framework to enable the significant programme of investment in onshore natural gas storage that is needed to ensure the continued security of gas supply in the UK.

We would however like to bring to the Committee’s attention three key issues:
(i) the clear national need for additional gas storage in the UK;
(ii) the importance of a robust policy statement as to that need; and
(iii) the geological constraints on underground gas storage which dictate where it may be located.

**THE NATIONAL NEED FOR ADDITIONAL GAS STORAGE**

Historically the gas industry in Britain relied on the flexibility from North Sea fields to provide the additional gas needed in winter. As a result the level of gas storage was very low compared with the rest of Western Europe. The figures in the table below illustrate the level of gas storage in the UK compared to other European countries. The figures show that the UK has significantly less gas storage than comparable European countries with only 16 days of storage compared to almost three months in France.

<table>
<thead>
<tr>
<th>Storage Working Volume (bcm)</th>
<th>Annual Demand</th>
<th>Storage/demand (% of demand)</th>
<th>Days of avg demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK (2008)</td>
<td>4.3</td>
<td>98.00</td>
<td>4.4%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.0</td>
<td>45.45</td>
<td>11.0%</td>
</tr>
<tr>
<td>Germany</td>
<td>20.2</td>
<td>96.19</td>
<td>21.0%</td>
</tr>
<tr>
<td>Italy</td>
<td>17.5</td>
<td>83.33</td>
<td>21.0%</td>
</tr>
<tr>
<td>France</td>
<td>11.5</td>
<td>47.92</td>
<td>24.0%</td>
</tr>
</tbody>
</table>

The output from the old North Sea fields that provided this extra winter gas has been declining for a number of years and is being replaced by gas both from new UK fields and imports, which offer much less flexibility. A new source of winter gas will be needed in the future to replace this. The most likely source of new peak supply is salt cavities or conversions of existing onshore oil and gas fields.

Historically the role of gas storage was solely to maintain security of supply by providing additional sources of gas in the winter. In traded gas markets such as the UK there is now an additional and equally important role of making the market work efficiently, both by moderating gas prices themselves and also by reducing the cost of storage itself. Unless more storage is built, the lack of competition will mean that costs for the gas suppliers will rise significantly. Ultimately this will be reflected in customer’s bills.

**THE REQUIREMENT FOR A ROBUST STATEMENT OF NEED**

NPS EN-1 and EN-4 need to provide a clear and robust statement of the need for additional gas storage and the contribution storage makes to both the maintenance of the physical supply to consumers, both domestic and industrial, and also the moderation of gas prices within the market as a whole.

The statement of need must be precise, quantitative and unequivocal in supporting the further development of onshore gas storage to ensure that future projects do not get bogged down in the need debate. Such clarity would enable all involved to efficiently assess proposals’ compliance with national policy, and therefore spend more time on those local issues which could affect the surrounding community and how best to address them.

**THE GEOLOGICAL CONSTRAINTS ON UNDERGROUND GAS STORAGE WHICH DICICT WHERE IT MAY BE LOCATED**

Unlike the Nuclear NPS, the NPS EN-4 dealing with gas supply infrastructure, including gas storage, is non-spatial in nature. GSOG suggests that EN-4 should recognise the geological constraints affecting the location of underground gas storage.

There are two forms of underground gas storage which are in use in the UK, namely constructed salt caverns and naturally formed depleted hydrocarbon reservoirs. Both types of storage require very specific geological conditions and the locations available for development of storage are very limited.

**Salt Cavern Storage**

Gas storage caverns can only be created in suitably thick, homogenous salt strata that are free of major faulting systems. There are limited onshore locations within the UK where such conditions are known to exist. These are:

— Lancashire;
— Dorset;
— Cheshire; and
— Yorkshire.
There are thus only four areas onshore in the UK where potentially suitable salt deposits are found (see map below, courtesy of E.ON).

DEPLETED HYDROCARBON FIELD STORAGE

Onshore in the UK there are a limited number of oil and gas fields that have been discovered after many years of exploration and their location is dictated by the geology. These fields tend to be concentrated in the Weald Basin, the East Midlands and East Yorkshire and not all of these are geologically suitable for re-use as gas stores (see enclosed map courtesy of DECC).

CONCLUSION AND RECOMMENDATIONS

GSOG strongly supports NPSs as the foundation of the integrated package of planning reforms so necessary to ensuring the security of gas supply in the UK.

GSOG makes the following recommendations to the Select Committee:

(i) The Committee should support the suite of energy NPSs, including EN-1 and EN-4, and acknowledge that they provide the stable policy framework needed for investment in gas storage.

(ii) The Committee should recommend that a much more robust and definitive statement of the urgent need for additional natural gas storage capacity is included in EN-1 and EN-4.

(iii) The Committee should recommend that the geological constraints over the location of underground gas storage are more explicitly and fully stated within EN-4.

We trust that these comments will prove to be of assistance.

January 2010

APPENDIX

LIST OF MEMBERS OF THE GAS STORAGE OPERATORS GROUP

Bord Gais Eirinann
Canatxx Gas Storage Limited
Centrica Storage Limited
E.ON Gas Storage UK Limited
EDF Trading Gas Storage Limited
ENI UK Limited
Gateway Gas Storage Company
INEOS Enterprises Limited
Infrasrata plc
National Grid LNG Storage
Scottish Power Energy Management Limited
SSE Hornsea Limited
Star Energy Group plc
Statoil (UK) Limited
Storengy UK Limited
WINGAS Storage UK Ltd

Memorandum submitted by Scottish and Southern Energy

SSE fully supports the submission by the United Kingdom Business Council for Sustainable Energy (UKBCSE)

However, one issue not covered in the response was the issue of Carbon Capture and Storage Readiness. This is covered below.

What has the Government actually said?

Section 4.7 of the overarching National Policy Statement deals with Carbon Capture and Storage Readiness.

The key section is as follows (with the most worrying sections underlined):

“4.7.1 To ensure that no foreseeable barriers exist to retrofitting carbon capture and storage (CCS) equipment on combustion generating stations, all applications for new combustion plant which are of generating capacity at or over 300 MW and of a type covered by the EU’s Large Combustion Plant Directive (LCPD) should demonstrate that the plant is “Carbon Capture Ready” (CCR) before consent may be given. The IPC must not grant consent unless this is the case.

In order to assure the IPC that a proposed development is CCR, applicants will need to demonstrate:

— that sufficient space is available on or near the site to accommodate carbon capture equipment in the future;
— the technical feasibility of retrofitting their chosen carbon capture technology;
— that a suitable area of deep geological storage offshore exists for the storage of captured CO2 from the proposed combustion station;
— the technical feasibility of transporting the captured CO2 to the proposed storage area; and
— the economic feasibility within the combustion station’s lifetime of the full CCS chain, covering retrofitting, transport and storage.”

Later on, the document says:

“4.7.3 If the IPC, having considered these assessments and other available information, concludes that it will not be technically and economically feasible to retrofit CCS to a proposed plant during its expected lifetime, then the proposed development cannot be judged to be CCR and therefore cannot receive consent”.

and

“4.&.11 In addition to satisfying the CCR criteria, new coal-fired generating stations in England or Wales must have Carbon Capture and Storage on at least 300 MW net of the proposed generating capacity. Coal-fired generating stations of less than 300 MW net capacity should show that the proposed generating station will be able to capture CO2 from their full capacity”

SSE’s opinion

SSE has already stated that Government must do two things: commit the UK to having no new coal without full capture, and to develop a funding mechanism for developing CCS demonstration projects.

This CCR policy, however, does nothing more than create an illusion of progress in CCS developments, and deflects focus from the more important measures needed to actually take CCS forward. However, it is actually far more serious than this for the reasons below.

Put simply, given the immaturity of CCS as a technology, making an assessment on the technical and economical feasibility of retrofitting the technology to a Planning Application is impractical and likely to produce a meaningless assessment. Without knowing the costs it is impossible to specify objectively what is “economically feasible”. In fact, it may even be the case that it will never be possible to economically retrofit CCS.

The result of these regulations (if taken literally) may be that no application (coal or gas) may be capable of compliance with the regulations meaning that these stations will simply not be able to be built. In fact, even if the Government or Infrastructure Planning Commission (IPC) treats these sections flexibly for applications, they may face legal challenge from objectors.

There is another added challenge for gas plant because CCS financial support is currently proposed only for the demonstration coal stations, meaning that gas applicants will have to effectively prove economic feasibility without subsidy. As the regulations apply to applications going through the planning process currently, this has ramifications for a number of applications, including SSE’s Abernedd Plant in Wales.

Around 12GW of coal and oil will have to close by the end of 2015 due to the Large Combustion Plant Directive (LCPD), and a further 7GW of nuclear is due to close by 2018. Therefore the UK is entering a period where investment in new capacity is vital to ensure secure energy supplies. Without a contribution from new gas plant over the next 10 years the UK will face power cuts. This CCR policy could hamstring the Government’s ability to keep its peoples’ lights on.

The Government needs to remove this proposal for CCS Readiness, if not for all plant then at least for gas plant, or defer it until CCS is proven as a technology, perhaps keeping the need to specify a route and ensure adequate space for retrofit at each plant. This, coupled with a commitment to no new coal unless fully abated today and a strong carbon price through the EU ETS, is the only sensible way to proceed in a way which tackles emissions while not compromising security of supply.

While a CCR type approach may be workable with Government as the decision-maker, given that the decision-maker will now be independent (the IPC), this area of the NPS needs to be made clearer to prevent later misinterpretation.

January 2010

Memorandum submitted by Scottish Power Limited

1. Scottish Power Limited is a subsidiary of Iberdrola SA and is a major UK energy supply, networks and generation business. This evidence is given on behalf of ourselves, our parent company, and ScottishPower Renewable Energy Limited (the UK’s leading renewables developer and another subsidiary of Iberdrola). References to “ScottishPower” and “we” are to any or all of the above companies as the context requires.

2. ScottishPower is an energy business that provides electricity transmission and distribution services to more than 3 million customers, supplies over five million electricity and gas services to homes and businesses across Great Britain (GB), and operates electricity generation, gas storage facilities and associated energy management activities in the UK.

3. ScottishPower Renewable Energy Limited is part of Iberdrola Renovables, which is 80% owned by Iberdrola. Iberdrola Renovables is the largest developer of renewables globally. Among our projects is the Whitelee wind farm which, at 322MW, is the largest onshore wind farm in Europe.

4. Iberdrola is also a major producer of nuclear power in Spain and is partnering with GDF Suez SA and Scottish and Southern Energy plc with a view to undertaking new nuclear build in the UK, including a proposed power station of up to 3.6GW on land adjacent to the existing nuclear complex at Sellafield.

5. ScottishPower is still studying the extensive documentation prepared by the Government in its proposals for national policy statements (NPSs) on Energy. Accordingly, this Memorandum constitutes our initial thoughts based on our study and consideration of the proposals to date. We will be continuing to develop and refine our thinking ahead of our oral evidence to the Energy and Climate Change Committee scheduled for on 27 January 2010 and our response to DECC’s consultation, due on 22 February 2010.
SUMMARY

6. According to Ernst and Young, £199 billion of new infrastructure investment will be required in the UK energy system prior to 2025 to ensure security of supply, climate targets are met and the UK economy remains competitive.

7. We believe this unprecedented level of investment, which will be needed in every type of energy related infrastructure, requires radical reform of the planning regime, which at present is a major obstacle to investment. A clear and stable long term policy framework for nationally significant infrastructure projects (NSIPs) which delivers timely and sound decisions on planning applications and provides greater clarity for developers and investors is needed as a key enabler for energy policy in the next decade.

8. We are therefore strongly supportive of the draft NPSs for Energy and believe that the Committee should recommend that Government formally approves (designates) them.

9. We firmly believe the Energy NPSs provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications for energy infrastructure and are wholly supportive of the IPC using the NPSs as the primary basis of their decision making for NSIPs. We also support their use as material considerations for both local planning authorities on smaller-scale energy projects, and the Marine Management Organisation (MMO) when considering sub 100MW projects in the marine area.

10. It is important to ensure the NPSs contain the right amount of prescription and flexibility to help the IPC make decisions on planning applications. We would urge the Committee to recommend that (subject to our comments below and in our forthcoming response to the NPS Consultation), the NPSs are retained as structured and to resist any calls to reduce the content or level of detail currently contained within the NPSs, which we believe to be needed and of critical importance to those who will rely on them in the submission of applications for NSIPs and/or the IPC. We would also add that inserting a review mechanism (we note the Planning Act 2008 requirements for review, but consider an express life-span should be referred to in the NPSs) would provide even greater certainty allowing operators and investors to plan beyond the dates that are currently used (such as the 2025 cut off date used in EN-6).

11. We are supportive of the need case for new energy infrastructure, as set out in EN-1 and the implementation of pre-agreed timescales for decisions by the IPC. We believe both these measures to be significant and vital steps forward in facilitating much needed speedier decisions.

12. We believe that a diverse energy portfolio is extremely important and we are encouraged that Government is allowing developers to decide on the most appropriate and commercially viable technologies within the agreed framework.

13. We ask that the Committee recommend to Government that Dungeness is re-considered for inclusion within the list of sites for new nuclear development within EN-6. We believe the exclusion of Dungeness to be premature, particularly given the uncertainties over some of the existing 10 sites and the implications this may have on competition in nuclear new build and on security of supply. In our view, there is insufficient evidence to conclude at this stage that compensatory measures could not be identified, or that there is not an over-riding public interest in making the site available.

14. Finally, the NPSs must play a significant role in defining the approach of all consenting regimes, both the local and regional planning regimes as well as the IPC and the DECC Consents team. We would emphasise the importance of the interrelationship between the NPSs and the hierarchy of the existing suite of planning policies, statements and guidance being made clear to all stakeholders within EN-1.

THE ENERGY CHALLENGE

15. In all future scenarios, independent commentators suggest that up to £200 billion of new investment will be required in the UK energy system in the next decade or so to ensure security of supply, climate targets are met and our economy remains competitive.

16. The Climate Change Act 2008 sets a statutory target of reducing greenhouse gas emissions by 80% by 2050. The EU Renewable Energy Directive has set the UK a legally binding target of achieving 15% of all energy from renewable sources by 2020 which requires the level of electricity generated by renewables to increase from 5.5% today to around 30% by 2020.

17. Furthermore, it is predicted that within a decade the UK could be importing 60–80% of its gas, which will require new gas import, reception and storage facilities as well as significant investment in the integrated gas transmission and distribution networks to enable gas to reach the market.

18. In the medium to long term, decarbonisation of the electricity mix is essential, particularly through new investment in large scale renewable generation, coal with carbon capture and storage and nuclear. Stronger and smarter electricity networks are also needed to ensure low carbon generation assets are connected up and performing to maximum efficiency, to ensure the connection and integration of distributed generation and to accommodate potentially significant shifts in load as the transport industry becomes more dependent on electricity as the favoured fuel source.

19. The unprecedented level of investment that will be needed in every type of energy infrastructure at the necessary pace to meet Government’s energy policy goals requires radical reform of the planning regime, which at present is a major obstacle to investment. In our view, a clear and stable long term policy framework for nationally significant infrastructure projects which delivers timely and sound decisions on planning applications is needed as a key enabler of energy policy in the next decade.

The Proposals for National Policy Statements for Energy

20. We greatly welcome and are supportive of the Government’s reforms to the planning regime through the Planning Act 2008. This package of reforms will deliver greater certainty for developers of NSIPs and a timelier and more efficient decision making process, making a major contribution to the achievement of the Government’s energy policy objectives.

21. We similarly welcome the proposals for the NPSs for Energy. The proposals generally provide a concise and helpful outline of the Government’s energy and climate policy and underpin the Government’s integrated package of reforms being implemented through the Planning Act 2008.

22. We believe that, subject to our comments below and in our forthcoming consultation response, the proposals for the NPSs for Energy provide a coherent and practical framework within which the Infrastructure Planning Commission (IPC) can assess future planning applications for energy infrastructure. As such, we see the NPSs as being vital to establishing the policy framework necessary to enable the very substantial infrastructure investment programme needed to meet Government’s energy policy goals of reducing carbon emissions whilst ensuring the future security of the UK’s energy supplies, and at the lowest possible cost.

Content and Detail

23. On the whole, we support the content and level of detail used within the NPSs, as well as their integrated nature, and we are wholly supportive of the IPC using the NPSs as the primary basis of their decision making for consenting NSIPs. If read in conjunction with the relevant draft technology specific NPS, the draft Overarching Energy NPS in the main gives very good and clear guidance to applicants to enable them to submit an application which contains the information necessary to allow the IPC to reach a decision on whether or not to grant development consent. We believe that NPSs will be invaluable not only to the IPC but also to developers, as well as local authorities, members of the public and any other interested parties.

The “Need” Case

24. We are supportive of the clear and robust need case for new energy infrastructure set out in EN-1 and believe this to be a significant and vital step forward in facilitating the decision process in relation to energy related infrastructure planning applications. Local planning processes are ill-suited for reviewing overall energy policy objectives, and it makes a great deal of sense to address these aspects at a national level through the debate on the draft NPSs. We agree with the document’s assessment of need which states beyond all doubt the need and urgency for the entire range of energy related technologies covered by the NPSs.

25. We would however ask that the projections in relation to the drop in demand for gas and its impact on the level of UK gas imports by 2020 be reconsidered, as this falls well short of our own and others’ estimations of around a 60–80% gas import dependency. While a great deal of work is under way to meet the Government’s ambitions for energy efficiency, renewables and nuclear, to the extent that any falls short, gas is likely to have to fill the gap. It would not be prudent to limit consenting of gas import and storage infrastructure to the level that assumes 100% success in all other policy areas. As such, given that we believe the need case for gas infrastructure projects may be even greater than assumed within EN-1, it does not seem appropriate that the stated need for these types of infrastructure projects be limited (as per paragraphs 3.9.8 and 3.10.8).

Agreed Timescales

26. The implementation of pre-agreed timescales for decisions by the IPC will also be essential in enabling the UK’s progression to a low carbon energy system in a timely and efficient manner.

Diversity of the Energy Mix

27. It is widely accepted that the best way to achieve the energy security and affordability our country needs is through a diverse mix of technologies. We are encouraged that Government is allowing developers to decide on the most cost-effective and most appropriate technologies within the agreed framework and we believe this to be the best way of bringing forward the most commercially viable low carbon technologies. Although we understand that current wave and tidal projects fall well short of the megawatt threshold for consideration by the IPC, we ask that their existence be referred to in some way within EN-3.
Holistic and Individual Applications

28. Whilst we welcome the statements that holistic consents are encouraged where possible, we also support the recognition in the NPSs that individual consents are permitted for particular aspects of a project that can be considered as a NSIP in their own right. While holistic consents are the ideal, single applications are often very difficult to achieve in practice due to a range of technical, environmental or commercial reasons. For example, different aspects of the development may have different lead times or be required to be in place at different stages. Accordingly, flexibility on this issue is vital in bringing forward much of the new energy infrastructure projects necessary to meet Government’s energy security goals as well as the carbon reduction and renewable energy targets.

Impacts and Mitigation

29. We are particularly supportive of the guidance provided within the technology specific NPSs on the key impacts that need to be considered when selecting an appropriate site for a particular project of nationally significant infrastructure and how to mitigate them. On the whole, we believe the inclusion of this information to be valuable to developers and the IPC in their decision making. We believe however that where any mitigation measure is indicated, the NPS ought to make clear that it is only intended to highlight possible mitigation that could be considered, and that it will not necessarily be appropriate to apply that particular mitigation in all cases.

Spatial v Non-Spatial

30. We welcome the spatial approach taken within the Nuclear NPS (EN-6). We agree that a non-spatial approach for the remaining technologies is the most sensible approach as we believe seeking to identify sites would be an unnecessary and complex exercise as the market is best placed to determine where and when to develop these particular projects. However, we would ask that the spatial nature of the Crown Estate leasing process be referred to within the Renewables NPS (EN-3).

Exclusion of Sites in EN-6

31. We welcome the fact that EN-6 identifies that all nuclear new build sites listed are stated as needed and are not alternatives to each other; this is particularly important for investor certainty. However, we suggest where potential sites for new nuclear development have been excluded from EN-6, this does not preclude them being considered for Nuclear development in the future, should circumstances change. A statement to this effect would be welcomed.

32. It is stated “the Government does not consider it appropriate to include more than 10 sites in the NPS at this stage”. In our view, there is no satisfactory evidence explaining the rationale for this 10 site limit. In addition, it is at odds with the evidence used in EN-6 to support the requirement for including a minimum of 10 sites: “it is necessary to include all 10 sites in this NPS to ensure that sufficient sites are available for development and to allow energy companies to fill a significant proportion of the 25GW of new capacity even if a number of sites fail at the project level.”

33. In particular, we do not support the Government’s reasons for discounting Dungeness and we therefore do not agree with the exclusion of Dungeness from the list of sites. We believe that these should be re-assessed with a view to including Dungeness in the list of sites in order for the IPC to assess the impacts of a new nuclear build at the project level. We would ask the Committee to make this recommendation to the Government.

34. The Government’s assessment notes that, unlike other sites, construction at Dungeness will require direct land take from an internationally designated site of ecological importance. However, we believe there is insufficient evidence to conclude at this stage that compensatory measures could not be identified for the new nuclear build site at Dungeness and we consider it premature to exclude it from the draft NPS. Indeed, the Government’s own assessment states that “further assessment supported by detailed data at the project level will be required before it can be concluded whether a nuclear power station development can be undertaken without adversely affecting the integrity of the Dungeness to Pett Level SPA.”

35. As part of the Government’s public consultation process surrounding this draft NPS, it is clear that there are certain sites attracting significantly more opposition than Dungeness and these sites are likely to be deployed later in the 2017 to 2025 period than would be feasible for Dungeness. This is a particular concern for two of the three Cumbrian sites (where, as the Government also notes, there may also be practical problems preventing the development of all three sites) We note that Dungeness has a grid connection agreement for a transmission capacity of 1,650MW with a connection date of 2016 (which under EN-6 would mean that, should Dungeness come forward to the IPC as a listed site, the IPC would be guided to attach significant weight to this potential early deployment).

36. Given the risk of sites not making it through at the project level and the risk of sites being removed from the NPS due to the consultation process, it is necessary to ensure there are sufficient sites available. We believe that it would be prudent to assume that at least one site (possibly in Cumbria) falls by the wayside at the NPS stage and that therefore Dungeness may be needed to achieve the target of 10 sites. Given the importance of nuclear power in achieving a low carbon, secure energy supply, we think that there may well be an imperative reason of overriding public interest for developing the site.
37. We also note that the sale of an option of Dungeness or Heysham was identified by the EU Commission as a necessary remedy to preserve competition in the nuclear new build market following the takeover of British Energy by EDF. With Dungeness potentially excluded from the NPS, and Heysham’s land area limited as a result of the SSA process, we would question whether the objectives of the divestment are being achieved.

**Alternative Sites**

38. We welcome the consideration of alternatives required in EN-1, however we would ask that the Committee recommends that the NPSs make clear that the IPC should take into account the urgency and importance of individual projects and ensure that only genuinely viable alternatives are considered so as not to cause unnecessary and time consuming delays.

**CHP**

39. We support the requirement for a developer to explore opportunities for CHP as set out in EN-2. We would however ask that the guidance makes clear that the IPC should only require developers to propose CHP where it is economic, where it is technically feasible to do so and where there is a practical application/need for the surplus heat. CHP should not be a continuing condition in any event because of the possibility that the company providing the heat load goes out of business.

**Gas Storage and Reception Facilities**

40. Development of new gas infrastructure, including storage, is critical in all future energy scenarios. The NPS should ensure the gas infrastructure capability is sized to meet the larger import dependency for 2020 and beyond that as we state above.

**Adaptation**

41. While we recognise the importance of adaptation to mitigate climate change, due to the high level of uncertainty as to the actual changes that will arise as a result of climate change, we would ask that the NPS also supports the option of active monitoring as an alternative to implementing measures far in advance.

**Clear Statements of Government Policy**

42. It is helpful that the NPSs provide a process for generic issues to be addressed on a global basis—through the debate on the NPS—rather than at each specific planning consent. We welcome the fact that the Government has chosen the NPSs as the most appropriate vehicle to address these important matters eg in relation to electric and magnetic fields (EMFs) and the availability of arrangements to deal with nuclear waste. We believe this to be sensible and in accordance with the need for a timely and well-founded decision making process.

**Beyond 2020**

43. We would ask that in due course Government further consider the energy infrastructure requirements and investment needed beyond 2020 and the implications that may have on the projects that are considered prior to 2020. This should not delay early designation of the NPSs.

**Conclusion**

44. We firmly believe that the Committee should recommend that Government formally approves (designates) each of the draft NPSs for Energy as quickly as possible, taking account of the points made above. This will enable the substantial infrastructure investment programme needed to meet Government’s energy policy goals of reducing carbon emissions whilst ensuring the future security of the UK’s energy supplies to get underway as soon as possible and at the lowest possible cost to the UK economy.

*January 2010*

Memorandum submitted by Shepway District Council

1. **Executive Summary**

   1.1 The government’s *Draft National Policy Statement for Nuclear Power Generation (EN-6)* proposes to reject on environmental grounds any new nuclear build at Dungeness, located within the District of Shepway. Yet the Dungeness site offers key strategic, logistical and economic advantages that make it an ideal location for replacement new nuclear build in the UK.

   1.2 Replacement nuclear build at Dungeness can both help to cut Britain’s carbon emissions fastest and plug an existing 8.7GW (33%) shortfall in electricity generation capacity in South East England. It would inject at least £2.4 billion directly into the local economy of Shepway District.
1.3 Shepway District Council strongly supports new nuclear build at Dungeness with an overall 82.5% majority of elected Councillors in favour, while a report commissioned from ORC in 2008 showed 62% of Shepway residents in favour. Two existing nuclear power stations have successfully operated at Dungeness for 45 years, beginning electricity generation in 1965. These reactors have operated safely and without harm to the environment.

1.4 Shepway currently hosts the retired Dungeness-A nuclear power station which closed in 2006 and the Dungeness-B nuclear power station which is scheduled to close by 2018. Replacement nuclear build at Dungeness could supply much-needed low carbon electricity generation for South East England and provide essential continuity of local employment.

1.5 Based on past experience, there are good reasons to believe that any environmental impacts at Dungeness can be mitigated and managed successfully. The Infrastructure Planning Commission (IPC) could take any site-specific decision on the suitability of Dungeness for nuclear build, based on a full project-level application for development consent.

1.6 For these reasons, Shepway District Council believes that Dungeness should be reinstated as a nuclear build site within the finalised Nuclear National Policy Statement for approval by the Secretary of State. The following bodies have all indicated their support for Dungeness as a location for a new power station:

— SEEDA.
— East Kent LSP.
— Hastings Borough Council.
— Rother District Council.
— Local Town and Parish Councils.
— Kent Economic Board.
— Channel Chamber of Commerce.
— Romney Resource Centre.
— The Marsh Academy.

2. SHEPWAY DISTRICT COUNCIL

2.1 Located in Kent, the Shepway District covers 360 sq. km and has a population of 100,100 (2008). Shepway is the third most socio-economically deprived local authority in Kent. Classified as a “Significant Rural District”, its principal settlements are Folkestone, Hythe, New Romney, Lydd and Hawkinge. Shepway’s central and east Folkestone wards exhibit particularly deep socio-economic problems. Dungeness is located within Lydd ward which has an unemployment rate of 4.3% (2009), nearly twice the 2% unemployment rate in the South East.

3. CASE FOR RETAINING DUNGENESS AS NUCLEAR BUILD SITE

3.1 Shepway District Council commissioned two independent expert reports from Jackson Consulting nuclear consultants and Hammonds legal advisors.\(^{273,274}\) The reports are available to the Select Committee and are attached at Annex 1 and Annex 2 of this memorandum of evidence. These technical and legal studies suggest that there are Imperative Reasons of Overriding Public Interest (IROPI) that make a compelling energy policy case for allowing new nuclear build to proceed at Dungeness. The Council has also prepared a synopsis of its socio-economic case (Annex 3).

3.2 Shepway communities have 45 years of experience safely operating two nuclear power stations locally. In addition to providing a safe, substantial and reliable supply of low carbon energy for the region, the nuclear industry is a major driver for prosperity and provides a wide range of employment opportunities directly and through the local supply chain.

3.3 The existing Dungeness-B nuclear power station injects £30 million to £50 million annually into the local economy but is scheduled to close by 2018. Because modern PWR nuclear power stations have design lives of 60 years, the future loss of nuclear build opportunity will have major implications for local employment and community sustainability. If nuclear build does not proceed the economy will lose £2.4 billion over the next 60 years, as well as local income lost from the five year construction phase. A replacement PWR nuclear power station built at Dungeness would probably employ 400 workers directly, and indirectly support another 88 local jobs (shops, hotels, goods and services) through local multiplier effects. Although the construction phase of a new nuclear build programme will produce a rapid temporary boost to the regional economy, it is the sustainable local jobs from reactor operation that are probably more important for the long term prosperity of Shepway District.


3.4 Dungeness can help to cut Britain’s carbon emissions fastest. Dungeness has a nuclear grid connection available from 2016, among the first sites in the country. The capability of Dungeness to rapidly connect to the grid ahead of nearly all other nuclear sites is extremely important. This is because the government has prioritised early deployability in the public interest, to maximise carbon emission savings (tonnes CO₂ avoided) during the period from 2017–25, the NPS deadline date. There are no major technical obstacles preventing reactor construction. The Spanish nuclear energy utility Iberdrola has stated that a new nuclear power station could be fully operational at Dungeness by as early as 2019.

3.5 New nuclear build at Dungeness could help offset a major shortage in low carbon generation in South East England. For historical reasons there is a growing negative regional energy gap between electricity generation and electricity demand in the South East. Today the South East generates 17.2GWe of capacity but needs to import about another 8.7GWe (one third of its electricity needs) from other regions of the UK. The problem was an important issue originally recognised at the Sizewell-B public inquiry which examined the case for Britain’s newest nuclear power station. The South East supply-demand gap will continue to widen outstripping most other regions of the UK. For example by the 2025 NPS deadline, South East England will need three times as many new power stations as Southern Scotland.

The problem will be exacerbated by the expected closure of the Kingsnorth coal-fired power station in 2015 and the Dungeness AGR nuclear power station in 2018. Replacement nuclear capacity could be embedded directly within the South East at Dungeness.

![Diagram: South East Energy Gap](image)

Source: Jackson Consulting (2009)

3.6 Dungeness is of strategic national importance as a viable nuclear generating site close to areas of high energy demand in the South East. Disregarding advice from the Institute of Engineering and Technology (formerly known as the Institution of Electrical Engineers founded in 1871), the government ignored grid connection as only a local siting issue. There is empirical market-based evidence to show that the government’s approach was probably wrong, at least in the commercial judgment of utilities and their investors. Eight nuclear development sites were sold in 2009 for a total of £1 billion. Analysis of these transactions shows a strong correlation between higher price and early grid connection, and also a strong correlation between higher price and preferred regional location in the South East and South West of England. Some 70% of the £1 billion spent on nuclear land was on sites in the South East and South West. The highest prices were paid for sites in the South East (39% of the total transaction value). Furthermore the market price paid for nuclear development land declines very rapidly, losing about £44 million for each year of delay connecting to the grid after 2016. These pricing signals strongly suggest that Dungeness would be a good location for new nuclear build, reflecting the viability and overall strategic desirability of early “first wave” nuclear build sites located in the South of England.
3.7 Nuclear development near environmentally sensitive habitats at Dungeness raises understandable concerns. Yet the government’s preliminary environmental reasoning to reject Dungeness appears excessively restrictive and a more pragmatic environmental approach is justified. There are good reasons to believe that the long term environmental impacts may not be severe, mitigation strategies through Biodiversity Action Plans (BAPs) will be effective, and nuclear construction may even be helpful to continue to protect the internationally designated ecology sites from coastal erosion. At worst, the 91 hectare nuclear development site would encroach on just 0.3% of the internationally protected 27,000 hectare Natura 2000 Romney Marsh wetland Special Area of Conservation (SAC) and Sites of Special Scientific Interest (SSSI). Only 30% of the 91 hectare nuclear site land would be developed, the remaining 70% (65 hectares) would become a security buffer zone remaining relatively unchanged and protected under Biodiversity Action Plan arrangements. If a nuclear power station is not constructed then about 240 metres depth of shingle habitat at Dungeness will likely be destroyed by natural coastal erosion over the next 160 years (the same time period as the proposed nuclear reactor lifecycle). There are also likely to be some synergies and opportunities to reuse or redevelop existing nuclear infrastructure at the adjacent Dungeness-A and Dungeness-B nuclear stations. For example shared modern spent fuel storage, intermediate level waste storage, and waste treatment and encapsulation facilities might substantially reduce the overall land area needed.

Future proposals for accelerated decommissioning of the government’s shut-down Dungeness-A nuclear power station might also free-up some land for brownfield nuclear redevelopment.

3.8 It is possible that Small Modular Reactors (SMRs) could be deployed at Dungeness, further reducing the land area needed for new nuclear build. Such modular nuclear power systems are particularly suitable for deployment within Britain’s future decentralised grid network architecture, as envisaged under recent Conservative energy policy proposals. Dungeness could remain as a development option for smaller utilities who might choose to invest in scaleable clusters of SMR reactor units, which can be built relatively quickly at lower cost and are easier to finance.

3.9 Shepway District Council has approached the government’s NPS consultation process constructively and is fully supportive of nuclear build proposals at all of the UK sites nominated by energy utilities. Nevertheless legal advice from Hammonds suggests that there are some apparent flaws in the government’s evaluation of Dungeness, when compared with other nuclear build sites that have provisionally been approved in the Draft NPS.

3.10 In practical terms, nuclear development at Dungeness is not impossible, and it is too soon to rule-out Dungeness as a site on the basis of the outline information presently to hand. The advantages offered by keeping options open at Dungeness must not be lost, particularly as there is no detailed application for development consent which the IPC could fully evaluate. Dungeness should be included within the finalised NPS. The site can be ruled-out at a later stage by the IPC if these reasons are not sufficient or if the environmental impacts cannot be overcome.
3.11 The government has set out a clear imperative for undelayed low-carbon nuclear development, which is a vital part of the argument in favour of Imperative Reasons of Overriding Public Interest (IROPI). The IROPI test has been considered at each of the 11 proposed nuclear build sites, which all have at least some potential to cause detrimental affects on designated European Sites that are protected under the EU Habitats Directive. In the face of that national low-carbon energy policy imperative, DECC’s proposed rejection of Dungeness is irrational, especially in view of its significant potential for early deployment avoiding CO₂ emissions.

3.12 Furthermore DECC’s evaluation of Dungeness includes detriments and omits matters which are important to the case in favour of Dungeness, both in comparison with other sites, and on the basis of Dungeness’s intrinsic value as a unique development asset in South East England. DECC’s public consultation process includes organised meetings and local events near the 10 sites which DECC has proposed to approve.

The failure of DECC to consult locally at Dungeness is procedurally unfair and presupposes the outcome of the NPS national consultation process. Shepway wish to participate fully in the local consultation process but are unable to do so unless DECC remedies the defective local consultation.

3.13 The government has rightly taken into account the views of local communities as an important factor for siting an underground repository for nuclear reactor waste disposal. Yet in contrast the government has ignored local community support as a factor for nuclear reactor build. This confusing approach to public consultation for nuclear facility build is both illogical and irrational. The lack of priority given to local community support at Dungeness for development is completely at odds with the Strategic Environmental Assessment (SEA) process for radioactive waste repository new build, which is to be led by a local community volunteerism approach. In matters of important national infrastructure the approach set out in the DECC MRWS process of seeking to engage with and give weight to the views of local communities is correct. But several important reports setting out local views at Dungeness have been excluded from the NPS consultation without full reason being given by DECC. There is no justification for the exclusion of local views supporting nuclear reactor build, in the face of the MRWS national radwaste consultation process. The failure to give sufficient weight to socio-economic factors including local public support may render the NPS consultation defective.

4. Conclusions

4.1 Shepway District Council supports the inclusion of Dungeness as a site for the development of a new nuclear power station by 2025, and having considered the draft overarching National Policy Statements for Energy (EN-1) and Nuclear Power Generation (EN-6) contends that:

(a) It is premature to conclude that objections by Natural England regarding the direct loss of vegetated shingle habitat from the Special Area of Conservation cannot be adequately compensated and that Natural England’s objections cannot be addressed. In addition there is no evidence that a combination of intervention measures including avoidance, mitigation and compensation is not unviable.

(b) Notwithstanding any ecological concerns it can be argued there is an Imperative Reason of Overriding Public Interest (IROPI) which justifies the inclusion of Dungeness.

(c) Dungeness can be brought forward more quickly than other identified sites, it can rapidly connect to the national grid and it has the potential to offset generation shortage in South East England.

(d) That the Dungeness site can make a meaningful contribution to the UK’s non-renewable capacity by 2025 and that it should not be assumed that the other nominated sites will be sufficient to meet this target or indeed that all those sites will receive development consent from the IPC.

(e) That reaching conclusions prior to the consultation is premature.

(f) That the regional/local socio-economic benefits of developing a third station at Dungeness should be given more weight.

January 2010


Annex 1


Annex 2


Annex 3

Summary Socio-Economic Case for inclusion of Dungeness as a site for a new Nuclear Power Station, Shepway District Council.

Memorandum submitted by the Shut Down Sizewell Campaign

ABSTRACT

We make general observations on the difficulties experienced locally around Sizewell over the consultation on NPSs, and on the unfairness to us and to the public in putting out the NPSs for consultation in front of the Justificatory Process. On EN-1, we submit that the neglect of alternative national levels of electricity need and supply in the document make it unnecessarily and unacceptably inhuman and planet-unfriendly. On EN-6 we challenge the exclusion of nuclear waste from consideration in the NPS, on the grounds that it remains an unresolved enigma of huge concern to local people. We challenge the inadequacy and short-sightedness of the NPS in its understanding of coastal processes. We contest the safety of nuclear stations at Sizewell from coastal and climate change events, stressing the problems of offshore dredging that are omitted from the NPS. We criticise the inadequacy of the COMARE-based arguments for safety from radiation risk, and the failure of the RIFE reports to provide necessary information. We argue that the omission from the NPSs of any consideration of terrorism prevents the public from exercising its own judgement over a matter that rightly concerns them deeply.

On all these grounds we find the NPSs unfit for purpose.

GENERAL COMMENTS

The Campaign observes that there have been considerable difficulties for its members, and for the general public locally too, in deriving enough information to respond to the public consultation on the NPSs for the following reasons, and in responding itself:

— The vast amount of documents to scan, assimilate and hunt through—some 1600 pages, we believe.
— The specialist details on which the NPSs frequently rely to argue their cases.
— The bias and assumptions on which much of the NPSs base their arguments.
— The shortness of warning and the poor publicity given to the DECC exhibition and its public meeting.
— The failure of the public meeting to enable everyone to contribute their views.
— Too much of the public meeting taken up by presentations from the two DECC staff.
— The inadequacy of the public meeting to develop the individual’s views in any way into community views on EN-1 and EN-6, as a workshop might have done.
— The inability of the exhibition to air individual views in constructive ways to encourage discussion and wider understanding, isolating each contribution instead and therefore debilitating it.
— Consultation Fatigue and bewilderment caused by such a plethora of consultations across Government.

We consider that all this goes against the Government’s own Guidelines for Good Practice in Public Consultation, and that this renders the NPSs unfit for purpose.

We believe there is a major problem with the Government’s logic and fairness, in having this NPS public consultation before ever the public may know and discuss what the Government’s final justification is for new nuclear power stations, under the European Council Directive 96/29 Euratom. We consider that this also makes the NPSs unfit for purpose.
SUBMISSION ON THE DRAFT OVERARCHING NATIONAL POLICY STATEMENT FOR ENERGY (EN-1)

Policies on energy supply and demand, EN-1 Parts 2 and 3

The statement in 2.1.5 that the average global temperatures must be kept to 2°C ignores the well-attested assessment that such temperature rises will nevertheless impose drastic effects on the populations of oceanic islands and of Bangladesh. It is therefore inhuman to propose a policy for the UK that accepts such problems, without at the same time proposing ways of mitigating them. And the Government have manifestly failed to propose any such mitigation, let alone set about implementing them.

There is a need to separate out the role of nuclear power—to provide electricity alone—from other forms of energy with which EN-1 confusingly conflates it, since this conflation disguises both the rather more limited role of electricity itself, and the very limited importance that large and centralised sources of electricity would have. It has been demonstrated over and over again that varied decentralised micro-energy sources could obviate the need for nuclear altogether. Yet this receives no attention at all in the NPS.

In 3.310–3.3.14, the policy is developed that an electricity demand for somewhere between the current 60 GW and a future 110 GW should be developed over the years to 2025. This blithely ignores the effect such a policy will inevitably have, both directly and indirectly, in increasing global temperatures, and it therefore inhumanly ignores the lethal consequences for low-lying countries.

Furthermore, 3.3.23 dismisses increased energy efficiency, smart demand management and opportunities for increased storage and interconnection as ways of reducing demand, yet the NPS’s reason—that their effect on large scale infrastructure would be limited—is erroneous, since they and micro-generation could do away in time with large scale infrastructure altogether. 3.3.25 proposes that nuclear power should be in the mix of methods of satisfying that demand, in spite of the self-evident fact that throughout the timeline considered (2010–2025) the building of nuclear power stations will be adding hugely to carbon emissions and therefore contributing directly to global temperature rises. Meanwhile the suffering to indigenes and the despoliation of land involved in supplying the uranium for nuclear power is brushed aside.

Indeed 3.5.1 promotes the contrary myth that “nuclear power stations are low carbon”, disarming ignoring the huge carbon cost of nuclear build and uranium supply during the only window of opportunity there is to avoid a 2°C rise and runaway climate change.

3.5.3 blandly refers to the Government’s so-called “debate at national level” in 2006. This debate was notoriously partial, avoiding altogether the exacerbating effects on climate change over the next few years of a new build nuclear programme. It was also dismissive of the many authoritative assessments and proposals available of the way policies might, if there was a Government desire for them to do so, enable the provision of a satisfactory level of electricity, using only benign renewable sources without nuclear.

That debate was posed by the Government (and is still posed in the NPS) against a background it had carefully avoided disturbing, of “business as usual” and indeed of material and economic growth. None of these is justifiable on a planet already suffering from the consequences of Western overgrown business and growth, nor is there any justification for the additional suffering the planet’s varied inhabitants will suffer if the UK maintains such selfish targets.

Far more thrifty and planet-friendly alternatives to our electricity needs and supplies are available, yet the NPS ignores these, without even considering seriously the obligation the UK has to be more planet-friendly. The precedent of a paradigm change to reduce energy use exists in the emergency measures put in place by a resolute UK Government in order to win the second world war, yet the NPS does not even begin to discuss the possibility, let alone the desirability, of such measures now, when the crisis is a far more severe global one, instead of an acute but local territorial one.

Such severe neglect on the part of the NPS EN-1 renders it unfit for purpose.

SUBMISSION ON THE DRAFT NATIONAL POLICY STATEMENT FOR NUCLEAR POWER GENERATION (EN-6)

Nuclear waste in EN-6, Part 3

The statement in 3.8.20, “that Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations”, flies in the face of reason, of the evidence, and of the Government’s own investigations on this matter.

No sound plan for disposing of any high activity waste anywhere has ever been produced by any country, let alone agreed anywhere. As 3.8 variously describes, the Government’s MRWS White paper reviewed the various plans and processes, but its title—that of only “managing” the waste—is tantamount to admitting it cannot dispose of it. Furthermore, CoRWM 1, which was set up by Government to look into merely managing (not at all of disposing of) the waste, clearly stated it was unable to say anything about waste from new nuclear build, except that its Recommendation 4 implied that an intensified programme of research and development would be needed to reach any firm proposals about management of all waste. Yet this has not yet been provided on anything like the scale necessary to decide anything.

The Sixth Report of the U.K. Royal Commission on the Environment of 1976 (The Flowers Report) recommended that “There should be no commitment to a large nuclear programme . . . until the issues have been fully appreciated and weighed in the light of wide public understanding”. Yet 34 years later the public
still fed propaganda about nuclear waste. The Flowers Report’s use of the past tense “have been appreciated and weighted” makes nonsense of the NPS’s claim above that the Government is satisfied that arrangements “will exist”.

The types of nuclear fuel proposed for new nuclear stations, and their higher burn-up, will produce even nastier waste materials than Sir Brian Flowers ever examined, providing further reason to doubt the validity of the Government’s satisfaction. Moreover, 5.4.1 D2 states (in spite of the Government’s satisfaction) that knowledge on how to manage nuclear waste is so uncertain that it may be necessary temporarily to store this spent fuel waste on the sites of new stations for 160 years, more or less, to enable an adequate cooling period for it to elapse before the waste can be moved elsewhere. Given the start date of the stations as 2025, this means some waste will have to remain in the locality, with all the risks and problems that may entail (discussed further below under Flooding and Coastal processes) until 2185, or until 2200 if it turns out to be more, rather than less. For this to be excluded from local discussion, by Government edict based only on its fantastical satisfaction described above, is unacceptable.

Article 6 of the IAEA Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (2001) states that “[e]ach contracting party . . . must ensure . . . it makes information on safety . . . available to members of the public”.3 The UK is a contracting party but it has not done this, and it cannot do this, because it does not yet know how to make nuclear waste safe. To exclude such issues from the IPS, and therefore from the public debate, is unacceptable.

On all these grounds, the NPS’s consideration of nuclear waste is not fit for purpose.

COASTAL PROCESSES, EN-6, PART 5.4.1 D2

This looks ahead only to 2100, because “it is not practicable to consider beyond 2100 at this stage”. Above however we have shown that the NPS predicts that some hot higher activity nuclear waste may have to be stored on the coast at Sizewell until 2200. So there is a gap of a century during which hot waste that has already been dumped on the coast may have to remain there, at the mercy of all coastal and climate vicissitudes, although the Government have no idea whatever what those vicissitudes may be. That is throwing all precautionary principles to the winds, and of itself—independently from all other considerations—it makes this NPS unfit for purpose. To prevent the public from having a say on such a matter goes against natural justice.

D1 & D2 Flooding, tsunami, storm surge and coastal processes at Sizewell, EN-6, Parts 5.14.18–5.14.37

We take these together because to separate them, as the NPS does, unrealistically minimises their synergism when such phenomena operate either variously over long periods, or more calamitously all at once. The paragraphs in these sections of the NPS offer an unrealistically benign view of the future stability of the Sizewell coast, based on inadequate data, largely derived from computer modelling and aimed at supporting insubstantial hypotheses. These ignore much hard evidence to the contrary that the coastline is extremely vulnerable even within 100 years, let alone over the 200 years for which planning for the safety of the waste is necessary. This evidence may be obtained from such sources as the Marinet Group of FOE.4

The NPS wishes one to accept the view that absence of evidence is evidence of absence, while there is quite enough evidence to require one to subject it all to detailed examination on a local level by local people interested in their own local safety, instead of excluding it from what local folk may consider at all. Even if the jury is out at present on some of the issues involved, four glaring problems face the protection of any nuclear station and its waste store at Sizewell from the sea and from flooding:

— Engineering, such as is deemed to be necessary and possible to protect the station, will by its very nature simply deflect the energy of the sea elsewhere. All along the coast to north and south are valuable assets and communities that would receive such deflected energy, in ways we cannot predict but that would surely happen.

— As is made very clear from the Marinet evidence, there is a large added risk to the stability of the Sizewell coast, and to the extent to which it will erode, from the exacerbating effects of offshore aggregate dredging. There is an ever-increasing amount of this dredging taking place at present to the north of the site, from whence is supposed to arrive the sediment intended to replenish the Sizewell beach (in reduced quantities already, the NPS acknowledges). Yet there are additional dredging proposals that bring the threat markedly closer and more directly to Sizewell, most worryingly those for the area 430 UMD/MX, less than eleven miles offshore from Sizewell and directly opposite the Dunwich sandbank. This sandbank is accepted as being a major defence for the Sizewell beach. If its material gravitates towards the hole caused by the dredging in area 430 that is likely to occur well before 2100, that must gravely reduce the defences for the nuclear waste on the beach well before 2200. None of this is mentioned in the NPS.

— The problems with the Minsmere sluice, blithely referred to in 5.14.21 as being capable of mitigation, should not be taken in isolation, but together with all the other destabilising influences on the Sizewell coast. The fact is that the entire coastal fringe of which Sizewell is a part and which extends back behind the site to the south west and west and several miles to the north, is over a period of 200 years at the mercy of both fresh water from the Minsmere river and of marine incursions too, interacting in unpredictable ways, so that the future stability of the site is anyone’s
guess. As confirmation of this, the enormous engineered causeway to the north of the site proposed by EDF is a hubristic attempt to provide a dam against the opposing waters; while all it would do in practice, of course, would be to deflect the water’s energy in other unknown directions, with unknown consequences.

— Although the NPS confidently quotes authoritative projections of coastal climate change effects from all sorts of up-to-date sources, this merely masks the uncertainty about the accuracy of each projection. It also masks the trend that is constant over all the successive projections—that they become more dire as one forecast replaces another in time. That trend is certainly reliable, and it means we cannot possibly know how vulnerable the Sizewell site will be in the future; we can only say it will be worse than we think.

The NPS is therefore entirely unfit for purpose in this part, in giving an inadequate appraisal of the vulnerability of the Sizewell site. And this is a particularly grave fault, since it will be local people who will suffer first and worst from any damage to the nuclear station or its waste stores, yet the NPS proposes to prevent local people from having any say in such matters.

Health at Sizewell, EN-6, Part 5.14.102–110

In an attempt to rule out of local consideration the effects on local cancer from radiation from Sizewell, the NPS relies upon the 10th and 11th Reports of COMARE. This is not fit for purpose because the model of radiation risk used by COMARE is the ICRP one, which is severely challenged and exposed as being unsatisfactory to explain the incidence of cancers in many cases. The CERRIE Committee majority report agreed that the ICRP assessment of risks might be an order of magnitude wrong in either direction.\(^5\) CERRIE’s minority report agreed that it might be two or three orders of magnitude wrong.\(^6\) Furthermore, the European Committee on Radiation Risk proposes alternative models for estimating radiation risk that meet the facts far better in many cases than the ICRP one does.\(^7\)

The figures on which COMARE relies are not available to the public, and there have been difficulties and obstructions facing the public in obtaining figures on which they may rely.\(^8\) Since most UK nuclear stations are on the coast and in sparsely populated areas, even COMARE’s jealously guarded samples are small and so of low significance. They rely more on absence of evidence than on evidence of absence. These samples from which COMARE draws its conclusions are dwarfed into insignificance by the huge size of samples used in the German KIKK Study of 2007.\(^9\) This found significant increases in childhood cancer in direct proportion to how close to nuclear power stations the children lived, and its methodology and power exceed any other study that can so far compare with it. This is very positive evidence of correlation between cancer risks to children and their adjacency to nuclear stations.

At the very least therefore the COMARE reports are not authoritative, therefore unjustifiable as reasons to exclude local people from having a say in the health of their children. So this part of the NPS is not fit for purpose.

The only other study relied upon by the NPS here is the Radiation In Food and the Environment Report (RIFE) 13 on the levels of radiation in various foods near Sizewell, and its conclusions are that its results show that levels of radiation in food are too low to cause cancer. Of course this depends upon what are the real relationships between radiation levels and cancer risk, which is uncertain as described above. However, local people are interested in a possible hypothesis for a pathway between nuclear stations and child cancer that depends upon peaks of radiation emissions (and therefore their deposition on food, which may be consumed by pregnant mothers and cause trouble for the developing foetus) at the time of or shortly before a shut-down of Sizewell B.

To test this hypothesis, we sent for RIFE 13 recently from the Food Standards Agency, and received on 15 January not RIFE 13, but RIFE 9, so we are unable to study the figures as pertinently as we would like.\(^10\) However, we notice in tables 5.10(a) and 5.10(b) of RIFE 9 that, of 43 categories of samples taken around Sizewell in 2003 (the year covered by RIFE 9), only one was taken more than twice during the year. That sample is of milk. All of the other 42 categories of samples were taken either only once or twice in the year. This would effectively prevent any correlation being shown between the radiation in the foods and sites on the one hand and the time of a shut-down of Sizewell B on the other. This means that those of us local to Sizewell are unable to make our own observations to satisfy ourselves as to the safety of nuclear power at Sizewell. Not only that, but it seems that the sources upon which the NPS relies to impose radiation upon us locals which simultaneously prevent us from obtaining the figures we ourselves need to discuss this.

This is contrary to natural justice and makes the NPS unfit for purpose.

The risks of terrorism at Sizewell, omitted from both EN-1 and EN-6

The Observer of 22 November 2009 reported that “the government is refusing to provide details on five separate security breaches at British nuclear power stations last year”. Three years earlier the OCNS annual report was prepared to reveal that among eight breaches of nuclear security that year were the thefts of laptops from parked cars, and inappropriate transmission of restricted information over the internet. The refusal now to reveal details suggests the recent incidents were even more serious than the earlier ones. The
presence of a new nuclear station at Sizewell will be an obvious target for terrorists. For the NPS to omit any consideration of this, and for the Government to deprive local people from any opportunity to assess the risks of this by withholding relevant information, make the NPS unfit for purpose.

January 2010

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10 www.food.gov.uk/science/surveillance/radiosurv/rife/

Memorandum submitted by Spring Wells Heritage Group

SYNOPSIS

Our detailed comments on the Draft National Policy Statement for Renewable Energy Infrastructure (EN3) are given below using the same layout as the document itself.

To be helpful however we first summarise some of our key arguments as to what is wrong with the statement and how it can be improved. This synopsis does not cover all the points we are making and should not be taken to represent the whole of our representation. All our synopsis comments relate to on-shore wind power:

1. It is necessary to know who determines whether an application is 50MW or over. Wind farm operators clearly see the IPC route as more favourable than a local authority route to consent and there is evidence that they are therefore saying that their proposals are 50MW. Given that EN3 (wrongly) encourages flexibility, developers can go down the IPC route and then later change to a smaller scheme making a mockery of the Act. How will the IPC be required to check out the power generation capacity? Surely it cannot just take the power company’s word?

2. “Good design” is a hollow principle when it comes to wind turbines. Wind turbines will always be designed to achieve the greatest efficiency in power generation at the lowest cost (often at the sacrifice of noise considerations) and considering their ever increasing size and industrial nature their visual design will play no part and it is cynical of EN 3 to suggest that it will

3. Electricity grid connections must be required to be detailed in the main application as their impacts on communities, especially when overground, can be as great as the turbines themselves.

4. The final minor roads and tracks giving access to windfarms should be required to have any “improvements” removed after the windfarm construction phase. Over zealous highways authorities should not be allowed to insist on concrete kerbs/radii, metallled or concrete roads or hard drainage as all of these can add up to threatening urbanisation of the countryside and can even be used as a pretext for further development. We believe that the industrialization and urbanization of our fast disappearing English countryside is just as affected, in an insidious way, by the access works to windfarms as by the turbines themselves. Indeed if the windfarms truly are temporary as the author would have us believe then these impacts threaten to last longer than they do.

5. We have great concern about EN3 setting up the perception that somehow windfarms are temporary and for this reason their impacts are less serious. 25 years is after all a generation. If for example there are adverse effects upon an historic landscape it should not be an offsetting argument (as advocated) to say that they do not matter because they will only be for 25 years. That is ridiculous! If the historic landscape is important then it is important for every generation and one cannot be missed out! It is simply wrong to steer the IPC in the direction of lessening the importance of adverse effects upon landscape, visual amenity and historic assets on the grounds of temporariness, when the life is expected to be at least 25 years. This does not happen in the whole Town and Country Planning System with any other form of development. Temporary should only be a label for a development with a life of less than three years. It is outrageous to suggest that somehow any indirect effects on historic environment features such as effects on setting will not be
permanent and therefore should not count as much in weighing up the decision. Does this mean that if one wants to experience the beauty of a Cistercian Abbey in its setting one might have to come back in 30 years time (if still alive)? Does this mean that the IPC should allow windfarms all around Stonehenge? What about the thousands of other less well known historic settings that this country is known for?

6. We object to the way that flexibility for applications is advocated. There is no logical reason why windfarm applications should have greater flexibility than any other planning application—indeed because the impacts are potentially much wider, if anything they should have less flexibility. For example the mechanism for driving the rotors can vary greatly in its noise generation and this is not just to do with its MW capacity. In order to decide whether to support or object to a local application the local community and other consultees need to know precise details of the development. If the developer is able to say in debate or at the hearing that “this is just an example and the final product could be different” it will be impossible for objectors (and the IPC/local planning authority) to pin him down and there will be no sensible debate. There is no less reason for a wind farm developer to not know the layout of his windfarm than for a housing developer not to know the layout of his housing estate.

7. In its attempt to support a flexible approach EN3 advocates that the ‘maximum’ scheme that could be built should be appraised. (This also encourages the applicant to go down the IPC route when he may intend to build a smaller development—see point 1) But what does maximum mean and this is not such a clever solution as it sounds because a smaller and cheaper turbine, which the applicant would be allowed to switch to, could well be noisier. The scheme should be the actual scheme.

8. A tolerance of up to 50 metres in the “micrositing” of turbines is unacceptable and could have unexamined effects on noise, archaeology or the historic environment. This does not happen with any other development requiring consent—what is different?

9. EN3 proposes giving special consideration to impacts affecting sites of “national designation” including listed buildings but it talks about where application sites are “in” these sites. To prevent applicants drawing their application boundaries around such designations as listed buildings or monuments the consideration needs to apply to sites which contain or are close to nationally recognised designations. It should be borne in mind that other planning legislation and advice (PPGs) refers to the importance of “the setting” of listed buildings and ancient monuments as well as the structures themselves. This important concept should also be incorporated here. The aim to weigh up any harmful impacts with environmental, social and economic benefits is admirable and is what decision making on development is all about. EN3 should make it clear that this approach should apply to all application sites and not just those within or close to national designations.

10. It is illogical to suggest that windfarms will bear greater scrutiny in greenbelts – greenbelts were introduced to stop urban sprawl and to achieve the separation of cities. There are no greenbelts where there are no cities but this does not mean to say that the countryside is any less precious—it belongs to all the citizens of this increasingly crowded country. The circumstance of greenbelts, when it comes to windfarms are therefore not ‘very special’ relative to anywhere else.

11. All other things being equal there is no reason why a sequential approach should not be applied to windfarms meaning there is no reason why priority should not be given to siting turbines on previously developed land. If this approach is specifically banned then it will simply mean that windfarm operators will always go for the cheapest solution which means constructing on greenfield land.

12. Considerations regarding birds is not just a question of the risk of collision with turbine blades. It is also a question of not interrupting large open spaces important for the winter grazing of such species as golden plover and lapwing which require uninterrupted space to land flocks of 1,000 or more birds.

13. Potential adverse impacts which are missing from EN3 include:

- effects of large concrete foundations on aquifers used for drinking water (eg the South kesteven fen margin in Lincolnshire);
- effects of large concrete foundations on drainage and on carbon release in their manufacture;
- effects upon radar at airports and airfields (these have been used by local planning authorities and the MOD as reasons to refuse applications); and
- effects in areas heavily used by light aviation.

14. There should be a requirement for the land on which windfarms stand to be reinstated when they become disused for a given period of time (say a year) and not just when the consent period runs out. This is to prevent the possibility of windturbines, towers and infrastructure standing disused for many years when their operation might cease because of changes in the economics and sources of power supply
15. Concerning the effects of noise, keeping turbines at a safe distance from homes is a key requirement. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier, which seems to be the Government’s objective. This distance should be 2km. This is the distance recommended by La Societee de Medicins in France and it has been the distance for the search criteria for windfarm sites issued in planning advice by the Scottish Government. If there are one or two isolated homes within the 2 kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes—such as the Davis family in Deeping, Lincolnshire.

16. The reliability on the standard known as ETSU-R-97 for the testing of noise effects from windfarms is unreliable because it dates from 1996 when there were very few and much smaller wind turbines in the UK. Much more is now known internationally about the noise effects from windfarms and their repercussions for human health including vibro acoustic disease. This 14 year old standard must be urgently reviewed in the light of empirical evidence including that of families who have been forced to leave their homes. However this complication and arguments over the complex business of measuring noise noise could be completely removed if a minimum distance of 2km between turbines and human habitation was adopted.

17. It is stated that “The IPC should use ETSU-R-97 to satisfy itself that the noise from the operation of the wind turbines is within acceptable levels” but will the IPC really carry out its own independent tests? Experience has shown that it is very easy for applicants to contrive the results of noise tests. This is particularly the case because the practice has developed of using laboratory/workshop readings for noise from particular turbines and this does not simulate the actual field conditions neither does it simulate the cumulative effect of several turbines combined with wind noise. The actual arrangement of the turbines on site can significantly affect noise generation. It is vital that the noise tests are taken from the same operational turbines that the applicant proposes to construct. If a new machine is envisaged then it should not be accepted until field tested in real operational conditions.

18. As advocated IPC should condition consents in respect of the maximum noise levels of machines. But control is much more effective and easier before a consent is given. How is the IPC going to monitor noise levels after developments have been constructed? Is it really going to close down turbines that are too noisy? This amounts to shutting the stable door after the horse has bolted.

19. Requiring wind turbines to be a minimum distance of 2km from any human habitation would obviate the need for any complex testing and control of shadow flicker.

1. **The Purpose of Energy National Policy Statements**

**Introduction**

1.1.1 *The Government’s transition to a low-carbon economy* sounds like a fait accompli in terms of policy. It needs to be recognised that whereas many of the measures to effect a low carbon economy are desirable anyway, they are not all (for example covering the whole of England’s countryside with wind farms) and it should be recognised that many people still question the evidence for man-made global warming and the effects of carbon dioxide and that consequently the Government’s policy may be wrong and may have to be changed. It can be dangerous to back the measures to carry out a policy without constantly re-examining the policy itself, especially when there are many vested interests in the policy, both financial and political. In this way the low carbon economy is like the Emperor’s New Clothes.

**Role of the NPS in the Planning System**

1.2.1 and 1.4.1 It is evident that the new Infrastructure Planning Commission (IPC) is being required to have primary regard to the NPSs and EN3 and therefore if the NPSs in general (and EN3 in particular) are too heavily bent towards Government Policy without allowing a fair consideration of wider social, economic and environmental considerations then the IPC will not be a truly independent body but simply a puppet of the Government (a dangerous step towards totalitarianism). The document must be equitable both in allowing the weighing up of the costs and benefits of planning decisions and in allowing both sides of the argument on a proposed development to be heard in a balanced way. This has been an important attribute of the British Town and Country Planning System since 1947. The law may well have been changed but this does not throw out the principles of equity.

**Infrastructure covered by this NPS**

1.7 The Act itself makes it clear that any renewable energy project for onshore wind of over 50MW is covered. By implication any project under this limit will go down the route of a normal planning application to a local authority in which case the NPSs will not be the primary determinant of the result? But who decides the size of the project in MW? This is not as simple as it seems especially as the draft EN3 itself and the IPC (see letter to me attached) are both advocating flexibility and it is clearly evident at present that windfarm
developers will want to push all applications down the IPC route because they will expect a more favourable result. Is it just sufficient to say that the power generation is over 50MW? If impacts are to be considered for a maximum size rather than an actual size then applicants will tend to exaggerate the possible sizes of their developments just to get consent (and then be free to switch to something smaller). That would make a mockery of the system and of Parliament.

2. **Assessment and Technology—Specific Information**

2.1.1 This seems to be saying that the need for any application coming before the IPC cannot be questioned. This seems to be saying that both man-made global warming is proven beyond doubt and that wind turbines (or any other specific technology forming an application) are the best means of provision of renewable energy. One or both of these statements may well not be true and it is not equitable for the Government to try to close down any debate on these matters. History shows that planning inspectors and judges have found it inequitable to adopt a position that one important aspect of a decision (ie need) cannot be debated. All planning decisions are about weighing up benefits with costs and by costs we mean social, economic and environmental costs. If the benefits cannot be examined then how can they be weighed up with the costs? The author’s stance is approaching totalitarian.

2.2.1 Even the least articulate applicant will have no difficulty in stating how his or her application “fits” with the NPS. That will be what is called a “no-brainer”!

**Good Design**

2.4.1 and 2.4.2 “Good design” is a hollow principle when it comes to wind turbines. Wind turbines will always be designed to achieve the greatest efficiency in power generation at the lowest cost (often at the sacrifice of noise considerations) and considering their ever increasing size and industrial nature their visual design will play no part and it is cynical of EN 3 to suggest that it will. This is virtually acknowledged in para 2.7.3!

2.7—**Onshore Wind**

2.7.1 Just because windfarms are “the most established large scale sources of renewable energy in the UK” does not mean that they are the best, nor that they should continue to be the main source. The reason why they are the most established is entirely a result of the Government’s financial regime which favours power companies building them—they are not naturally economic and they represent old technology, not new. In Gordon Brown’s tele-conferencing input to the post Copenhagen de-briefing conference at the Queen Elizabeth Conference centre he talked about “low-carbon investment” being “one of Britain’s main industries with half a million jobs”. But we have missed the boat with wind turbines having closed our last manufacturing plant and we should be concentrating on new technologies in wave and tidal power which also have the advantage of not intruding on residents everyday lives. These options should be financially incentivised much more, not wind turbines.

**Predicted Wind Speed**

2.7.7 It is agreed that wind speed increases with height above ground level, which is the reason why turbines are becoming taller. Wind speed does not vary hugely across the country however and is less likely to be the reason for a particular siting of a windfarm than the perceived sparsity and inarticulateness of the local population. Indeed the latter is probably the key factor in power companies siting their projects but is not mentioned in EN-3.

**Electricity Grid connections**

2.7.12 should also say that the grid connection, especially where overground by using pylons, can have considerable adverse impacts on the amenity of residents and on landscapes. All applicants should be required to set out detailed proposals for these connections at the time of the main application for the wind farm. Because of the possible adverse impacts it is not acceptable for electricity grid connections to form subsequent applications once the development is approved.

**Access Tracks**

2.7.15 Access tracks should be required to be largely removed and the land re-instated once construction has taken place. This is to protect the countryside because creating urban type roads with metalled surfaces and concrete kerbs is one of the most sinister effects of onshore windfarms in terms of erosion of countryside character. Ironically it is often likely to be an over zealous local highways department which wrongly insists on these urban type standards.
Project Lifetimes

2.7.16 EN3 should positively state that consents should be conditioned so that upon decommissioning wind turbines should have their concrete foundations removed to at least one metre’s depth.

2.7.17 and 2.7.18 It is not just a question of requiring decommissioning after a set life of say 25 years. Technology may change fast and the turbines may stop being used after a much shorter period. There should therefore be conditions that require any turbines that have not been generating electricity for a specified period (e.g., one year) to be decommissioned and removed. This is to prevent the countryside from being littered in future with dead turbines or their towers just because the act of finally removing them and reinstating the ground is too costly for their owners. 2.7.18 has not been thought through sufficiently.

2.7.19 We object strongly to the first sentence of this paragraph, if not the whole of it.

We have great concern about EN3 setting up the perception that somehow windfarms are temporary and for this reason their impacts are less serious. 25 years is after all a generation. If for example there are adverse effects upon an historic landscape it should not be an offsetting argument to say that they are lessened because they will only be for 25 years. It the historic landscape is important then it is important for every generation and one cannot be missed out!

Britain’s world-leading role in Town and Country Planning since the innovative Act of 1947 has many time considered the definition of a “temporary” planning permission. This has always varied between one and three years and has never been considered for as long as 25 years. In the planning of housing the life of a house has often been considered as 30 years, yet houses are never regarded as temporary! To say that wind turbines are temporary when they should have a life of 25 years and when in any case they are likely to be replaced with new machines is not a credible argument in our support.

It is simply wrong to steer the IPC in the direction of lessening the importance of adverse effects upon landscape, visual amenity and historic assets on the grounds of temporariness, when the life is expected to be at least 25 years. This does not happen in the whole Town and Country Planning System with any other form of development. Temporary should only be a label for a development with a life of less than 3 years.

Flexibility in the Project Details

2.7.20 The fact that “many different makes and models of on-shore wind turbines are available” does not require the flexible and lax attitude to these developments promulgated in the following four paragraphs (2.7.21 to 2.7.24). This seems to be just an excuse for giving the power companies a licence to do what they want and for making generic and vague applications which presumably the author thinks will be able to be made quicker. There are many makes and types of home available in the provision of housing but, if anything, matters there are going the other way, requiring more and more detail with any planning application as this country becomes more and more crowded. How much more important is the detail and fixing the detail in these industrial scale developments which have the ability to affect many people’s daily lives.

2.7.21 This paragraph shows great naivety. There is no logical reason why windfarm applications should have greater flexibility than any other planning application – indeed because the impacts are potentially much wider, if anything they should have less flexibility. For example the mechanism for driving the rotors can vary greatly in its noise generation and this is not just to do with its MW capacity. In order to decide whether to support or object to a local application the local community and other consultees need to know precise details of the development. If the developer is able to say in debate or at the hearing that “this is just an example and the final product could be different” it will be impossible for objectors (and the IPC/local planning authority) to pin him down. Also in response to an objection the developer can say that he will alter the design (at some vague point in the future) whereas in practice there is very little that a developer can do to alter the design of a windfarm.

Why should the wind farm operators not know which turbine they will use? They should be forced to, otherwise it cannot be tested properly—for noise and other effects. The aim of this paragraph seems to be to give operators a charter for applying for one thing and building another. For example what will happen if these paragraphs stand is that the application could be for a relatively quiet turbine, only to be replaced by a much noisier (and cheaper) one once the work is tendered following consent. This is like applying to extend a listed building in natural stone and then building it in concrete blocks.

Are these paragraphs (2.7.20 to 2.7.24) written so that the windfarm operators can keep their costs down rather than the best development (if any) achieved?

2.7.22 The author must have been hoodwinked here by the power companies. There is no less reason for a wind farm developer to not know the layout of his windfarm than for a housing developer to not know the layout of his housing estate. The answer is that precise permissions should be given for precise developments and if circumstances change thereafter then variations can be sought. We are not trying to speed windfarms through the planning process at any cost. The forestry example is extremely weak.

2.7.23 This paragraph should be removed (as should the whole section on flexibility) as it merely encourages applicants to invent reasons why their applications are vague and endorses a lazy or even arrogant approach.
2.7.24 The author evidently thought that assessing the “maximum case” was a clever way around any criticism of a flexible approach. This clearly has not been thought through. We strongly object to the notion that if something bigger is evaluated as being acceptable then something smaller must be as well. This is flawed logic. For when it comes to maximum do we mean maximum generating capacity of turbines, height of turbines, noise of turbines, numbers of turbines, area of windfarm etc.? As written it would be perfectly possible for a windfarm operator to apply for a windfarm of say 18 3MW turbines and then once approved to replace it with 18 much noisier and cheaper 2.3MW machines. This would make a mockery of the crucial noise section of the Environmental Assessment as the wrong machines would have been tested. Please believe us that noise emissions vary considerably between machines and not necessarily in proportion to their generating capacity. Moreover it is no good saying that if changes need to be made later these can be run past the IPC (or LPA) because once granted permission it will be very difficult to refuse such changes, especially if the flexibility provision in EN3 is allowed to stand (note that in several places the draft EN3 states that on technical matters the windfarm operator knows best anyway).

Stating that the maximum adverse effects should be considered rather than the accurately assessed effects of a specific development gives the windfarm operator an unfair advantage in the debate with consultees and the examination of the proposal by the IPC. This is because when challenged he can constantly revert to saying “well the effects could be this but actually we very much intend that they won’t so they should be less”. Such a stance then becomes almost impossible to argue against as the applicant can just keep moving the goalposts. The Environmental Impact Assessment, required by law, is meant to be a serious scientific assessment but it can only be so if the development is precisely defined—the flexibility argued in this section will make a mockery of any EIA and the developer himself will be able to decry it by saying that it is only appraising a theoretical scheme and not the one he is actually likely to build.

**Micrositing**

2.7.25 and 2.7.26 Our comments on paras 2.7.22 to 2.7.24 apply equally here. Why should there be this degree of flexibility in siting the turbines or other infrastructure which is unprecedented in the tried and tested British Town and Country Planning System. If someone applying for a house was to be allowed to move it by 30m to 50m without a new or amended consent all hell would be let loose. What is the difference? Why do windfarms require any greater flexibility than any other development? If there is uncertainty on the part of the operator this uncertainty should be removed at the preparatory stage of the detailed plans and EIA. Encouraging such flexibility is encouraging an attitude where the operator simply sticks something in for approval in order to gain approval and then thinks about what he really wants to construct. “Unforeseen events” can arise with any development.

Para 2.7.26 seems to be backtrackering by saying that the IPC may decide that the so-called tolerance or flexibility of the design of the scheme might be restricted. This just muddles the point of this sub section further. “Tolerance” is the wrong word as in technical use it implies something that cannot be helped (as in manufacturing tolerance)—in this day and age siting can be assessed down to 30cm to 50cm or finer never mind 30m to 50m.

This whole sub section should be removed.

**Repowering**

2.7.27 and 2.7.28 Of course the proposal to re-power is a “commercial matter for the applicant”. What are we being told here? Who would have thought otherwise? The proposal to construct any development is a commercial matter for the applicant. This is unnecessary and incredibly naïve.

2.7.29 and 2.7.30 Of course re-powering requires a new application.

**National designations**

2.7.32 This paragraph starts by using the words “in sites” with various designations. Surely this does not just refer to the boundary of the site which the applicant has drawn for his application? For he could draw his site boundary to deliberately miss such designations such as listed buildings. The start should be changed to “In sites which contain or are close to nationally recognised designations . . . .” Bear in mind that other planning legislation and advice (PPGs) refers to the importance of ‘the setting’ of listed buildings and ancient monuments as well as the structures themselves. This important concept should also be incorporated here. The last part of this long sentence clearly and correctly mentions weighing up any disbenefits of harm to say listed buildings (should be and their settings) with any “environmental, social and economic benefits”. This allows an examination of the need for the electricity generation and the amount of it which is right in equity but which seems to have been ruled out at the beginning of EN3. Weighing up costs and benefits is the only way to resolve such dilemmas and nothing can be off the agenda.

**Green Belts**

2.7.33 This paragraph is interesting and should be applauded for wanting a wide and equitable discussion of the arguments for and against a windfarm. It expresses the same approach as for national designations above. There is no reason why such an approach should not apply everywhere in open countryside because many other areas of the country are protected by local planning policies often embodied in statutory...
development plans. It is illogical to suggest that windfarms will bear greater scrutiny in greenbelts—
greenbelts were introduced to stop urban sprawl and to achieve the separation of cities. There are no
greenbelts where there are no cities but this does not mean to say that the countryside is any less precious—
it belongs to all the citizens of this increasingly crowded country. The circumstance of greenbelts, when it
comes to windfarms are therefore not “very special” relative to anywhere else.
We hope that the government is not suggesting here that the view of windfarms in greenbelts might be
abhorrent to city dwellers but that they are quite acceptable in other countryside. The increasing demand
for power is predominantly from our increasing population which lives in cities. It is not equitable for the
source of this power to be simply pushed out of sight into country areas.

Other locational considerations

2.7.34 This paragraph seeks to give carte blanche to wind farm operators to apply for windfarms
wherever they see fit on the pretence that the wind generation circumstances of a particular location are so
crucial. If this is the case then the government is having the wool pulled over its eyes by the power companies.
Wind speeds and currents do not vary that much over the UK and in particular over a local area and there
is every reason to encourage windfarms to be moved to previously developed land or land where the impacts
are not so severe.

The sequential test should therefore apply exactly as it does to other development all other considerations
being equal—ie approximate wind speeds, separation distances from homes etc.

The sequential test should not simply be dropped but should be offset by the special siting considerations
that apply to windfarms.

If the sequential test is dropped then this will make a charter for windfarm operators to be simply lazy.
They will choose that land which is easiest and cheapest to develop (ie greenfield) hiding behind the pretence
that this is the only place where the windspeed is just right.

Biodiversity and Geological Conservation

2.7.36 and 2.7.38 to 2.7.41 It is not just that birds and bats might be struck by rotating blades. The
introduction of massed turbines into previously open winter grazing spaces for birds like lapwing and golden
plover can render those spaces useless as there is not enough clear space to get the flock down. These species
graze at about 7 metre centres so a very large uninterrupted area is required to land a flock of 1000 birds.

IPC Decision making

2.7.43 It is strange how this section picks out birds, bats and peat as if these are the only considerations
of particular importance to windfarms under the heading of Biodiversity and Geological Conservation.
Another very important consideration is the effect of the large concrete foundations on aquifiers
(groundwater used for drinking) and ground drainage.

Mitigation

2.7.44 and 2.7.44 This sub section is naïve and has absolutely nothing to say. Has it been written by a
child?

Future Surveys and Monitoring

2.7.46 Such monitoring requirements are a good idea but it is naïve to think that the IPC by simply
placing a monitoring requirement on the wind farm operator will achieve objective results. Any monitoring
must be independent and not instructed by the windfarm operator who clearly is biased.

Historic Environment

Applicant’s assessment

2.7.48 Yes, “visualisations” usually will be required! But please do not think that these are in any way
objective or scientific—they have a tendency to do the job that the applicant wants them to do. Local
authorities often have to appoint their own specialist consultants to evaluate independently the work of the
applicant in the EIA—this raises the question of whether the IPC will be required to do that and whether
the results will be publicly available.

IPC Decision Making

2.7.49 It is absurd to state that “onshore wind turbines are not permanent features in the landscape”. With
a life stated as typically 25 years and the chance that they will be continuously renovated or replaced, wind
turbines are as permanent as houses. As stated before the Town and Country Planning system recognizes
temporary uses as those with a life of up to only three years. This statement is ridiculous. 25 years is a
generation. It is outrageous to suggest that somehow any indirect effects on historic environment features such
as effects on setting will not be permanent and therefore should not count as much in weighing up the decision.
Does this mean that if one wants to experience the beauty of a Cistercian Abbey in its setting one might have
to come back in 30 years time (if still alive)? Does this mean that the IPC should allow windfarms all around Stonehenge? What about the thousands of other less well known historic settings that this country is known for?

There should be a requirement for the land on which windfarms stand to be reinstated when they become disused for a given period of time (say a year) and not just when the consent period runs out (it is pointless having a long consent period as we show next). This is to prevent the possibility of wind turbines, towers and infrastructure standing disused for 25 years when their operation might cease for a host of unknown reasons.

2.7.50 See our remarks under 2.7.49. This just repeats the Philistine attitude of the author. The “length of time consent is sought for” is a total red herring – in any other planning application there is no requirement to say how long the development is for because all development is regarded as permanent (unless it is a temporary consent for up to three years). Indeed if after a long period of time a building needs replacing the planning system usually allows it to be replaced once planning consent has been given in the first place. There is no reason to suppose that windfarms will be any different—indeed EN3, earlier, encourages replacement. Where on earth has this idea of windfarms having their impacts lowered in importance because they are not permanent come from? The reason why we protect and conserve our historic landscapes is so that people can enjoy them—to take them out of the equation for 25 years or longer is simply not an option.

Mitigation

2.7.51 This is a non-sequitor. The NPS has not mentioned below ground archaeology so far. In any case the injury to below ground archaeology can be indirect and does not have to be below the actual works. This paragraph achieves nothing—indeed it perhaps encourages applicants not to research such things completely in advance of starting work.

2.7.52 The naïve approach returns. This basically says it does not really matter if we do not research the archaeology properly because we can always move things later!

2.7.53 The naivety gets worse. This just re-emphasises the approach that things can always be moved (precisely sited) later (so it doesn’t really matter if we get them wrong first time). If this principle was applied to the whole 50 year old Town and Country Planning system in Britain it would fall down. Applicants would only show roughly what they intended to do and then they could do almost anything by way of correction. Once consent is given control goes.

Landscape and Visual

2.7.57 Having just said, correctly, in para 2.7.56 that wind turbines are large structures and will always be visible in the landscape it is suggested here that by “careful design” and “arrangement” of the turbines on the site the adverse effects on landscape can be minimized. If the effects are adverse the only real solution is to choose another site—the author is clutching at straws if he thinks that moving around 130 metre high turbines within a site is going to make any significant difference to their landscape and visual impact.

2.7.58 Keeping turbines at a safe distance from homes is a key requirement. This concerns noise impacts even more than visual amenity. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier which seems to be the Government’s objective. This distance should be 2km. This is the distance recommended by La Societee de Medicins in France and it is the distance for the search criteria for windfarm sites issued by the Scottish Government. If there are one or two isolated homes within the 2 kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes—such as the Gray family in Deeping, Lincolnshire).

2.7.59 Having just said in 2.7.57 that windfarms might be rearranged to minimize landscape impacts (a contention which we have argued is likely to make little difference considering their height) the proposition is then taken away in this paragraph. Why is reducing the electricity generating capacity of the windfarm apparently made off the agenda by this paragraph? Surely if compromise can be achieved between adverse impacts and electricity production it should be. It is ridiculous to suggest that the design of a windfarm might be changed to accommodate adverse landscape impacts (in 2.7.57) and then contradict this to say so long as the power production is not affected. Is the maximum power production such a holy cow that it cannot be changed? As we have said earlier many applicants may well play the game of submitting ‘maximum’ schemes only to build smaller and cheaper schemes when they come to tender the turbine provision. So presumably the author is thinking that the windfarm might be made smaller in terms of power production if the developer is happy but not if he is unhappy. This is not equitable. He cannot be forced to construct in any case.
NOISE

Applicant's Assessment

2.7.63 to 2.7.68 The reliance on ETSU-R-97 in this and following paragraphs for the testing of noise effects from windfarms is unreliable because it dates from 1996 when there were very few and much smaller wind turbines in the UK. Much more is now known internationally about the noise effects from windfarms and their repercussions for human health including vibro acoustic disease. This 14 year old standard must be urgently reviewed in the light of empirical evidence including that of families who have been forced to leave their homes (such as the Davis family at Market Deeping in Lincolnshire) or whose lives have been made a misery (such as the Rashleigh family near to the Bicker windfarm in Lincolnshire—see precognition by Steve Rashleigh, attached at Appendix 1)

2.7.65 It is stated that 'The IPC should use ETSU-R-97 to satisfy itself that the noise from the operation of the wind turbines is within acceptable levels' but will the IPC really carry out its own independent tests? Experience has shown that it is very easy for applicants to contrive the results of noise tests. This is particularly the case because the practice has developed of using laboratory/workshop readings for noise from particular turbines and this does not simulate the actual field conditions neither does it simulate the cumulative effect of several turbines combined with wind noise. The actual arrangement of the turbines on site can significantly affect noise generation. It is vital that the noise tests are taken from the same operational turbines that the applicant proposes to construct. If a new machine is envisaged then it should not be accepted until field tested in real operational conditions.

2.7.68 A correction is required. The words ground transmitted must be inserted before low frequency in the last line (as earlier in the paragraph) because all noise from turbines is low frequency.

Mitigation

2.7.69 This mitigation in order to reduce ambient noise can be achieved by so-called 'good design' but it should be spelled out that the variables of this design which will change noise effects are (a) the precise type of turbine (b) the height of the turbine and (c) the distance from any human habitation. It is therefore extremely important that these variables are pinned down in the application and consent and not subject to the flexibility advocated earlier in EN3. A great deal of time and effort in studying, debating and testing noise effects could be saved (and possibly ETSU-97-R not reviewed) if a set minimum distance between any turbine and any place of human habitation was made.

Keeping turbines at a safe distance from homes is a key requirement. EN3 should set a minimum distance between turbines and any residential accommodation. This would then save a great deal of work and argument by the IPC, the power companies and by communities who otherwise might be in opposition and make the whole business of approving windfarms easier which seems to be the Government's objective. This distance should be 2km. This is the distance recommended by La Societee de Medicins in France and it has been the distance for the search criteria for windfarm sites issued in planning advice by the Scottish Government. If there are one or two isolated homes within the 2 kilometre radius of a turbine then there should be a compulsory purchase power in order to move and compensate that home (at present there is no such power and some home owners who have been much closer than 2km have been forced to leave their homes—such as the Davis family in Deeping, Lincolnshire.

2.7.70 and 2.7.71 This is weak. Yes the IPC should condition consents in respect of the maximum noise levels of machines. But control is much more effective and easier before a consent is given. How is the IPC going to monitor noise levels after developments have been constructed? Is it really going to close down turbines that are too noisy? This amounts to shutting the stable door after the horse has bolted. This provision would be much more effective if the application and consent was required to be for specific machines and turbine locations—it is the concept of flexibility earlier in EN3 that contradicts the recognized need to control noise levels. All these details should be fixed at the time of application (they can always be changed with a new application or amendment just like normal planning applications)

Shadow Flicker

This section needs to have its logic broken down. Shadow flicker is a real problem, as the section acknowledges (see evidence of Steve Rashleigh at Appendix 1 in relation to the Bicker windfarm).

If it is right that shadow flicker only occurs within 8 rotor diameters of a turbine then we agree that a zone of 10 rotor diameters should be drawn (2.7.75). But because shadow flicker can occur in this area under certain conditions then no amount of testing will remove this possibility. The whole problem is therefore solved and unnecessary work for the applicant and the IPC avoided by simply stating that because of the risk of shadow flicker no turbine shall be constructed within 10 rotor blade diameters of a human habitation.

Of course if our proposal to limit all turbines to a minimum distance of 2km from any human habitation this has the advantage of removing any concerns about shadow flicker as well as noise.
Mitigation

2.7.80 This is naïve. No condition can remove the possibility of shadow flicker except through requiring relocation of the turbine to the distance where the risk cannot occur (10 rotor diameters as stated above).

Traffic and Transport

We believe that the author has got the guidance right in this section in respect of the possible adverse effects on communities of heavy traffic during the construction period. This largely applies to where traffic is using the existing main highways through villages and close to homes and one aspect of this possible impact (in addition to disturbance, noise and road safety effects) is the effect on the stability of older buildings, many of which, built before the 19th Century, do not have proper foundations. This impact should be acknowledged.

However there is one very important adverse impact which the section does not identify. This is the threat of the increased urbanization of the countryside brought about by the new construction or so-called improvement of minor roads and tracks right up to the windfarms. In para 2.7.91 the statement correctly identifies that after construction the use of these final sections of access roads is very light. If these roads are required by the highway authority to be widened, given black-top concrete surfaces and (worst of all) given concrete kerbs and radii and hard drainage then there will be an immediate and sinister erosion of the rural nature of these areas (someone may even start arguing that these roads are used for other forms of development).

All works to widen and “improve” minor rural roads and tracks for the purposes of construction traffic should be conditioned to be removed once the windfarm is operational. Our concern is that over zealous highway authorities will get their standards books out and require everything to be upgraded to an urban standard. Much heavy machinery—combine harvesters, drainage equipment etc uses these routes already and the routes simply recover. This should be the same for windfarms. No permanent improvements should be required.

We believe that the industrialization and urbanization of our fast disappearing English countryside is just as affected, in an insidious way, by the access works to windfarms as by the turbines themselves. Indeed if the windfarms truly are temporary as the author would have us believe then these impacts threaten to last longer than they do.

2.7.95 This paragraph importantly acknowledges the need for “non-permanent highway improvements” which reflects the point we are making about therefore not requiring (urban) highway standards that would be required for permanent routes (concrete kerbs etc). However it is worrying that the IPC is being guided in the direction of keeping these routes just in case a future windfarm comes along in the vicinity. This will tend to lead to the routes becoming permanent and therefore subject to the creeping highways urbanization that we so fear.

Other Impacts

EN3 should mention other possible adverse impacts including:

1. The adverse effect of turbines upon radar at airports and airfields (safety consideration)—see Appendix 2 where South Kesteven District Council in association with the MOD has used this as a recommendation for refusal of a windfarm

2. The adverse effect of turbines in areas with frequent light aviation use (safety consideration)—see Appendix 2

3. The effect of the large concrete foundations upon the water table—both aquifers for drinking water and upon ground drainage

4. The effect of large concrete foundations upon carbon generation

January 2010

APPENDIX 1

PRECOGNITION BY STEVE RASHLEIGH
MONTREATHMONT PUBLIC INQUIRY

1. My name is Steve Rashleigh, my wife and I live at White House Barn, North Drove, Bicker Fen PE20 3BQ. Our home is on the Fens and has two and a half acres of land. Our family run a double glazing business.

2. During the summer Wind Prospect erected thirteen REpower 2mw wind turbines at Bicker Fen. From the beginning they were noisy. We complained and were told it was early days and it was only a temporary problem. When the remaining turbines were erected and it was operating properly there would not be a problem.

3. We waited but when the development was completed the noise problem was worse.
4. Our home is approximately 800m from the closest turbine. It is a barn conversation and has buildings on three sides. The noise seems to enter the courtyard and bounce round the buildings. The noise we experience sounds just like an old steam train.

5. The noise is almost constant as the noise we receive comes with the prevailing wind.

6. We were told that we would not notice the noise so much when it was windy. This is not the case, when it is windy the noise is very much worse. It is a thumping noise like an old steam train coming in.

7. During the day when we are moving around and the television is on, it is bearable. At night it is not. The thumping noise just goes on all night. Sometimes it is impossible for us to get to sleep.

8. We have done everything we can to try to kill the noise. We already had double glazing but, at our own expense, we installed 6mm secondary double glazing. We now have four layers of glass at our windows. This has reduced the noise a little but it is still unbearable at night. Unfortunately our bedroom windows face the turbines.

9. We have also spent £1000 and planted trees between us and the turbines but of course it will be some time before we know whether they will have an effect on the level of the noise.

10. We wrote to Wind Prospect and asked them whether they would pay for these trees but they did not reply.

11. We have spent a considerable sum to try and reduce the noise from the windfarm and have received no help whatsoever from the developers/operator.

12. In contrast, when E.On built a substation near to other properties to take the power from the turbines to the grid they provided eight neighbouring properties with double glazing free of charge—we know this is correct because our company installed the double glazing.

13. Although the noise is the main problem we have with these turbines we also suffer from shadow flicker.

14. We can suffer shadow flicker for over an hour. It is very difficult to cope with this. We close the curtains but you can still see the shadows flickering. We are particularly concerned about the shadow flicker as our son is epileptic. He is not living at home at the moment but we have to be very careful when he visits.

15. We have complained to Trevor Gait of Fenland Wind Farms/Wind Prospect but he has done nothing.

16. We have complained repeatedly to Boston Borough Council. They have been reluctant to act but at last we understand that they are now obliging Fenland Wind Farms to commission a noise investigation. This is due to commence on 6th December 2008. We cannot understand why they are allowing the turbine developer to undertake this survey. We believe this should have been commissioned by the Council and undertaken by independent noise consultants.

17. At the moment life is unbearable and we are worried that in the event we ever wished to sell our home it would not be possible to find a buyer.

18. We are very disappointed with the lack of concern shown by Wind Prospect/Fenland Wind Farms and hope that between them and Boston Borough Council something will be done to reduce the noise and shadow flicker and improve the quality of our lives.

19. In view of the problems we have experienced, we wish to warn people of what can happen and at the same time object to the Montreathmont development. We were assured that noise would not be a problem and this has not been the case. This Company is obviously unable to ensure that noise is not a problem with their turbines and we do not believe that they should be allowed to erect further turbines until they have resolved the problems at their existing operating developments.

APPENDIX 2

PROPOSED NESLAM WINDFARM, SOUTH KESTEVEN LINCOLNSHIRE. REPORT TO THE DEVELOPMENT CONTROL COMMITTEE. SEPTEMBER 2009

THE REASONS FOR RECOMMENDED REFUSAL ARE:

1. The Defence Estates have advised that the proposed development would have a detrimental impact on the Air Traffic Control radar at RAF Cottesmore, and RAF Cranwell. The proposed development would also adversely affect the Precision Approach Radar at RAF Cottesmore, to such an extent that the RAF would be unable to provide a full air traffic service in the area of the proposed wind farm. There are also two locally operated aerodromes in the area and it is considered that any degradation of the radar systems in this area would be detrimental to air traffic safety. Acceptance of the proposed development would therefore be contrary to the advice contained within Planning Policy Statement 22 (PPS22).

2. It is considered that the erection of six 125m high wind turbines at Neslam Farm, would have significant and detrimental impact on the setting and visual amenity of a number of heritage assets in the area including St Andrews Church Sempringham, St Andrews Church Billingborough, and Sempringham Priory. The proposed development is therefore considered to be contrary to the guidance contained within PPG15, PPG16 and PPS22, and policies 26, 27 and 40 of the East Midlands Regional Plan 2009, and policies
EN1, C1 and C2 of the saved policies of the South Kesteven Local Plan. Consideration has been given to
the wider environmental and economic benefits of the proposal but it is considered that they do not outweigh
the harm which would be caused to the setting of the heritage assets in this area.

3. The proposed development would be located within 580m of Dove Cottage a residential property on
Neslam Road. The noise assessment contained within the submitted Environmental Statement (ES) is based
on a candidate turbine (Vestas V90 2MW turbine operating in mode 2). Based on the guidance contained
within ETSU-R-97 it is considered that an appropriate upper daytime limit would be 38dB(A) given that
the site is located within a tranquil rural location. The noise assessment contained in the ES indicates that
the candidate turbine could only just achieve this level operating in a quite running mode. Given that the
assessment is based on a candidate turbine and this may not be the final turbine used the Council is
concerned that the proposed development would be unable to comply with any conditions restricting the
noise output to 38dB(A). Given the lack of certainty in the ability of the development to comply with the
necessary noise conditions it is considered that the proposed development would result in an adverse impact
on the residential amenity of the occupiers of Dove Cottage due to increase noise disturbance. It is therefore
considered that the proposed development would be contrary to the guidance contained within PPS22,
policy 40 of the East Midlands Regional Plan 2009, and policy EN1 of the saved policies of the South
Kesteven Local Plan.

4. The proposed 125m high turbines would because of their height, and movement of the blades appear
intrusive and oppressive in the outlook from Dove Cottage, Herron Lodge, Neslam Fen Farm, Gosdale
Farm House, Gosdale Farm and Church Farm. It is considered that the proposed development would have
a significantly detrimental impact on the residential amenities of the occupiers of these properties. The
proposed development is therefore considered to be contrary to the Guidance contained within Planning
Policy Statement 22 (PPS22)

Memorandum submitted by the Stop Hinkley Coordinator

On 19 November a three day event occurred near Bridgwater in Somerset organised by DECC to give
local people a say in the consultation on the National Policy Statement. In principle this should have been
a good idea: two days to have a look at an exhibition and a Saturday morning session to hold a public
meeting and hear peoples’ views.

Unfortunately the event was a missed opportunity. The chosen venue was nearly two miles on the wrong
side of Bridgwater from the communities most likely to be interested. It was held in a relatively unknown
location near a motorway turn-off.

Most people who might have attended the event live in villages in West Somerset nearer the power station
or Burnham-on-Sea where health concerns are a sensitive issue. Public transport is very limited in West
Somerset and people from much of West Somerset would have needed to change buses once or even twice
to get near the venue.

On the DECC website notices, no information was given on how to access the site by public transport:
simply a link to the venue’s website, which itself gave no specific directions even for drivers.

One colleague from Stop Hinkley bicycled from Bridgwater to the location on the opening day and could
not find it, for some time cycling around. A very small notice had been pinned outside the building but there
were no signs from the main road. Another colleague went by car and drove round in circles before
eventually discovering it.

It seems odd that a Government Department responsible for mitigating the effects of Climate Change
should choose a venue that forces people into their cars when plenty of venues are available in Bridgwater
town centre, accessible by foot for many and public transport for others.

I raised the inadequacy of the venue location at a meeting of NGOs with DECC officials a few days earlier
on 17 December, offering to help find a suitable location if they needed.

My colleague who went along on the opening day of the exhibition found the hall empty apart from
numerous DECC officials who seemed to compete with each other to talk with him. During the three hours
he stayed, explaining in detail his objections to nuclear power, only one other member of the public was
registered. This was Simon Dunford, the EdF Project Manager for Hinkley Point C! (Meanwhile outside
the policeman allocated to marshall the crowds had no bigger a job than to guard my friend’s bicycle!)

This leads on to another weakness in the planning for the event. Any publicity about the event had been
so insignificant that it seemed to have passed most people by. At the 17 November DECC/NGO meeting,
we were told that the event could not have been announced before the National Policy Statement, which
came out just two weeks prior to the DECC Hinkley event. In that case the meeting should have been set
for a later date.

I think there was too little notice and too little publicity given to the important event. Overall it gave the
impression that DECC did not really want to engage in local discussions.
The public meeting on the Saturday was reasonably well structured with short presentations and time for questions and debate but not well attended with about twenty to twenty-five participants. The mood of the meeting was very much opposed to the project, with one exception, the chair of the Hinkley Site Stakeholders' Group who was more neutral in his comments.

Last week DECC issued a notice by email saying they were holding another new event on 27 January, but for just for two hours in Stogursey. I'm reluctant to say that meeting in this small village, although suitable for residents in that particular village is still not great for most West Somerset inhabitants.

Stogursey is right under Hinkley Point and so it is appropriate for those people to air their opinion about the new 500 acre site, its associated infrastructure and the national policy which will affect them a good deal. But again it is not a central position for a public event affecting villages and towns at least from Minehead to Burnham-on-Sea. It is a long way off the A38 which runs parallel to the coast but five or six miles inland with clusters of bigger towns dotted along it.

Colleagues in Bristol, which is just 35 miles from Hinkley Point and 12 miles from Oldbury nuclear power station, have complained that no consultation events have been planned for the city. People from Bristol were actively involved in the previous Hinkley C Public Inquiry in 1988-89 and many feel left out of proceedings geared to just very local communities.

Other large towns where a meeting would be appropriate include Taunton (the county town), Minhead, Weston-super-Mare, Burnham-on-Sea (where excess breast cancer and infant mortality has been recorded) and Glastonbury.

Bristol City council are due to debate a motion objecting to the building of Hinkley Point C on 19th January and calling for the Government to provide a public event to debate the issue.

I haven't had feedback from all local sites but I gather people in Hartlepool were furious to have a meeting thrust on them with just three days' notice.

Responses from DECC officials at the Hinkley public meeting were also a concern. One person asked what would happen if uranium supplies were to run out due to the number of new nuclear plants being planned or constructed world-wide. He was told by a DECC official that market forces would come into play and that higher prices for uranium would enable a market economy to go to greater expense in extracting uranium from lower grade ore or even from the sea. He said this had been the case in the seventies when oil prices had gone up, enabling oil companies to exploit more difficult oil-fields.

The disturbing thing about this logic is that the carbon cost of this more difficult extraction was not even referred to by the official who had worked for Shell before coming to DECC. Uranium extraction from low grade ores requires extensive use of fossil fuels. Indeed the open-cast uranium mine in central Australia contributes ten percent to their national carbon emissions. It is also, incidentally the largest man-made hole on earth.

I think people employed in key positions of the UK department responsible for mitigating Climate Change should have an altogether different mind-set, which should be generally helpful to the climate issue. This point applies equally to the more parochial question described earlier of of locating venues which reduce the need for travelling or at least allow access by public transport.

THE REMIT OF THE INFRASTRUCTURE PLANNING COMMISSION

We have a particular concern that the IPC has been set a remit in the National Policy Statement which excludes examining the question of on-site spent fuel storage. The European Pressurised Reactor (EPR) favoured by Electicite de France for Hinkley Point, as well as the Westinghouse AP1000 under consideration for other sites such as nearby Oldbury, will “burn” the uranium fuel in an especially intensive way. This “high burn up fuel” has specific handling problems when it is removed from the reactor in that it is so hot and so radioactive that it will be required to be stored under water in mechanically cooled ponds for one hundred years before it can be handled for preparation for eventual “disposal”. (We use quotation marks here as we do not believe that nuclear waste can be disposed of in the usual meaning of the word due to its toxic longevity). With the expected sixty year operating life of the EPR this would mean the nuclear fuel will be at Hinkley, for example, for at least one hundred and sixty years.

There are complex problems associated with having a spent-fuel storage plant on a site such as Hinkley Point:

— The fuel canisters are more likely to splinter or corrode due to heat and radiation, producing a potential local contamination issue.

— The plant would be a potential terrorist target extending long after the nuclear power station itself has closed down.

— Because the power station would have ceased generation there would be no more income stream for the company, in this case EdF, rendering removal or even safe monitoring of the dangerous spent fuel less certain.

— So Somerset and other counties with a new reactor may be left with a de facto nuclear dump. The local community should be in a position to raise their concerns and objections to this eventuality so the IPC should be allowed to make a judgement on the question.
We are aware that the Conservatives have suggested they may make changes to the IPC terms of reference should they take power after the forthcoming election. Whoever holds office, we would like to see a more openly democratic process. This should include:

— Ministerial accountability and the eventual decision on nuclear power stations resting with the Secretary of State.

— Hearings for all members of the public who wish to make a statement.

— Hearings to be held near the relevant site but also at nearby big towns and cities (The 1988–98 Hinkley C inquiry held sessions in Cardiff but still finished in 14 months—not as long as the Government has suggested that public inquiries on major projects take).

— The ability to cross examine experts from Government, the nuclear industry and put forward our own expert witnesses and legal representatives.

LOCAL ISSUES RELATED TO THE NUCLEAR NATIONAL POWER STATEMENT

As mentioned earlier, health issues are a vital concern to many who live downwind from Hinkley Point and our group has commissioned several epidemiological studies showing excess breast cancer and infant deaths in the area. The local health authority pointed to Hinkley as a likely link to a 24 percent excess of leukaemia in young people in West Somerset in a seventeen year study in 1988. This paper has never been challenged.

The EN-6 DECC document allots extra space dealing with the health subject in the Hinkley Point section. We assume this is some measure of sensitivity to local feelings on the issue. But the section skims over the local debate on health issues which includes questions over the South West Public Health Observatory’s use of different wards to supposedly ‘replicate’ Professor Busby’s 2008 study showing a threefold excess of infant mortality in coastal wards downwind from Hinkley. The SWPHO said there was no significant infant mortality excess having, we feel, diluted the statistics by included some wards which were less likely to be affected.

We will bring up these arguments in our submission to the DECC consultation but want to say here, as a process comment, that it would be helpful to see the results of a forthcoming study by the Committee on Medical Aspects of Radiation in the Environment (COMARE) into the very large German Government KiKK study into childhood leukaemia near nuclear power stations.

This important study showed a doubling of leukaemia within five kilometres of all reactor sites. COMARE expects its report to be ready in the spring but respondents will not have a chance to scrutinise it before the end of the DECC consultation, particularly the ‘Justification’ process which will decide on the ramifications of new nuclear build on health effects.

On that point we believe that the current Secretary of State, having already made his views known about new nuclear power, cannot be seen as an arbiter and decision-maker on the Justification question. The call for a public inquiry has been turned down but we believe this decision should be reviewed.

SUMMARY

In summary I would say we are not convinced about the authenticity of the DECC consultation as viewed from a local perspective. Decisions seem to have been made which reduce the options for local public involvement in the bigger questions around building more nuclear power stations and bias the outcome in a particular direction. DECC officials appear to have the promotion of nuclear power higher up their agenda than either consulting local people or mitigating climate change.

January 2010

Memorandum submitted by the Sustainable Development Commission

1. The SDC is the Government’s independent advisor on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and, in Northern Ireland, the First and Deputy First Minister. Through advocacy, advice, appraisal and capability-building, we help to place sustainable development at the heart of Government policy.

2. The SDC thanks the Committee for its invitation to submit a written response to this inquiry and welcomes the opportunity to contribute to this important initiative. We strongly believe that the objective of the planning system should be to deliver sustainable development by basing the decision making process
on sustainable development principles. We therefore reiterate the comments we made on the Planning White Paper, emphasising the relationship between the five principles as stated in the Government’s 2005 Sustainable Development Strategy “Securing the Future”:277

We want to achieve our goals of living within environmental limits and a just society, and we will do it by means of a sustainable economy, good governance, and sound science.277

3. A genuinely sustainable planning system is one that should promote the highest quality development and most beneficial use of land, in the most appropriate locations at the most appropriate time, and in the public interest. It should assess and provide for needs rather than just meet demands. Conversely, it should prevent inappropriate, poorly located, poor quality or unnecessary development. Sustainable planning should result in a net improvement in places.

4. A sustainable development approach to development and land use change should have the following general features:
   - takes a long term view—setting a vision for future generations;
   - provides integrated, joined-up development decisions and land use solutions;
   - promotes social progress in the public interest, including through effective public involvement, participation and mediation;
   - achieves the protection and enhancement of biodiversity and natural processes; and
   - promotes resource efficiency and reduced demand for consumption.

5. The Government’s intention in introducing the concept of National Policy Statements (NPS) was to establish the case for national infrastructure development and to set the framework for decision making by the Infrastructure Planning Commission (IPC). In doing so the statements are meant to explain how strategic economic, environmental and social policy objectives, including those on climate change, are integrated to deliver sustainable development. This is welcome but in order to be taken forward in a meaningful way the NPSs need to meet the following criteria:
   - The topics covered need to be integrated together to achieve a consistent spatial approach. Effective horizontal integration of policy, based on sustainable development principles, is critical to overcome the potential of “silhouette delivery.”
   - Their primary focus must be to deliver whole policy solutions, which would include both the reduction of demand and the supply of infrastructure for national needs.
   - They must meet other EU and national policy objectives such as those within the Water Framework Directive, Habitats Directive etc.
   - They must address the national carbon reduction target (currently set at 80% cuts by 2050, based on 1990 levels).
   - They should be subject to Strategic Environmental Assessment, both individually and as an integrated whole to assess their cumulative impact, and unintended chain effects—to include a “climate proofing” test.
   - They must be subject to full consultation, and genuine engagement and debate, at all levels and with all stakeholders throughout the various stages of their development, in compliance with the Aarhus Convention.

ESTABLISHMENT OF NATIONAL NEED

6. A key function for a NPS is to set out the case of national need, thereby allowing the IPC to concentrate its decision making role on the detail of the individual application. The SDC is concerned that the case of national need for various types of infrastructure has not been set out in this draft NPS as was the intention.

7. The central issue is the balance between a primarily market-led approach and a more strategic planning-led approach, both in terms of need and location. Effectively, the current energy NPS simply says we need more of all types of energy infrastructure (with only the nuclear NPS providing site specificity) and there is no need for the IPC to consider the relative advantages of one technology over another as that is for the market to decide.

8. But the recent tightening of the targets for carbon reduction are likely to result in significant changes to our current energy systems, with much greater decentralised generation. The issue of demand reduction has also not been addressed. For example, the retrofitting of existing homes to make them not only energy efficient but potentially energy generators could have greater economic, environmental and social benefits than the provision of major infrastructure and result in a different technology mix with less requirement for major infrastructure.

9. Additionally, the long term economic case for new nuclear is still not yet clear let alone key environmental issues such as waste handling (see paragraphs 25–30 below for further information). If a robust case is to be made for new energy infrastructure, and to give more certainty to developers and

277 HM Government (2005), Securing the Future: delivering UK sustainable development strategy, p 17.
investors, all the NPSs will need to be consistent in their approach and there is currently a lack of clarity and consistency over the weighting of different impacts and objectives. This is further complicated by uncertainties and transparency of assumptions in current Government modelling of future needs.

10. There are advantages and disadvantages of moving towards a planned approach, but unless Government sets out a more specific case for the numbers, types and locations of energy infrastructure it is not possible to assess the impacts of the proposed developments, individually or cumulatively, or whether this has achieved the sustainable development principles. This does not have to mean fully prescribing the energy mix with fixed GW of capacity to aim for, as this is likely to be far too inflexible and lock us into the “wrong” set of infrastructure. But, it could for example set boundaries within which the pathway of our strategic infrastructure can be more effectively guided. This is particularly important given the dramatic change that will be needed within our energy sector to meet our long-term greenhouse gas emission targets.

11. It is not clear yet whether the Government have fully accepted the Committee on Climate Change’s (CCC) recommendations on the need for rapid decarbonisation of the power sector and their conclusion that “in power generation [where] the current combination of markets and market instruments (the electricity markets and the EU ETS) is not best designed to deliver required long-term decarbonisation and [where] a combination of additional policies and more fundamental review of approaches is likely to be required”. But all of this has implications for the role of the NPS and IPC, at the very least in terms of being able to assess the cumulative impact of different proposals and being able to reject applications where they are likely to move us significantly away from our longer-term objectives.

**Integration to Achieve a Consistent Spatial Approach**

12. The suite of Energy NPSs do not work as a strategic whole in they should provide the necessary spatial element to allow them to operate as effective decision making tools for the IPC. Only the Nuclear NPS includes a spatial assessment and provides an indicative framework. Unless all the NPSs operate in this way, perhaps indicating zones for certain types of infrastructure, it is difficult to see how the documents will ensure integration of types and locations of infrastructure to ensure energy security. A greater spatial element would also provide the foundation for a more coherent understanding of the likely impacts of new energy infrastructure, particularly in relation to cumulative, location-specific impacts and the consideration of alternative solutions.

13. The relationship and integration of the NPSs with other material considerations such as Policy Planning Statements and Local Development Frameworks is also unclear. Ideally the NPSs should set out the national need and provide robust guidance to the IPC on the issues they need to consider, at a national and sub-national level, in order to spatially integrate the delivery of nationally significant infrastructure within SD principles. The NPSs need to be integrated into the existing planning system in a clear and accountable way (through open and transparent public engagement). The IPC then needs to make decisions on specific developments taking into account the sub-national plans but acknowledging that some negative impacts will be felt in a particular locality due to national need, so non-compliance with the sub-national plans may be unavoidable, but should be mitigated.

14. There is provision within the legislation for local authorities to produce a Local Impact Report which the IPC has to consider in its decision making. In producing such a report the local authorities should be encouraged to make specific reference to how well the application complies with the existing Local Development Framework(s) and relevant regional and sub-regional plans.

15. The SDC supports the position of the Royal Town Planning Institute, and a number of other bodies, that NPSs must have a spatial element, which also implies a spatial connection between each of the various energy NPS and with other NPSs. An assessment of suitable locations/areas for all Nationally Significant Infrastructure is the only effective way to ensure the strategic needs of the nation are met, particularly within the context of climate change considerations.

**Carbon Reduction**

16. The draft Overarching Energy NPS makes a clear case for the need to reduce carbon emissions through the transition to a low carbon economy. However, as outlined in section 2.1.5 of the NPS the IPC is effectively “carbon-blind” in its assessments:

   “Given that the Government policies that underlie NPSs have been set in accordance with the Transition Plan and carbon budgets, the IPC does not need to assess individual applications in terms of carbon emissions against the budgets”.

17. From a purely technical carbon budget accounting perspective, there is no apparent need for the IPC to assess compliance of projects with the carbon budgets. Power sector emissions are covered under the EU ETS and the traded sector portion of the budget is automatically credited or debited, on the assumption that participants will buy or sell the necessary credits relative to the UK’s nominal allocation of EUAs (European Union Allowances).²⁷⁸

18. However, the lack of a formal link to the carbon budgets ignores a number of more fundamental issues, including:

— The purpose of the budgets is not a box-ticking compliance exercise, but is to help drive substantial long-term reductions in emissions in the UK, and the associated technological and structural changes required.

— It assumes that the existing policy framework, particularly the EU ETS, is sufficient to drive the scale of the changes required. As indicated above this is not the view of the CCC, particularly with respect to decarbonisation of the power sector. This may have substantial knock-on implications for other sectors as low-carbon electricity is seen as a promising long-term route to decarbonise space heating and parts of the transport sector.

— It ignores wider life-cycle and embodied emissions associated with new infrastructure.

19. The IPC should be able to explicitly consider greenhouse gas emissions (given changes to the NPS and technicalities of budget accounting) when assessing applications as no-one currently has the responsibility for making the link between new infrastructure and the UK’s overall emission targets. The CCC are a statutory consultee under the Planning Act 2008, but their primary role is only to set and monitor the carbon budgets.

20. The IPC could take the information on emissions provided within the applications’ Environmental Impact Assessment and could use this information to assess the cumulative effects of these proposals going forward. The CCC could then provide guidance on carbon budgets and the IPC should have the power to accept or reject applications where such cumulative effects fulfil or detract from the UK’s longer-term objectives (GHG emissions as well as other objectives).

21. Without these changes in the working relationship between the IPC and the CCC, there is no-one responsible overall for taking into account the impact of large scale infrastructure on UK carbon targets and taking decisions as to the acceptability of the development application.
2007 court ruling\textsuperscript{279} described the consultation process as “misleading”, “seriously flawed”, and “manifestly inadequate and unfair”. It concluded that the legitimate expectations of Greenpeace of the fullest public consultation had not been met; and that consequently the conclusions that the Government had reached on nuclear power could not be validly drawn.

27. Following this judicial review the DTI (as was) approached the SDC for advice on how a meaningful and comprehensive public engagement programme could be delivered, which we outlined in a guidance paper.\textsuperscript{280} Whilst the subsequent consultation programme was somewhat of an improvement over the initial exercise, it by no means met the requirements that we had outlined, due to concerns from DTI over timescales and possible costs. However, time and resources for effective public engagement have to be contrasted with the importance of the issue. In the case of the NPS and IPC, these will lead to an absolutely fundamental change to our planning system with knock-on implications for the deployment of nationally significant infrastructure, which will then be with us for the next \textit{50+} years.

**Nuclear Waste**


“Before development consents for new nuclear power stations are granted, the Government will need to be satisfied that effective arrangements exist or will exist to manage and dispose of the waste they will produce”.

29. The Draft National Policy Statement for Nuclear Power Generation goes on to state, in paragraph 3.8.20, that:

“Having considered this issue, the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider this question”.

30. This is based on the strategy within the 2008 Managing Radioactive Waste Safely (MRWS) White paper—which is repeated in paragraph 3.8.12 of the Nuclear NPS and states that:

“The MRWS process for implementing geological disposal is flexible and able to incorporate both robust technical site investigations and ongoing interactions between the project and the potential host community. The Government has therefore not set a fixed delivery timetable, but in planning the implementation of the national policy of geological disposal, the NDA has assessed that a UK facility could be operational for the disposal of legacy ILW by about 2040, with legacy HLW/spent fuel emplacement beginning around 2075. Disposal of legacy waste is estimated to be completed by around 2130 and it is currently anticipated that disposal of new build wastes would begin once disposal of legacy wastes is completed (though it might be possible to dispose of new build ILW somewhat earlier).”

31. The SDC believes this sets a dangerous precedent and falls foul of all five of the sustainable development principles as the Government has not provided any evidence to demonstrate that effective arrangements will exist and how they will do so sustainably. Our 2006 report on the Role of Nuclear Power in a Low Carbon Economy\textsuperscript{281} identified dealing with long-term waste as a key disadvantage (along with a number of others). On balance, the SDC found that such problems outweighed the advantages of nuclear. However, we did not rule out further research into new nuclear technologies and pursuing answers to the waste problem, as future technological developments may justify a re-examination of the issue. With respect to waste and in particular, given the precautionary principle, tangible progress on our ability to deal with existing legacy waste needs to be demonstrated, before we consider generating additional waste from new reactors, even if these will produce smaller volumes than older nuclear plants.\textsuperscript{282}

32. At issue is what is considered sufficient to demonstrate “tangible progress”. An absolutist position, which the SDC does not support, is that a fully operational (and hence costed) geological repository is needed first before new waste is generated. However, neither do we agree that having a “paper” strategy and being at Stage 1 of the site selection process—ie having received some initial expressions of interest for possible sites (see diagram below), as the current position stands, represents sufficient progress either.

\textsuperscript{279} http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/ERJR_SullivanJudgement.pdf
\textsuperscript{280} http://www.sd-commission.org.uk/publications/downloads/Nuclear_public_engagement-briefing.pdf
\textsuperscript{282} The SDC report estimated that 10 GW of new nuclear capacity would add less than 10\% to the total UK nuclear waste inventory (by volume).
We would expect to see both a more focused timescale from Government to speed development of the repository and to be considerably further along the stages in the site selection process. Even Stage 6 in the above diagram is not the start of construction of the actual repository, but is aimed at:

“confirm[ing] a site’s suitability to host a geological disposal facility that complies with safety and environmental regulatory requirements”.

All of this needs to be contrasted with the tangible progress made in countries such as Finland, where they have identified a site and are currently in the process of detailed geological testing, with the aim of having an operational repository by 2020.

34. The SDC believes that in order for the IPC to take decisions on the sustainability impacts of new nuclear development it must know how the developers / Government will handle the nuclear waste arisings. Therefore the issue of nuclear waste is one that must be addressed by the IPC in its decision making process just as dealing with any other material consideration. To do this effectively may require the Nuclear Decommissioning Agency to become a statutory consultee for nuclear installations as they are responsible for legacy nuclear waste.

January 2010

Memorandum submitted by the Town and Country Planning Association

1. ABOUT THE TCPA

The Town and Country Planning Association (TCPA) is an independent charity working to improve the art and science of town and country planning. Representing the views of our membership organisations and individuals from local authorities, planning academics and practitioners under the policy guidance of the Policy Council, the TCPA puts social justice and the environment at the heart of policy debate and inspires government, industry and campaigners to take a fresh perspective on major issues, including planning policy, housing, regeneration and climate change. Our objectives are to:

— Secure a decent, well designed home for everyone, in a human-scale environment combining the best features of town and country.

— Empower people and communities to influence decisions that affect them.

— Improve the planning system in accordance with the principles of sustainable development.
1.2 The TCPA vision for sustainable energy, as set out in the TCPA Policy Statement: Planning for a Sustainable Energy,283 is for clean, safe, low carbon energy generated more closely to the communities and households it serves. A decentralised energy system will ensure less waste, greater efficiency, more direct local benefits from energy installations, and stronger incentives to employ generation methods benign in their impacts on people and the environment. A sustainable future of this kind, that integrates people's needs with those of the environment, has consistently been the TCPA's mission.

2. SUMMARY OF TCPA EVIDENCE

2.1 The Planning Act 2008 sets out a powerful new regime for the approval of major energy and transport infrastructure. The Energy National Policy Statements (NPS) published by the Department of Energy and Climate Change (DECC) in November 2009 set out a new framework which is intended to shape long term energy supply. The TCPA is committed to the need for a national spatial framework so long as it delivers sustainable development and in particular prioritises action on social justice and climate change. The TCPA accepted Government assurances that NPS would set a pathway to a low carbon future, would allow for proper public participation and would be rigorously tested by a fulsome parliamentary process.

2.2 The TCPA does not have the capacity to deal in detail with all five energy NPSs in the time available. However, it is our provisional view that the Draft Overarching Energy NPS (EN-1)284 profoundly fails two important procedural and substantive policy tests:

— The process of adopting the NPS does not allow sufficient scrutiny given the powerful nature of the documents. In particular it is not clear that there has been sufficient public engagement or investment in a public awareness campaign. Neither has the NPS been subject to minimum requirements of testing that other planning documents of much less significance to our national future are subject to.

— The substantive contents of the NPS fail in two ways. First it fails to ensure that the Infrastructure Planning Commission (IPC) has a coherent metric for understanding carbon and in fact removes the IPC from having any consideration of carbon emissions in relation to UK budgets. Instead it places total reliance on the European Union Emissions Trading Scheme (EU ETS). Second, and related, it follows a free market vision of new energy development and does not allow the IPC to consider need. In this way there is no mechanism to ensure that the sum of private sector investment decisions necessary delivers on key scenarios of the Government’s Low Carbon Transition Plan (LCTP),285 the Renewable Energy Strategy (RES)286 or the objectives of the Committee on Climate Change (CCC).287

2.3 Our evidence provides more detail on both issues. It is important to state that the TCPA has worked closely with Friends of the Earth (FoE) in a long term project to promote new transformational planning policy on climate change.288 We had hoped to submit joint evidence around the issue of carbon assessments and energy need and many of our key points represented here on carbon budgeting have been developed by FoE and will be explored in more detail in their written and oral evidence to the Committee.

3. IS THE PROCESS OF PREPARING NPS ADEQUATE?

3.1 The Status of NPS

3.1.1 Proper scrutiny of planning policies should be proportionate to their influence over final outcomes. NPSs have unprecedented power in planning decision making.

3.1.2 The Draft Overarching Energy NPS (EN-1) repeatedly makes clear that NPS is the “primary” consideration for the IPC and that NPS takes precedence over all other planning documents (4.1.2). The Planning Act 2008289 sets out even more forcibly the status of NPS. The IPC “must decide the application for the IPC and that NPS takes precedence over all other planning documents (4.1.2). The NPSs have unprecedented power in planning decision making.

3.1.3 The weight to be given to NPS in decision making appears to be more forceful than that given to existing development plans under the Town and Country Planning regime. The Planning and Compulsory Purchase Act 2004 reinforced the plan led system with decisions being made in accordance with the plan (Section 38(6) Planning and Compulsory Purchase Act 2004).290 However, the exception to this provision is

284 Draft Overarching Energy NPS (EN-1) www.energynpsconsultation.decc.gov.uk/overarching/
287 Committee on Climate Change http://www.theccc.org.uk/about-the-ccc
290 One of the questions the TCPA are left with is how will the IPC meet it’s legal obligation on renewable energy delivery as set out by the EU Renewables Directive?
much more broadly drawn including any “material considerations”. The point is that the NPS have the legal status of a kind of “super development plan” which appears to provide much more limited discretion for the decision-maker than any other form of planning.

3.1.4 This powerful new status implies that the testing and examination of NPS should at least meet the standards of lower tier local and regional planning documents. This is even more important given that the IPC cannot reopen policy issues settled in NPS (Section 106 (b) 2008 Planning Act) and because the IPC is not democratically accountable for its individual decisions.

3.1.5 The comparison between the level of statutory public engagement in Regional and Local planning and the NPS preparation is, however, stark.

3.1.6 For example, Local Planning Authorities must prepare a Statement of Community Involvement (SCI) which sets out how people will be involved and prioritises public engagement. In addition there are two defined periods of public participation in plan preparation (PPS 12)292 and a statutory right to be heard for any participant who makes representations in an independent examination (Section 20(6) Planning and Compulsory Purchase Act 2004). This provision safeguards the system from potential Human Rights Act (HRA) challenges under Article 6 (right to fair hearing).293 This potential engagement of the HRA is related to the Local Development Framework’s (LDF) allocation of site specific development proposals. We note that at least one of the Energy NPS is a site specific document. Table 1 below provides a comparison of public involvement and engagement requirements between the NPS, RSS and LDF frameworks. It is significant that there is no examination in public of NPS. Instead the full weight of independent testing of NPS falls on the parliamentary process and in this case on the ECC committee.

Table 1

<table>
<thead>
<tr>
<th>National Policy Statement</th>
<th>Regional Spatial Strategy</th>
<th>Regional Strategy</th>
<th>Development Plan Document (LDF)</th>
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<td>Pre Plan Production</td>
<td>Section 6: Regional planning body to publish and keep under review a statement of policies for involvement</td>
<td>Section 75: Responsible Regional Authority to publish and keep under review a statement of policies for involvement</td>
<td>Section 18: Local Planning Authority to publish and keep under review a statement of community involvement</td>
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<td>Draft Submission</td>
<td>Section 5(4): NPS to be consulted on</td>
<td>Annex D: Guidance on community involvement in preparing RSSs</td>
<td>Section 5: Proposed guidance on revising regional strategies with stakeholder and public engagement</td>
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<td></td>
<td>Section 7: Secretary of State’s duty for consultation and publicity</td>
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<td>Paras 4.19–4.29: Guidance on participation in preparing Core Strategies</td>
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292 Planning Policy Statement 12: Local Spatial Planning
3.1.7 The Planning Act 2008 gives wide discretion to the relevant Secretary of State as to how to proceed with public consultation on NPS. According to the DECC website the department have set out three opportunities for public involvement:

- A written response to the NPS.
- Attendance at five half day national events in five cities. 294
- Attendance at 10 local events in communities affected by the nuclear build. 295

3.1.8 In addition Planning Aid England has published a series of brief two-page leaflets on each NPS. 296

3.1.9 On 18th December 2009 the TCPA also received email notification from DECC of three stakeholder events. The first workshop on 25 January will focus on draft NPSs EN-1, EN-2, EN-3, EN-4 and EN-5, covering the draft overarching NPS, fossil fuels, renewable generation, gas storage & oil and gas pipelines and electricity networks. The second workshop will be on 2 February and focus on the draft NPS for nuclear power generation, EN-6. The third workshop on 3 February will discuss the Appraisals of Sustainability (AoS) and Habitats Regulations Assessments (HRA) for all draft Energy NPSs, including nuclear (EN-6).

3.1.10 The TCPA is not aware of a funded communications strategy to support this consultation process. For example, according to the Hartlepool Mail newspaper only 100 people attended the consultation events for a new nuclear power station in Hartlepool. Of those that did attend the consultation event, only 35 attended a public meeting. The local media suggested this was mainly due to the short notice given for the consultation events. 297 The Nuclear NPS (along with the other Energy NPSs) was published on Monday 9 November with the three day consultation event in Hartlepool starting the same week on Thursday 12 November.

3.1.11 The TCPA believes that the opportunities for public engagement are wholly inadequate. Five national half day events for England and Wales do not provide a fulsome opportunity for public engagement. Neither does the current publicly available information communicate the potential impacts of say new nuclear build on people’s health in way likely to aid the understanding of local communities. Communicating the importance of such national policy to communities is acutely important since these issues cannot normally be reopened by the IPC once settled by the NPS.

3.1.12 Of equal significance is the absence of any independent examination of NPS prior to adoption by an equivalent body of expertise such as the Planning Inspectorate. Crucially, the whole weight of this necessary function falls on the relevant parliamentary select committees. We remain concerned that such select committees will not have the time or resources to provide sufficiently stringent scrutiny. For example, a Local Development Framework (LDF) examination might last between four and six weeks, but in session most working days. We are concerned that the select committee process must also provide for site visits and for individuals directly affected to have a right to be heard.

3.1.13 Overall we believe that while DECC may have conducted themselves lawfully, by meeting the minimum standards set down by Cabinet Office rules, they have failed to provide the necessary time and resources to ensure meaningful public debate. It is also clear that little or no regard has been paid to other Government guidance set out in Community Involvement in Planning: The Governments Objectives (ODPM 2004). This document provides guidance to the rest of the town and country planning regime and is specifically mentioned in the Planning White Paper in relation to consultation on NPS (paragraph 3.25 Planning for a Sustainable Future. CLG 2007). This document sets out clear operational principles for community engagement which do not appear to have been applied or even considered in the consultation process for NPS. The document specifically makes clear that “It is not enough for participation to focus on providing information and consultation on proposals that have already been adopted to the point where it is difficult to take other views on board” (Paragraph 2.4 Community Involvement in Planning ODP 2004).

294 DECC consultation on Energy NPSs—National Events www.energynpsconsultation.decc.gov.uk/home/events/nationalevents/
295 DECC consultation on Energy NPS—Local Events—www.energynpsconsultation.decc.gov.uk/home/events/localevents/
296 Planning Aid briefing leaflets on the NPS http://www.nationalpolicystatements.org.uk/
297 Hartlepool Mail, 16 November 2009. Have your say on nuclear power plan. www.hartlepoolmail.co.uk/news/Have-your-say-on-nuclear.5827195.jp
3.1.14 While organising a national consultation programme is challenging there appears to have been no attempt to work with other partners in the media or social sectors to find imaginative ways of raising the profile of these vital documents. One obvious example of this opportunity would have been to work closely with local authorities in directly affected areas. Hartlepool Council intends to set up its own consultation web site but the most basic pre-planning by DECC would have allowed this local resource to be live at the beginning of the public consultation and not half way through its duration.

3.2 The systematic testing of NPS

3.2.1 As well as formal arrangements for public participation, other planning documents have a systematic and transparent framework for the examination of development plan documents and their supporting evidence. This is known as the “soundness test”. Guidance for the testing of soundness in examinations in public for both Regional Spatial Strategies298 and Local Development Framework Development Plan Documents299 are provided by the Department for Communities and Local Government (CLG) and by the Planning Inspectorate to ensure that participants understand how the test is applied. The test is vital to ensure that plans are fit for purpose. This means that differing plans have to conform to minimum standards of justification and effectiveness (including proper evidence gathering and community participation as well as deliverability).

3.2.2 The TCPA believes that a clear assessment framework is a vital pre-requisite for public confidence as well as ensuring consistency of approach and assessments of the different NPSs. This concern is reinforced by the fact that different select committees from different Government departments will be examining differing NPSs. TCPA is not aware of any comprehensive or systematic guidance provided to the select committees on assessing the soundness of NPSs.

3.2.3 The TCPA is also concerned about the overlap between the public consultation process and the Energy & Climate Change Committee’s deliberation. The Association is concerned that this may limit the Committee’s ability to fully consider the results of the public consultation and is likely to confuse members of the public wishing to submit evidence to the Committee. We note with concern that the evidence sessions of the Committee do not appear to include any representative of a community organisation that will be directly affected by NPS policy.

3.3 Empowering the NPS in Town and Country Planning decisions

3.3.1 We note that the Draft Overarching Energy NPS states that NPS can be relevant and material to decisions in the rest of the town and country planning system.300 This is reflected in CLG’s letter on the NPSs to all Chief Planning Officers on the 9 November 2009.301 In this letter, it is made clear that Local Planning Authorities (LPAs) and responsible regional authorities should consider the extent to which emerging plans and strategies can reasonably have regard to emerging NPSs, depending on the stage which the development plan has reached. NPSs are also likely to be material consideration in areas where development plans are out of date. Where there are conflicts with local or regional plans, the designated NPSs will prevail (Annex A Paragraph 18). In addition, the TCPA understand that there is active debate in CLG as to whether critical considerations of impacts of smaller scale energy projects below the IPC thresholds of 50MW should be contained in NPS and not repeated in the Planning Policy Statements (PPS) which guide decisions in the Town and Country Planning system.

3.3.2 The TCPA views this as a major mistake. First, NPS have a specific legislative purpose for the operation of the IPC. They are primarily designed to guide the decisions of that body. As a consequence, while the TCPA welcomes the limited degree of clarification from CLG’s letter, their legal status in the rest of the planning system is uncertain and will have to be resolved in the courts. Providing policy that is vital for Town and Country Planning in the NPS documents will result in uncertainty and delay and is an unnecessary complication of an already procedurally complex system.

3.4 Does the substantive policy content of NPS support national policy for a low carbon economy?

3.4.1 In the passage of the Planning Bill there was much debate about how to ensure that the policy (NPS) and decision making process (IPC) contributed to reducing carbon emissions in line with the requirements of the Climate Change Act 2008. Assurances were given that the NPS and the duty for them to consider climate change (in Section 10(3) of the Planning Act 2008) would mean that the final decision-maker, the IPC, did not need to have a separate duty to address carbon emissions. Key parliamentarians disputed this proposition arguing that to avoid carbon leakage the body who grants final consent for major infrastructure must at least be able to understand the carbon profile of new development. This is to ensure that the IPC can report on the sum of all its decisions and therefore be confident it is supporting and not compromising the Low Carbon Transition Plan (LCTP) and domestic carbon targets set by the Climate Change Committee (CCC).

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300 Draft Overarching Energy NPS, Section 1.2.1, Page 2 “Role of this NPS in the planning system”
3.4.2 We now know that the NPS are not to be assessed for their carbon profile and that the IPC is being positively prohibited from considering carbon impacts in relation to CCC budgets.\(^\text{302}\) We also know that the energy NPS sets out a free market vision of energy production and does not wish to prescribe through policy the amount of capacity of, say gas, which the market brings forward. The Government argues that this is because all emissions from new development will be covered by the European Union Emissions Trading scheme (EU ETS). It further argues that other fiscal policy will control market conditions to deliver on national policy (for example, the renewables feed-in tariff).

3.4.3 All of the arguments surrounding this issue are complex and go to the heart of Government’s commitment to deliver of the ambitions of the Climate Act 2008. Our overall argument is that the NPS process should address the following fundamental issues to ensure effective policy:

- Given that the IPC is not required to consider the sum total of climate emissions from its development decisions how will we know if such emissions are in line with the Low Carbon Transition Plan (LCTP) scenarios or with domestic carbon budgets?

- How will the IPC account for emissions not covered by the EU ETS such as embodied carbon in the construction phase or emissions not intended to be covered by EU ETS for some years (such as aviation)?

- Given that the IPC is prohibited from considering the need for energy infrastructure and that NPS have a market driven framework how do we ensure that the ambitions of the LCTP or the RES are fulfilled? Put simply, there is no mechanism to prevent the IPC from approving all our future energy needs through coal which, even under the Carbon Capture and Storage (CCS) and Capture-Ready (CR) policy, is much more carbon intensive than renewables.

- Given the whole weight of ensuring carbon reduction falls on EU ETS are we comfortable that the framework will deliver given its poor record so far? Higher emissions in the UK would mean buying credits from elsewhere in Europe and from developing nations outside the EU.

3.4.4 There are important arguments about all of these issues, but there is one profound paradox in the new framework. Government has created the most powerful planning body since the war and, in principle, the most powerful policy documents to guide the IPC’s actions. However, Government has failed to employ this potential power to deliver on the domestic climate change agenda. Instead of allowing the IPC to ensure that its decisions deliver on the energy mix set out in Government policy it has prohibited it from considering need and allowed the free market to determine the energy mix, shaped only by a set of market regulation which may or may not deliver on the policy. This approach represents a remarkable lost opportunity to deliver the vision of a low carbon society through spatial planning.

3.4.5 This paradox goes to the heart of the relationship between spatial planning policy and market regulation. While both these ideas need to be employed to tackle climate change, Government has failed to offer a transparent framework to ensure that these mechanisms dovetail together.

3.4.6 The Draft Overarching Energy NPS is explicit\(^\text{303}\) that the IPC does not need to assess individual applications in terms of carbon emissions against the Climate Change Act 2008 budgets. It also sets out that there is “need” for infrastructure of all main types—renewables, nuclear and fossil fuels—and that the IPC need not consider “need” in its decisions.\(^\text{304}\) The NPS acknowledge that the type of applications coming forward from developers will depend on market conditions and it is, therefore, impossible to know what the final energy mix the private sector will determine.\(^\text{305}\) In this context, it is possible that a large number of carbon-intensive projects could come forward, and in this case there is the potential for the UK’s carbon budgets to be breached.

3.4.7 The Government’s broad response to this concern is to argue that the policies underpinning the NPS are set in accordance with the Low Carbon Transition Plan (LCTP), the Renewable Energy Strategy (RES) and the carbon budgets set out by the Committee on Climate Change (CCC), and that therefore this concern is not likely to be a problem.

3.4.8 However, since the NPS also makes clear that no part of the RES should be treated a firm target in decision making (“the lead scenario presented in the Renewable Energy Strategy should not be seen as a sector or technological target”),\(^\text{306}\) it is hard to see how this claim can be considered sound. It is vital that Parliament explore the scale of what appears to be a set of key contradictions in the NPS framework which may result in UK carbon budgets being breached.


\(^{305}\) Ibid, Section 3.3.15 Page 19 http://data.energynpsconsultation.decc.gov.uk/documents/nps/EN-1.pdf
3.5 **Does the NPS framework support the UK carbon budgets?**

3.5.1 The Low Carbon Transition Plan (LCTP) sets out an anticipated trajectory for UK carbon budgets in both the traded and non-traded sectors. The “traded” sector are those emissions which are covered by the EU Emissions Trading Scheme (EU ETS), mainly electricity generation, heavy industry, and (from 2012) aviation. This trajectory anticipates a certain mix of new renewable, coal, gas and nuclear plants coming forward in the next 20 years, according to its modelling of the existing policy framework, and other estimates (e.g. on fossil fuel prices and economic growth rates).

3.5.2 It is distinctly possible that many more applications for gas-fired power stations, for example, could come forward from developers, than in these modelled scenarios, and that the IPC would have to give consent (as the NPS say that “need” has been demonstrated). Put simply this could result in much greater carbon intensity than anticipated with consequent impacts on UK carbon budgets (note: gas is a useful example because unlike coal no gas-fired station has to install CCS).

3.6 **But does a more carbon intensive energy mix matter to the carbon budgets?**

3.6.1 While this might sound counter intuitive, it is our understanding that DECC has argued that the impact of a more carbon intensive energy mix on the carbon budget would be zero. In the traded sector, the UK Government records “allocated” emissions of permits in the EU ETS as the contribution of that sector to UK carbon budgets. So, it does not matter at all, for the purpose of meeting the UK carbon budgets, what happens, whether gas or renewable power stations are built so long as sufficient carbon credits can be purchased in the trading system. Government ministers have also argued that if UK emissions in the traded sector were higher than anticipated this does not matter from a climate perspective, as overall in the EU emissions are capped. For example, if UK emissions are higher than budgeted, emissions in, say, Poland will have to be lower—so that the cap is met. This means that the NPS series essentially wash their hands of any carbon controls and that the whole carbon approach of Government in NPS rests on the success of the EU ETS.

3.7 **But does the EU ETS work?**

3.7.1 There are a growing number of organisations who are critical of the effectiveness of the EU ETS. These concerns surround particular market failures in the price of carbon and effectiveness and ethics of purchasing carbon credits from developing nations whose emissions are not capped. This is widely regarded as a form of carbon off-setting and allows the EU carbon cap to be exceeded so long as credits are purchased by investment in developing nations. Buying credits from uncapped nations means that the climate integrity of the EU ETS is heavily compromised. Professor Paul Ekins sets out a clear view on what is wrong with the offsetting element in recent written evidence to the Environmental Audit Committee.307

3.7.2 The concerns are well established but have been strongly reinforced by the Committee on Climate Change’s October 2009 Progress Report.308 The report concluded that significant policy change is required in number of areas but particularly in power generation “…where the current combination of markets and market instruments (the electricity markets and the EU ETS) is not best designed to deliver required long term decarbonisation and where a combination of additional policies and more fundamental review of approaches is likely to be required”.309

3.7.3 The Committee on Climate Change (CCC) addresses the low price of carbon which is unlikely to “incentive investments in low carbon technologies”.310

“The only situation where investments in low carbon technology would then proceed is if investors attach significant weight to scenarios with a significantly increasing carbon price over the next decade and through the 2020s. We believe that this is currently unlikely for two reasons:

— There is a great deal of uncertainty over what the arrangements will be for determining the carbon price in the 2020s.

— It is difficult to make an investment business case around a price that is currently low but that is projected to increase significantly in 20 years time, particularly where the increase is subject to significant political risk. We cannot therefore be confident that the EU ETS will deliver the required low-carbon investments for decarbonisation of the traded sector through the 2020s.”311

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307 Professor Paul Ekins written evidence to the Environmental Audit Committee


310 Ibid, Page 38.

3.7.4 The CCC concludes that a likely scenario is greater investment in carbon intensive generation plants and particularly in gas and highlights that “this is problematic given the centrality of power sector decarbonisation to decarbonisation in other sectors on the path to meeting the 2050 target”. The CCC report is clear that while the switch to gas may meet interim targets it will not put us on the path to a decarbonised electricity sector beyond that. Put simply the EU ETS will not have incentivised the construction of the right kinds of generation kit to meet the 2050 target.

3.7.5 It is clear that there is a gap between the reliance placed on EU ETS in the Draft Overarching Energy NPS and analysis and advice of the CCC: “There is an approach to power generation that says emissions from the sector are capped and that we can entirely rely on the market to determine the appropriate path to decarbonisation. This is not, however, an approach that the Committee accepts. Whilst inclusion of the power sector in the EU ETS will deliver the emissions cuts required in the sector to 2020, it will not automatically bring forward the low-carbon investment to deliver required emissions cuts in the 2020s and beyond. This is because the EU ETS cap to 2020 could be met through coal to gas switching without any significant new investment in low carbon plant, and because the cap beyond 2020 is highly uncertain.”

3.7.6 Building more carbon-intensive infrastructure will lock us into carbon emissions for decades, making it much harder to meet much tougher carbon budgets in future. This last point is one which the Committee on Climate Change have argued strongly, saying that decarbonisation of the electricity sector is essential by 2030 to meet long-term goals. The broad conclusion of the CCC appears to be that Government would be wise not to base the UK’s climate strategies with too much faith in the EU ETS since it is not delivering the carbon price to push investments fast enough down a low-carbon path. Given that the scientific evidence suggests that carbon budgets will have to be revised to be even more stringent it is vital that we urgently begin decarbonising electricity.

3.7.7 It interesting to reflect that given all this complexity and uncertainty about the EU ETS that Government could, as we have made clear, simply ensure that the NPS contain direct guidance to the IPC not to approve energy development which compromises the LCTP or domestic budgets. Spatial planning delivers such a framework as in many other sectors and is designed to ensure private sector interest and investment are mediated and shaped by a clear framework of regulation which ensures outcomes are in the wider public interest.

3.8. Is there a genuine need for all types of energy infrastructure?

3.8.1 The NPS is very strongly advocating that there is overwhelming need for renewables, nuclear and fossil fuel infrastructure (the coal element of the latter with some CCS requirement). Overall, we are concerned that the need for major energy infrastructure may be exaggerated. For example we are keen to test the validity of low estimates for potential alternatives, such as decentralised energy. The lead scenario in the UK’s Renewable Energy Strategy contains around 4 GW of small scale electricity generation. We believe this to be a significant underestimate of the true potential for decentralised energy which will benefit from the feed-in tariff.

3.8.2 The Draft Overarching Energy NPS sets out the need for 43 GW of new capacity by 2020, and a 60 GW by 2025. It sets out that 26 GW of the 43 GW by 2020 will come from renewables, and the other 17 GW from other sources (ie fossil fuels and nuclear). For 2025, it is 35 GW renewables and 25 GW “other” generating capacity.

3.8.3 However, the Draft Overarching Energy NPS also states that 20.5 GW of the 43 GW is already commissioned, constructed or with all the planning consents. It appears from a very initial analysis of what type of plants comprise this 20.5 GW that a very large proportion of it is gas—meaning that there could in fact be very little requirement for non-renewable capacity by 2020 (and 2025). This figure looks set to diminish even further because there is a very large number of “applications under consideration” at present—these are not part of the 20.5 GW, and they are also not part of the IPC decision making process. Again, a very large percentage of these applications are gas power stations.

3.8.4 The initial conclusion from this is that there could in fact be very little “need” for non-renewables to be consented by IPC, given the large amount of gas already consented, and gas projects at the application stage (and largely likely to be granted). In this situation, the NPS guidance is rightly demonstrating large need for renewables, but this need is not the case for nuclear or fossil fuels.

4. How can NPS be improved?

4.1.1 The Government should integrate the objectives of the LCTP, RES and CCC into a more prescriptive energy policy framework capable of swift and effective implementation. In the TCPA’s view a starting point would be to ensure that the lead scenario of the LCTP is identified as a firm objective and not simply an illustrative proposition.

314 Draft Overarching Energy NPS. Section 3.3.18. Page 20
4.1.2 The NPSs should then reflect these objectives and set clear and prescriptive policy to enable the IPC to deliver effective decision making. Such figures should be based on detailed time horizons up to 2020 but also contain indicative scenarios up to 2050 to make clear the direction of policy travel. The IPC itself must of course be able to consider need so that where applications appear to conflict with NPS policy they should be refused.

4.1.3 While other organisations have greater expertise on energy policy we strongly believe that the NPSs should be carefully reassessed to test whether in fact the blanket need for all new energy infrastructure is logical or justified. This is particularly relevant in relation to the amount of energy infrastructure currently approved or proposed under the existing consent regime.

4.2 Why the IPC needs a proper carbon assessment framework

4.2.1 The assessment principles section of the Draft Overarching Energy NPS includes insect infestation but not carbon or other greenhouse gas emissions. To be precise this means the IPC lacks a metric to assess carbon in a coherent and systematic manner. For the IPC the carbon impact of coal fired power station is simply not a key decision making matter.

4.2.2 We have made clear that we do not accept that the EU ETS, as currently in operation, provides the right framework to tackle climate mitigation. However even if we accept that this is the subject of separate debate there are still powerful reasons why the IPC must at least understand and consider carbon emissions.

4.2.3 The IPC must understand the full carbon life cycle of major energy infrastructure in order to contribute to accurate real world, rather than assumed levels of emissions. This should be based on carbon profile assessment provided as part of the Environmental Impact Assessment (EIA). Failure to provide such data under the EU EIA Directive would in any event be legally dubious and therefore the IPC should have clear guidance on how to assess such data. The carbon data from the sum total of consent orders should form part of the IPC annual report and will be of vital importance to both DECC and the CCC in judging the accuracy of forecast emissions from particular technologies and sectors. This allows the CCC to continue its oversight role of NPS as they are reviewed.

4.2.4 The IPC must be able to deal coherently with the impact of carbon emissions not covered by EU ETS. These emissions have a major environmental impact and must be weighted in the assessments of whether a development should gain consent. This ensures that there is no potential for significant carbon leakage. There are three categories of such emissions:

— Those emission not yet covered by EU ETS where there is uncertainty about how emissions will be treated (such as aviation).

— Those emissions not related to EU ETS which arise from construction such as the embodied carbon profile of concrete. The applicant’s assessment should set out the full lifecycle carbon emissions—sourcing, construction, operation and disposal.

— Those emissions which may compromise international climate obligations. The IPC must have regard to these as part of the law, such as the carbon intensity of fuel sources. This applies specifically to Liquid Natural Gas (LNG) where very significant emissions arise from liquefaction in nations outside the EU.

4.2.5 In addition the challenge of rapidly changing climate science reinforces the need for the IPC to adopt a flexible and informed approach to understanding climate mitigation particular where NPS policy becomes rapidly out of date. There should be a memorandum of understanding between the IPC and CCC to ensure the IPC has the latest climate science and objectives to inform its decision making.

5. Conclusion

5.1 The TCPA strongly supports the need for a national spatial framework and has long campaigned for this, making the case for it in its 2006 report, Connecting England. However it must:

— Demonstrate an integrated and consistent approach across the NPS series, informing a joined up national infrastructure framework to enable confident and sustainable local, sub-regional and regional decision making.

— Ensure relevant policies from across Government are given clear and effective spatial expression in NPSs. For example, the Energy NPS series should join up with the Renewable Energy Strategy and Low Carbon Transition Plan.

— Provide an adequate timescale for consultation to ensure it is fair, transparent and just, meeting the tests of the Aarhus Convention and the Human Rights Act.

January 2010

Memorandum submitted by the UK Business Council for Sustainable Energy

1.1 The UKBCSE was formed in 2002 to support the fastest possible transition to a low carbon economy consistent with maintaining secure and affordable UK energy supplies. UKBCSE’s members include Centrica, EDF Energy, E.ON UK, National Grid, RWE NPower, ScottishPower and Scottish and Southern Energy. This written evidence is submitted on behalf of all our members, each of whom will also be submitting their own written evidence and appearing before the Committee.

1.2 During the passage of the Bill through Parliament and the development of its subsequent regulations and guidance, UKBCSE has been working closely with the UK’s major energy trade associations—the Association of Electricity Producers, the British Wind Energy Association, the Energy Networks Association, the Gas Forum and the Renewable Energy Association—all of whom support and have contributed to this submission to the Select Committee.

1.3 UKBCSE welcomes the scrutiny of the Draft National Policy Statements (NPSs) by this Committee, which, together with the continuing public consultation, gives greater legitimacy and status to NPSs, and we are therefore pleased to submit evidence to this inquiry.

1.4 UKBCSE strongly supports NPSs as fundamental to the success of the necessary reform of the planning system. We generally welcome their content, style and the necessary level of detail, however there are a few areas of specific detail where we believe further work is required prior to designation of the NPSs. These areas will be expanded on in our more detailed response to the Department of Energy and Climate Change consultation.

2. EXECUTIVE SUMMARY

Key Recommendations

In particular, we would encourage the Committee to:

— Acknowledge the importance of, and strengthening the wording on the Statements of Need within the energy NPSs, as invaluable in clearly stating Government policy on the need for the range of included technologies, thereby avoiding the need for lengthy debates on the need at each individual planning inquiry.

— Support the need for NPSs to be robust and sufficiently detailed to enable assessment of applications for compliance, thereby again avoiding the need for further debate on national policy-related issues at planning inquiry.

— Support the need for flexibility concerning the submission of different elements of a project, with the option for each in their own right being submitted as a NSIP (nationally significant infrastructure projects), whilst endorsing the proposed approach, which requires developers to ensure that an appropriate level of detail is included to enable the IPC (Infrastructure Planning Commission) and stakeholders to understand any likely associated implications.

— Acknowledge that 2020–25 is not the end of the journey in terms of energy infrastructure investment, with significant amounts required well beyond, and suggest to DECC that they include further emphasis of investment requirements from 2030–50, including reference to the Renewable Energy Strategy and the Climate Change Committee First Progress Report.

The Scale of the Energy Challenge

2.1 It is widely recognised that the UK is coming out of a period of “energy plenty”, with the decline of North Sea gas supplies and many existing power stations reaching the end of their lives. Over a third of the UK’s existing generation needs replacing within the next 15 to 20 years and within a decade up to 80% of the UK’s gas will need to be imported if Government’s objective of maintaining the current high levels of security of energy supply is to be met.

2.2 The scale of the challenge to meet Government’s energy policy goals of addressing climate change and ensuring continued security of the UK’s energy supplies requires a sustained multi-billion pound investment programme to build a range of energy technologies to deliver both a balanced fuel mix and the transition to a secure low carbon economy.

2.3 In short the UK needs very significant investment in a range of low carbon energy technologies and in the networks infrastructure necessary to deliver that energy to consumers—electricity and gas, big and small, onshore and offshore and across the UK. The UKBCSE’s members, along with those of the UK’s major energy trade associations mentioned above, will be responsible for providing a very substantial proportion of the nationally significant energy infrastructure projects necessary to provide secure low carbon energy supplies. All of this investment must be undertaken in a way that takes account of the views of communities and respects precious landscapes and environments.
The Role of National Policy Statements (NPSs)

2.4 In order to deliver the necessary very substantial investment programme in the UK’s energy infrastructure, the UK needs a broadly consistent long-term policy framework, which clearly sets out the Government’s energy policies and priorities for all.

2.5 In particular, we believe that NPSs are fundamental to establishing a stable policy framework to enable the very substantial infrastructure investment programme needed to address climate change and ensure continued security of supply of the UK’s energy supplies. Without the necessary stability and clearly defined policy framework, developers may at best continue to experience uncertainty over timescales and delays through repeated debate over Government policy at planning inquiries, and at worst may therefore choose to invest outside the UK.

2.6 Equally, NPSs must clearly spell out the urgent need case, both overall and for each technology/infrastructure. The suite of energy NPSs set out in general terms the need case for the different technologies. This is vital, but UKBCSE/Industry believes that, given the potential major concerns over security of supply, the NPSs need to be realistic about the scale of the need for each technology and the networks necessary to bring energy to market.

2.7 The need cases should therefore be strengthened from “significant” to emphasising the critical importance of delivering investment in each technology, and should provide clarity over the weight that the IPC should give to the respective need cases.

2.8 Additionally, NPSs need to be robust, relevant and clear to provide sufficient detail to communities/stakeholders, statutory consultees, local authorities and promoters on key issues that get raised time and time again at planning inquiries. Such clarity will enable all involved to efficiently assess proposals’ compliance with national policy, and therefore spend more time on those local issues which could affect the surrounding community and how best to address them. Conversely, the absence of such clear guidance in the NPSs could lead to continued debate at each stage of the consents process, which would negate one of the major benefits of NPSs.

2.9 Finally, there needs to be recognition of the need for flexibility in the IPC’s ability to consider related nationally significant infrastructure projects as linked proposals, via joint applications, or as separate projects in their own right.

2.10 We therefore welcome NPSs as the primary basis for decisions by the IPC on nationally significant infrastructure projects (NSIPs). We also support their use as material considerations for both local planning authorities on smaller-scale energy projects, and the Marine Management Organisation (MMO) when considering sub 100MW projects in the marine area—as well as providing invaluable guidance to all stakeholders and developers.

Reform of the Planning Regime

2.11 Prior to the Planning Act 2008 the consents regime for nationally significant energy infrastructure projects was too complex, too lengthy, too uncertain for both developers and communities and too costly.

2.12 In order to deliver this step-change in investment, the Council and the wider industry has long supported the reform of the planning regime, including the majority of the Planning Act 2008 provisions. These reforms deliver an integrated package which will enable more timely, transparent, cost-effective, certain and fairer decision-making on nationally significant infrastructure projects.

2.13 As well as a stable policy framework delivered by NPSs, developers need certainty in terms of the time a project will take to go through the planning system. Therefore, whilst ensuring full and fair consideration of all the issues, the implementation of pre-agreed timescales within the nationally significant infrastructure project regime under the jurisdiction of the IPC, is essential.

2.14 Equally, by placing a statutory requirement on pre-application consultation, as well as the opportunity to provide both written and oral representations to the IPC, potentially affected communities have the chance to engage on individual proposals earlier and in a more meaningful way than under the existing regime.

2.15 Finally, the establishment of a single consenting regime with the IPC as a single independent decision making body, will streamline the planning system to provide greater certainty, efficiency and consistency for all, whilst ensuring the quality of decision making, including community and stakeholder involvement, is improved.

Conclusion

2.16 UKBCSE welcomes NPSs as the fundamental plank which underpins the integrated package of planning reforms so necessary to enable the UK to meet its twin goals of secure and affordable energy supplies whilst addressing the challenge of climate change.

2.17 We support the integrated nature, style, level of detail and content of the energy NPSs and believe the layout is easy to follow. This, along with clearly setting out the UK’s overarching energy needs, also provides a generally good level of information on types of technologies, their likely impacts and how these can be mitigated. This level of detail is not only very helpful but necessary, as it will set out clearly what the
IPC, local authorities, statutory consultees and potentially affected communities can expect from a proposed development and its impact, and from its developer in terms of mitigation. We do however, note a number of areas where we believe small modifications are needed to remove any ambiguities and prevent delays in the future.

2.18 In order to be effective the NPSs must give clear, specific and unambiguous direction to the IPC, industry and stakeholders. The suite of energy NPSs, as currently drafted, generally provide both the stable policy framework that energy developers require in order to invest, and, on the whole, the right level of detail to enable effective assessment of compliance with national policy. This detail will be necessary in order to enable the IPC and all other relevant parties to satisfactorily consider the relevant issues that could affect a local community. However, whilst generally satisfactory for this purpose, in some cases we would welcome an even greater level of detail.

3. The Scale of the Challenge

3.1 Radical reform of the planning regime remains essential to delivering the very substantial amount of energy infrastructure necessary to make the transition to a low-carbon economy, to ensure continued security of the UK’s energy supplies and attract inward investment into the UK. The Government’s Renewable Energy Strategy and Low Carbon Transition Plan clearly recognise these imperatives.

3.2 The Climate Change Act 2008 sets a statutory target of reducing greenhouse gas emissions by 80% by 2050. The EU Renewable Energy Directive has set the UK a legally binding target of achieving 15% of all energy from renewable sources by 2020. This will require a step-change in renewables development to move the UK from 5.5% of electricity generated by renewables currently, to around 30% by 2020.

3.3 However, 2020 is not the end of the journey and continued investment is needed well beyond, as confirmed in the Climate Change Committee’s First Progress Report, which recommends that the electricity industry should be significantly decarbonised by 2030 to enable low carbon power to form the basis for decarbonising the rest of the economy and delivery of the 2050 target.

3.4 Also, within a decade the UK will be importing up to 80% of its gas, which will require new gas import, reception and storage facilities as well as significant investment in the integrated gas transmission and distribution networks to enable gas to reach the market.

3.5 In short, the UK needs a diverse portfolio with extensive investment in all types of energy technologies and infrastructure—electricity and gas, big and small, onshore and offshore and across the UK and including significant investment in the energy networks that enable energy to reach the market. As recognised by the Government when launching the draft NPSs, the transition to a low carbon economy will require a phased transfer from carbon-intensive energy technologies. Therefore this will continue to necessitate investment in the nation’s gas infrastructure (both reception facilities and the national gas transmission network/gas distribution networks), as well as the development of carbon capture, transportation and storage (CCS) technology to potentially enable existing coal-fired power stations to continue generating, and the construction of new coal-fired generation (providing CCS can be proven to work at a commercial scale and the costs of retrofitting do not preclude such an option).

3.6 In addition to the existing need cases in the draft NPSs, we believe there should also be an explicit reference to the need for carbon dioxide transportation and storage infrastructure and as well as appropriate information on assessment of impacts, mitigation measures and a statement on IPC decision making for these infrastructures included within EN-1 and EN-2. New carbon dioxide transport and storage infrastructure will be needed to support the Carbon Capture and Storage (CCS) chain, taking captured carbon away from power stations and industrial emitters and transporting it for permanent storage underground.

3.7 Alongside these technologies, companies believe nuclear power is a proven largescale technology which has the potential to continue to make a major contribution to the UK’s electricity generation through investment in safe and efficient modern designs of nuclear reactors.

3.8 All energy developers need a broadly consistent long-term policy framework and a planning regime that is effective and fair, but most importantly gives them, affected communities and their representatives certainty. The Planning Act reforms are an integrated package, which together deliver a more timely, certain, unified and effective planning regime to enable decisive investment whilst ensuring enhanced community engagement.

3.9 Appropriate incentives are required to stimulate investment in low carbon technologies. A long-term carbon price, reflecting the cost of emitting carbon dioxide from fossil fuel generation is essential to underpin investment in low carbon generation of all types, including renewables, nuclear and CCS.
4. **The Role of National Policy Statements (NPSs)**

4.1 The NPSs are critical to the success of both planning reform and delivering the UK’s energy policy. They need to provide, and as currently drafted do broadly set out, a stable long-term policy framework.

4.2 Equally, it is vital that they give clarity on issues, which are raised time and time again at planning inquiries. Therefore, they need to be robust and sufficiently detailed to enable efficient and effective assessment of applications for compliance, thereby negating the need for further debate on national policy-related issues at inquiry level. This will enable greater opportunity to review and address the impact on the local community and environment.

4.3 The Overarching NPS for Energy (EN-1) sets out the Government’s energy policy priorities; the need case for each electricity and gas technology and the equal need for investment in the electricity and gas networks. It also helpfully confirms that in order to address climate change and ensure continued secure and affordable energy supplies, a wide range of energy technologies will be necessary for the foreseeable future.

4.4 Therefore, when considering a prospective energy project, either the IPC, or in the case of smaller-scale energy proposals, the relevant local planning authority or other relevant decision maker, can begin assessing proposals on the basis that the national need has been established, and not waste lengthy periods of time debating the national need. This will provide much greater time to assess the local impacts of a proposal and whether they can be satisfactorily resolved/mitigated.

4.5 However, whilst welcoming this recognition, the Council believes that the need case for all the various energy technologies/infrastructures should be strengthened still further from the need being “significant” to emphasising the critical importance of delivering investment in all technologies to maintain security of supply and address climate change. Specifically the need case for gas infrastructure should be strengthened within EN-1 and EN-2. Equally, EN-1 should spell out that the IPC should give substantial or considerable weight to the need case for each technology.

4.6 Equally, the value of setting out national policy in a single place is that including Government’s policy on particular issues within the relevant NPS, this will provide clarity for developers, the IPC, statutory consultees, local planning authorities and potentially affected communities, and hence again negate the need for lengthy and needless debate. A good example of this is electric and magnetic fields (EMFs), where planning inquiries considering electricity overhead line projects often spend much time debating the science surrounding EMFs. By setting out Government policy on EMFs and the compliance standards network operators will have to meet, everyone will know exactly what is required to make a prospective project compliant, and can therefore concentrate on the local issues such as the proposed route, the impacts, amenity issues and how to satisfactorily address them.

4.7 We also support NPSs’ use as material considerations for both local planning authorities on smaller-scale energy projects, and the Marine Management Organisation (MMO) when considering sub 100MW projects in the marine area—as well as providing invaluable guidance to all stakeholders and developers.

4.8 Of course many renewable projects, whilst not nationally significant infrastructure projects, share the same characteristics and impacts of development covered in EN-3. As currently drafted, Paragraph 1.2.4 states that an NPS “may” be a material consideration in decision making on an application under the Town and Country Planning Act (TCPA). UKBCSE strongly believes that this wording should be strengthened and that all NPSs including in particular the Renewables NPS should be afforded equivalent status within the TCPA regime.

4.9 Lastly, the suite of energy NPSs do not appear to consider period post 2020 for renewables and gas, and post 2025 for nuclear and coal. Given the nature, scale and timescales of investments required, the NPSs need to recognise that this investment will be required beyond these timescales (as confirmed by the Climate Change Committee First Progress Report which considers potential investment in the period 2030 to 2050.

5. **NPSs—Style, Content and Approach**

**Format and Style**

5.1 The Council and the wider industry welcome the format and style of the NPSs, and in particular the cross-referencing between NPSs and with the Planning Act 2008, which ensure consistency and provide information on:

- The most common impacts.
- What applicants must include in the Environmental Statement/application.
- The most likely mitigation measures that could be used to offset or eliminate impacts.
- What the IPC should expect from applicants and with whom it should consult.

5.2 The provision of information on impacts and mitigation will enable all stakeholders to know upfront what they can expect in terms of likely impacts arising from a project, including guidance to developers regarding the actions they will be expected to take in order to minimise that impact. This level of detail is therefore helpful, and providing that the IPC deems that the proposed development meets with the requirements of the relevant NPSs, it will allow greater time and focus to be given to project-specific impacts on the local community/environment.
Non-Spatial Approach

5.3 We welcome the spatial approach taken within the Nuclear NPS (EN-6) and ask that the spatial nature of the Crown Estate leasing process also be referred to within the Renewable NPS (EN-3). However, we agree that a non-spatial approach for the remaining technologies is the most sensible approach and important for a number of reasons including:

— The importance of market influences in determining where and when to develop nationally significant energy infrastructure projects.
— The range of technical, operational, commercial, ecological and other environmental considerations that determine where a developer might consider proposing a project eg the geological constraints affecting underground gas storage or the proximity of the grid network for all forms of generation.
— The evolution of energy technologies and mitigation measures which could quickly affect the legitimacy of any assumptions leading to spatial “mapping” for differing technologies, thereby quickly rendering the NPSs out of date.
— The resource intensive nature of undertaking detailed spatial planning (be it centrally, regionally or locally) which would inevitably delay the introduction of NPSs.
— Even more importantly, the planning regime is based on a plan-led system based on Local Development Frameworks and Regional Spatial Strategies, which look holistically at the needs of communities. With the exception of nuclear, which is largely based on existing nuclear sites and therefore warrants a different approach, any national spatial approach for other individual technologies would cut across the fundamental principles of a plan-led system which encapsulates local democracy, enshrined within the planning system for decades.

Flexibility

5.4 Whilst the new regime very much improves the ability for the authorising authority and all stakeholders to consider the holistic implications of any nationally significant infrastructure project, it is important that it also retains flexibility around submission of different elements of a project, with the option for each in their own right being submitted as a NSIP eg a proposed electricity generation project and any connection or indeed deeper reinforcement of the electricity network system. In such cases, these different aspects may be undertaken by different legal entities with different regulatory and commercial backgrounds.

5.5 For a range of technical, commercial or environmental reasons it may not be appropriate for a generator or gas reception facilities developer to include within their consent application the connecting assets or any necessary network reinforcement works. However, we support the requirement in those circumstances for an applicant to have to demonstrate that there are appropriate alternatives for connection to the gas or electricity grids.

5.6 The proposed approach strikes the right balance enabling the IPC and other stakeholders to understand the likely full implications of a proposed development, whilst enabling the developers of the respective elements of an energy project, the opportunity for one party to apply on behalf of all involved; to jointly apply or to apply separately.

Alternative Sites

5.7 Industry welcomes the wording laid out in Section 4.4 (Alternatives) of EN—1 the Overarching NPS for Energy, which confirms that when there is a policy or legal requirement to consider alternatives (such as under the Habitats or Water Framework Directives) the IPC should frame any consideration of alternatives in the context of the scale and urgency of the UK’s need for energy infrastructure.

5.8 The section also allows the IPC to potentially exclude vague or inchoate alternatives or to potentially place the onus on third parties proposing an alternative to provide any necessary evidence.

5.9 Whilst energy developers will themselves normally consider all reasonable expedient alternatives, and/or take into account suggestions from stakeholders, a range of technical, operational, commercial, geological, ecological and other environmental factors often render alternatives unsuitable.

5.10 The proposed approach will ensure that all genuinely viable alternatives are considered whilst making sure that the proposing of alternatives is not used to unnecessarily frustrate or delay valid applications who have consulted fully with the affected community, the local planning authority and statutory consultees to develop the best all-round proposal.

6. Recommendations

6.1 In order to be effective the NPSs must give clear, specific, unambiguous direction to the IPC, and inform the work of both industry and stakeholders. The suite of energy NPSs, as currently drafted, generally provide both the stable policy framework energy developers need to invest, and, on the whole, the right level of detail to enable effective assessment of compliance with national policy. This provides more opportunity
for the IPC and all stakeholders during IPC consideration or planning inquiries to consider and satisfactorily deal with the relevant issues that could affect a local community. The level of detail is generally satisfactory for this purpose but in some cases we would welcome additional detail as an aid to clarity.

6.2 In particular, we urge the Committee to:
— Acknowledge the importance of, and recommend the strengthening of the wording on the Statements of Need within the energy NPSs, as invaluable in clearly stating Government policy on the need for the range of included technologies, thereby avoiding the need for lengthy debates on the need at each individual planning inquiry.
— Support the need for NPSs to be robust and sufficiently detailed to enable assessment of applications for compliance, thereby again avoiding the need for further debate on national policy-related issues at planning inquiry.
— Support the importance of flexibility concerning submission of different elements of a project, with the option for each in their own right being submitted as a NSIP, whilst endorsing the proposed approach, which requires developers to ensure that an appropriate level of detail is included to enable the IPC and stakeholders to understand any likely associated implications.
— Acknowledge that 2020–25 is not the end of the journey in terms of energy infrastructure investment, with significant amounts required well beyond, and suggest to DECC that they include further emphasis of investment requirements from 2030 to 2050, including reference to the Renewable Energy Strategy and the Climate Change Committee First Progress Report.

January 2010

Supplementary memorandum submitted by UK Business Council for Sustainable Energy

1.0 INTRODUCTION

The Council welcomes the opportunity to provide supplementary evidence on the issue of timeframes and frequency of updating National Policy Statements (NPSs) following our oral evidence to the Energy and Climate Change Select Committee on 27 January 2010.

We hope that this supplementary note is helpful to the Committee, but should you require further information or wish to clarify any of the points included, please do not hesitate to contact Jane Smith in the first instance.

2.0 TIME-FRAMES

Q. How should the NPSs best deal with views on energy requirements and investment beyond the time horizon of the NPS?

The NPSs do not appear to consider renewables and gas post 2020—and nuclear and coal post 2025.

There is a need to recognise that:
— 2020–25 is not the end of the journey.
— The transition to a low carbon economy will require a phased transfer from carbon-intensive energy technologies.
— The speed of this transfer must take into account affordability—the need to ensure security of supply—and the speed of renewables deployment.

The UK therefore needs a diverse portfolio with extensive investment in all types of energy technologies and networks, with market-based mechanisms and strategic interventions to encourage developers to bring forward increasing numbers of low carbon energy projects.

Therefore at the very least the Council would wish to see a stressing of the investment need from 2030 to 2050 which would be very helpful—and once published we would advocate that extensive reference is included to the DECC Roadmap to 2050, which will set out the practical pathways the UK might need to follow and the barriers that will need to be overcome in order to secure the necessary emissions reductions through to 2050 (at an acceptable balance of cost, security and behavioural change).

Q. What should the trigger be for reviewing the energy NPS?

Industry needs a stable policy framework in order to ensure confidence to invest—and so would not wish to see numerous minor revisions to NPSs However, there are certain circumstances where Government (and industry) may find it helpful for NPSs to be reviewed/updated. These include:
— Significant advances in energy technology e.g. new technologies with the capability to be developed at a commercial scale, or major improvements in existing technologies which impact the supply or design of energy infrastructure.
— A major change in Government Energy Policy resulting from the need to respond to changing market or security of supply conditions, or to further incentivise low carbon technology if the trajectory to the 2050 targets needs raising—however again we would stress the importance of stability for investors.

Q. Should the energy NPSs have a fixed time horizon after which review is mandatory?

Industry needs a stable policy framework in order to ensure confidence to invest—and so would not wish to see numerous minor revisions to NPSs or frequent reviews.

The construction period for major gas and electricity infrastructure such as gas terminals or nuclear power stations can last a number of years—potentially in excess of five years—and so unless there are very significant reasons for change, we would advocate a minimum of five years before a major review is undertaken. Ideally such a review should only take place (a) on the specific elements of the NPS(s) which require change ie the remaining elements of the NPS continue to be designated and therefore valid, and (b) any review should be instigated because of a substantial change in the above areas listed, and not just on an automatic time-basis.

The Government has recently committed to a review of Carbon Capture and Storage in 2018, and we therefore suggest that this might also provide a useful opportunity to undertake a wider review of the suite of energy NPSs.

Additionally, the Council is aware that the Government are committed to a two-yearly review of the IPC, which we support. However, unless there are significant changes in any of the key elements of the NPSs, we would not wish to see any changes.

It is worth noting that without stability, investors will simply choose to invest elsewhere, particularly when this is taken in conjunction with other key investment factors such as the potential rates of return on investment and the cumulative regulatory regime.

3.0 SUMMARY

The Council believes that National Policy Statements (NPSs) are fundamental to establishing the stable policy framework that energy companies need to have confidence to invest. This is critical given the very substantial amounts of infrastructure that are needed to address climate change and ensure continued security of supply of the UK’s energy supplies.

Therefore, following public consultation and full Parliamentary scrutiny, it is vital that detailed and robust NPSs are designated at the earliest possible opportunity.

February 2010

Memorandum submitted by UK COAL Mining

EXECUTIVE SUMMARY

1. Greater emphasis should be placed on indigenous coal as part of a diverse, secure and affordable energy policy

2. Current planning policy on new fossil fuel stations, which only requires CCS on coal plant, is influencing developers build gas to meet the forthcoming energy gap. This will have a negative effect on both security and affordability of supply.

3. New gas fired power stations should be subject to the same requirement to fit CCS.

4. The current winter cold spell has highlighted our reliance on gas with two national balancing alerts in the first week of January and many industrial consumers having their supply cut off. Future planned gas build will exacerbate this position.

5. Coal fired generation could virtually disappear from the UK electricity mix in the mid 2020s with only the four UK Government supported commercial demonstration stations in operation.

6. The uncertainty over the future size of the coal market for power generation is hampering current investment in deep mines which has a long development lead time and payback.

INTRODUCTION

7. UK COAL Mining (UKC) welcomes the opportunity to submit evidence to the Energy and Climate Change Committee looking into proposals for National Policy Statements (NPS). UKC is Britain’s biggest producer of coal, supplying around 5% of the country’s energy needs for electricity generation. The Group has four deep mines located in Central and Northern England with substantial reserves and employs 3,100 people. Around 95% of the Group’s 8Mt/year production supplies the electricity generation market and as such we are heavily influenced by policy objectives affecting the electricity sector.
8. UKC supports the high level statements contained within EN-1 that “it is critical that the UK continues to have secure and reliable supplies of electricity” and that the UK needs a “diverse mix of technologies and fuels”. Secure and reliable energy is a vital component of a developed society. UKC agrees that the forthcoming energy gap requires that the planning system is streamlined to ensure that decisions on energy production and infrastructure are made quickly.

9. However we are disappointed that the document doesn’t acknowledge the role that indigenous coal plays and can play in the UK’s energy mix and places significant emphasis on nuclear, renewables and the continued importation of gas.

10. In 2008, coal provided 31% of the UK electricity supply of which indigenous coal was responsible for 35% of this figure. Therefore 11% of the UK’s electricity supply was as a direct result of the indigenous coal industry.

11. There is currently 28GW of coal plant on the UK grid, of which 8GW is due to close before 2016 as a result of the Large Combustion Plant Directive (LCPD). This is likely to fall very rapidly post 2016 as a consequence of the Industrial Emissions Directive (IED). The IED will result in the total closure of all existing coal plant unless significant investment in Selective Catalytic Reduction (SCR) is made by 2023. At present this is not likely to go ahead without greater certainty about the role of coal in the low carbon economy and what CO2 emissions are permissible. There is clearly some risk that, by 2023, all of the coal-fired power stations that are currently running will be closed.

12. Coal-fired power stations provide security and diversity of supply. They are also able to respond more quickly to peaks in demand on the electricity grid than either gas or nuclear stations. This provides a vital “load following” capability, which ensures that the National Grid is able to meet fluctuations in electricity demand. As we become more reliant on intermittent wind generation this function will become even more important. Also coal, unlike gas can be easily stored in anticipation of future energy demands.

13. UKC believes that Carbon Capture and Storage (CCS) is vital if coal is to play a significant role in the UK’s long term diverse and secure energy mix. It is therefore important that CCS development is undertaken in a timely manner and that National Policy Statements are compatible with this approach. UKC welcomes the Government’s announcement that it will provide financial support for four commercial demonstration projects of 300MW net, but is concerned that no further build may be forthcoming.

14. To combat the forthcoming energy gap caused by the impending closure of coal and nuclear stations the UK market has chosen to build gas generation plant. At present there is a new “dash for gas” underway, with 7.4GW currently in construction. The UK is already heavily dependent on imported gas and was the 5th largest gas consumer in world in 2008 with 3% of the global total after; USA, Russian Federation, Iran and Canada. The continued build will put further pressure on our need to import energy from an already highly competitive international market.

15. The choice to build gas plant has been caused, in part by Government policy which requires the fitting of CCS to all new coal stations from day one, but does not impose the same requirement on new gas build. Government policy on new gas build only requires that the plant is Carbon Capture Ready (CCR) before consent may be given. The definition of CCR requires land to be available and a technical and economic feasibility to be undertaken, but does not include a mandatory date when CCS must be retrofitted. This result of this policy is to further exacerbate the UK’s security of supply position and lock in long term carbon emissions.

16. The UK’s reliance on gas has been highlighted during the current winter cold spell. In the first week of January the National Grid issued two national balancing alerts and over 200 industrial customers on interruptible contracts had their gas cut off. During this week it was coal fired power stations which helped keep the lights on, supplying over 50% of demand. Also there is no doubt we have been helped in meeting this winter demand by the current economic downturn which has partially offset power requirements. In future years as the economy recovers the demand from industry will be far greater.

17. Investment in coal power stations is an essential requisite for the long term future of the indigenous coal industry. The long lead time involved in mining projects, especially new deep mine schemes means that it may be seven or eight years before the first production arrives and would require a further 10–15 years in order to make a return on the substantial investment required.

18. The uncertainty over the future market has meant mining companies have found it impossible to raise finance for viable schemes which would enhance UK energy security and provide valuable employment. One such example is at UKC’s Harworth Colliery.

19. Harworth Colliery is situated in North Nottinghamshire and is currently mothballed following the exhaustion of the reserves in the Deep Soft seam in 2006. Boreholes and seismic exploration have identified up to 54Mt in the Top Hard seam which would be suitable for the local power station market. If the project went ahead the mine would produce in excess of 2 Mt per annum, which would directly replace imports as well as providing employment for 550 employees.
20. The overall cost of the scheme would be around £200 million. In the current economic climate UKC has failed to attract investment from traditional sources and has subsequently approached the European Investment Bank (EIB). The EIB have targeted energy production and security as a priority area for lending, but UKC has been told that although the scheme meets the criteria for funding in terms of creating jobs in an area of high unemployment, security of supply and return on investment; it fails in terms of its “low carbon green credentials”. Therefore in order to secure funding from the EIB, they would require coal to be sold to a power station with CCS installed. Hence there is a further urgent need from a coal producer’s perspective to see many CCS coal stations up and running within the UK as soon as possible to provide a continuation of the market.

**FOSSIL FUEL POLICY STATEMENT (EN-2)**

21. Despite its title, this document is mainly concerned with conditions for new coal fired plant. It takes its direction from the overarching EN-1 document which as stated above requires partial CCS to be operational on all new coal stations from the start of operations and to be completely retrofitted by 2025.

22. The planning system should not put barriers in place which would delay or discourage the building of new coal fired plant. In this respect, UKC is concerned that there should be a conditional consent requiring CO₂ pipeline and storage consents to be in place before construction commences. In an emerging technology, these consents will take time and this condition risks imposing major delays in an area where rapid progress is essential. The estimated two years quoted by the Government before consent could be given, may deter operators to simply build unabated gas stations as a simpler and quicker alternative, with consequent long-term security of supply, price and high carbon lock-in risks.

23. Also UKC would wish to see a condition, at least for the publicly funded CCS demonstration plants, that new coal–fired power stations can accommodate indigenous coals. Indigenous coal production is an important constituent of our energy security and CCS stations should be designed to burn the quality characteristics associated with UK coals which are not typical of international traded coal, ie higher sulphur and chlorine levels.

24. An example where power station operators have made such investment in the past is in flue gas desulphurisation (FGD) equipment. Certain FGD coal stations in the UK can only meet SO₂ emission standards by burning low sulphur imported coals. This is because they have opted to cut capital costs and not install a full blown system which would remove the higher sulphur levels associated with indigenous coals.

_January 2010_

Memorandum submitted by Mr J Urquhart

**RADIATION DOSE AND GENETIC RISK**

_Abstract_

The current radiation paradigm for genetic risk is not secure. Present estimates for the purposes of radiation protection are derived mainly from studies of spontaneous mutation rates of human genes, and radiation-induced mutation rates of mouse genes. This has led to the conclusion that genetic risk is considerably lower than that for cancer. An examination of research into stillbirth rates in the offspring of male Sellafield radiation workers showed a dose response relationship between stillbirth rates and preconceptional paternal irradiation (PPI). The Excess Relative Risk (ERR) for stillbirths was estimated to be 21.5 per Sievert. For stillbirths with congenital anomaly, the estimated ERR was 35.5 per Sievert. There is some evidence that genetic effects via preconceptional maternal irradiation (PMI) may be considerably higher. Belarus studies after the Chernobyl nuclear accident indicated high ERR for congenital anomalies: 40 per Sievert due to PPI, and 400 per Sievert for preconceptional maternal irradiation (PMI). Animal studies provide evidence of persistent transgenerational effects, possibly involving genomic instability after the initial radiation dose from Chernobyl fallout. Saturation dose effects were observed, even at low levels of radiation exposure. If the animal model is applied to human populations, this suggests that genetic effects may persist for more than 600 years after initial radiation exposure of the first generation. The existing radiobiology paradigm, which is fundamental to the estimation of environmental radiation risk, cannot explain the phenomena of radiation-induced genomic instability and the bystander effect. Current radiation protection standards for genetic risk appear to be optimistic. This has important implications for the use of nuclear power.

The EIB takes its guidance from the European Commission and its Board of Governors. Each EU Member State appoints one member to the Board, normally the Finance Minister. The UK representative is the Chancellor, Alistair Darling.
1. Current Radiation Standards

Ionising radiation is relatively easy to quantify and our knowledge about its effects have accumulated over 100 years. An extensive literature on radiation health effects has been based mainly on analysis of the health consequences of Japanese A-bomb survivors who were exposed in 1945, uranium miners and hospital patients. This provides a considerable weight of evidence to support current international radiation standards. These standards have not been explored in detail in this review because the models they employ are well known and reflect established scientific thinking. A recent paper by Mobbs et al (2009) provides a useful short summary of the current approach of the Health Protection Agency (HPA) in the UK, which also reflects international standards recommended by the International Commission on Radiation Protection (ICRP).

- Increase in fatal cancers is 5% per Sievert (Sv). A Sievert is a unit of radiation exposure to an individual; the estimated annual dose to individual in the UK from all radiation sources is 2.4 millisieverts and the average chance of an individual getting cancer in a lifetime is about 35%.
- The HPA accepts that the cancer risk estimate could vary by a factor of three either way for external radiation and some radionuclides.
- The HPA suggest that there are a further group of radionuclides which the true effect could range by a factor of 10 either way.

Mobbs et al (2009) do not point out that at certain periods in human development the individual may be much more sensitive to radiation, for example the excess relative risk (ERR) for in utero exposure was estimated from the Oxford Survey of Childhood Cancer (OSCC) to be 51 per Sv (Doll and Wakeford 1997). However, a later paper (Little and Wakeford 2003), suggested that figure might be an over estimate and the true ERR might be one order of magnitude lower.

2. Genetic Risk

The HPA paper (Mobbs et al 2009) considers cancer risks from low level radiation but dismisses possible genetic risks in the following terms:

“As well as the possibility of causing cancer in the exposed individual, it is biologically feasible that mutations to genetic material could be passed on to future generations (this is called a heritable effect). However there is no direct evidence of radiation-induced heritable effects in humans (ICRP 2007) and this genetic risk is judged to be considerable lower than that of cancer.”

UNSCEAR (2001) estimates that the excess relative risk is only 0.4–0.6% per Gray compared with the ERR for cancer of 5% per gray but this calculation is not based on epidemiological studies and does not equate with recent scientific results.

Parker et al (1999) published a key paper in The Lancet on stillbirths among offspring of male radiation workers at the Sellafield nuclear reprocessing plant. They found a significant positive association between the risk of a baby being stillborn and the fathers' exposure to external ionising radiation before conception. The adjusted odds ratio was 1.24 per 100mSv (95% CL 1.04–1.05, p = 0.009). The risk was higher for stillbirths with congenital anomaly and they estimated that 30 of the 130 stillbirths to the workforce may have been attributable to the fathers radiation exposure. These findings were disputed by Doyle et al (2000), who reported that male radiation workers in the nuclear industry had not observed an increase in stillbirths or miscarriages in their partners over the expected. On the other hand, female radiation workers reported stillbirth rates that were more than double the expected, and an increase in miscarriages over the expected rate.

The Parker et al (1999) study was far more comprehensive and based on actual records as opposed to male recall of their partners' pregnancy condition. The study reported an ERR of 0.24 for 100mSv, based on total dose before conception. It is likely only a proportion of the total dose was involved in producing adverse effects in the offspring. The study reports an ERR of 0.86 per 10mSv during the three month period before conception. This originally assumed that the effective PPI dose could be confined to this three month period, but it was discovered that higher stillbirth rates were associated with fathers who had been irradiated up to twelve months before conception. However, it was subsequently discovered that some fathers who produced stillbirths had received no recorded radiation in that three-month period, but had received high doses within twelve months of conception. At this stage, the exact mechanism of how the sperm is affected by ionising radiation is not known. For example, it may be via damage to the spermatozoa, which would extend the period of vulnerability before conception. A more conservative estimate for ERR assumes 0.86 per 40mSv—equivalent to 21.5 per Sievert.

The odds ratio for stillbirths with congenital anomaly was higher than that just for stillbirths: 1.46 vs. 1.26, suggesting a 65% increase in ERR equivalent to 35.5 per Sievert.

3. Female vs Male Genetic Risk

Preconceptional maternal radiation (PMI) in women may be a more potent factor than paternal preconceptional irradiation (PPI). The higher level of stillbirth and miscarriage rates reported by female radiation workers in Doyle et al (2000) is indicative of this possibility. Draper et al (1997) carried out a study of over 100,000 male and over 10,000 female radiation workers in the UK. They found that in the
offspring of the male radiation workers, the odds ratio for leukaemia was 1.83, but they did not find an increase in other cancers. On the other hand, for female workers, they found four cases of leukaemia against an expected of one, but eleven cases of other cancers compared with an expected of two. It can be concluded that the relative increase for all cancers for male radiation workers was 3.83 vs. 3.0 but for female workers was 15.0 vs. 3.0; a relative increase of 14.5 for children born to female radiation workers. Some of this increase may have been due to in utero exposure, but nevertheless genetic risk may have been a key factor.

4. Preconceptional Maternal Irradiation (PMI)

As early as the 1970’s, Alberman (1972) reported an increase in Down syndrome in children born to mothers who had been exposed to X-rays, but only after a delay of at least six years. This little-noticed finding may now have important implications.

5. Birth Defects in Belarus after Chernobyl

Moller (2005) has drawn attention to the fact that the disaster at the Chernobyl nuclear power plant in April 1986 released 80 petabecquerle of radioactive caesium, strontium, plutonium and other radioactive isotopes into the atmosphere. A becquerle is one radioactive disintegration per second; a petabecquerle is one thousand million million becquerles. Six months after the accident the radioactive rate in more contaminated areas had fallen by a factor of ten (Ryabokon 2006). However research into the biological and genetic consequences has been carried out by only a few individuals rather than a concerted research effort by the international community despite the fact that the effects of the disaster were continent wide. Hoffman (2002) has pointed out that the radiological consequences in Europe are greater than those from all 420 above ground nuclear tests, but the current radiation risk dose models suggest the additional number of cancers would be very small.

There is however no explanation within the existing radiation paradigm for the significant increases in birth defects that have occurred in Belarus since the nuclear accident. Lazjuk (2003) reported at least an 80% rise in 10 important congenital anomalies after Chernobyl in Belarus. Using the estimated dose to the population of 2mSv per individual, this would suggest an excess relative risk for birth defects of 400 per Sv. This is much higher than indicated by the Sellafield study. A closer view of the congenital malformation time trend in Belarus is shown in Figure 5.1.

Figure 5.1
BELARUS CHILDHOOD HEREDITARY DISEASES PER 100 BIRTH 1981–2004
(BELARUSSION 2006)

It can be seen that a peak occurred in the most contaminated areas for 1987/88/89. After that, rates throughout Belarus were at pre-Chernobyl levels, but in 1993 started to rise again in all areas, so that by the year 2004 the national rate was two and half times the pre-Chernobyl level. It should be noted that after the accident there was considerable migration out of contaminated areas by prospective mothers.

The return to pre-Chernobyl levels and then the subsequent rise in defects may reflect a delayed response to PMI. The initial peak in contaminated areas in 1987/88/89 may correspond to PPI effects. The relative contribution of this peak is estimated to be only 10% of the total number of extra birth defects observed, suggesting that the ERR from PPI in Belarus after the Chernobyl accident is only 40 per Sievert.

A report by the Chernobyl Forum (2005) has played down the Belarus results, suggesting that only a modest rise in birth defects has occurred since the Chernobyl accident—even though this is more than double—and that any such rise could be attributable to increased registration. The report claimed that no observed increases were supported by the existing radiation paradigm (UNSCEAR 2001). It has been pointed out earlier that the radiation paradigm for genetic risk has no data on radiation-induced mutations in humans. The Chernobyl Forum (2005) rejected the human data on the grounds that it lies outside the current radiation paradigm.
6. **Animal Studies after Chernobyl**

Animal studies in the area near Chernobyl do not support the claim that increases in human birth defect rates after the accident were an artefact of social, psychological, or registration influences.

6.1 *Barn swallow studies*

*Moller et al. (2007)* carried out an examination of barn swallows from Chernobyl. A long-term study demonstrated the presence of eleven morphological abnormalities in populations around Chernobyl, but much less frequently in uncontaminated Ukrainian control populations, and three more distant control groups. An earlier paper had shown a long-term reduction in fertility in the Chernobyl sample: 23% of adults were infertile, compared with virtually 0% in the control groups.

6.2 *Belarus bank vole studies*

*Ryabokon (2006)* examined the possible transgenerational effects of radiation fallout from the Chernobyl nuclear accident on colonies of bank voles in Belarus. Murine rodents are an important proxy for establishing genetic and health paradigms in human populations. The study was carried out over ten years, tracing health and genetic effects in 22 generations of bank voles in five separate sites in Belarus, exposed to different levels of radiation.

The authors of the study found that in spite of exponentially decreasing external irradiation, the proportion of chromosome aberrations in successive generations did not decline, and in fact the percentage of foetal deaths rose, particularly towards the end of the study period. The results from site three with medium exposure are depicted in Figure 6.1.

![Figure 6.1](image)

**Figure 6.1**

**COMPARISON OF EXTERNAL RADIATION EXPOSURE*, CHROMOSOME DAMAGE AND % FOETAL DEATHS OVER 22 GENERATIONS OF A BANK VOLE COLONY IN BELARUS**

(RYABOKON 2006)

It can be seen that estimated external dose declined steeply over the period of study, but the percentage of voles with chromosome damage remained fairly constant, while the percentage of foetal deaths rose markedly.
Table 6.1

BELARUS BANK VOLES—PRE CHERNOBYL TO 1996—BACKGROUND DOSE, CHROMOSOME DAMAGE AND FOETAL DEATHS, 22 GENERATIONS OVER 10 YEARS (SITES 1, 2, 3 AND 4) (RYABOKON 2006)

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<td>7.2</td>
<td>0.4</td>
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* significant at p = 0.05; ** significant at p = 0.01

Table 6.1 compares results for sites one, two, three and four. This table compares chromosome cell aberration levels and percentages of foetal deaths in four sites of widely differing radiation background from the pre-Chernobyl period through to 1996. Site one had an estimated initial dose of six µGy per day, equivalent to normal background radiation. On site two, the initial radiation levels were about 12 times background. Site three had an estimated external dose 145 times background. Site four was 1,000 times background. Nevertheless, site four had only 60% more chromosome aberrations than site two, and only double the percentage of foetal deaths, even though the initial radiation level was nearly 100 times greater. This suggests a saturation dose effect. In other words once the initial external dose rate exceeded a value between 875–6,055 micro Grays per day, there was very little increase in biological and genetic effects.

Not shown here are the results for a sample of bank voles bred in the laboratory. Even though the radiation levels were much lower here succeeding generations continued to show adverse chromosome and health effects.

The authors concluded that their results were evidence for the transference of genomic instability through successive generations.

7. GENOMIC INSTABILITY

A new phenomenon discovered within the last 20 years is that when cells are subjected to ionising radiation and exhibit a cell response, this cell response can also be found in neighbouring, non-targeted cells. This is known as the bystander effect. This cell response can then be propagated into new generations of cells which is known as genomic instability (Kadheim 2007; Mothersill 2001; Mothersill 2006; Coates et al 2004).

If the cells are germline cells then genomic instability can be transferred from one generation of individuals to the next. The transfer is non-mendelian, in other words, the next generation does not inherit the exact mutation of the previous generation, but instead the instability of the inherited genome in itself creates new and unpredictable mutations in the second generation. This genomic instability effect is transgenerational and can last through many generations.

Baverstock (2000) has pointed out that “The existing paradigm governing radiobiology, which is fundamental to the estimation of environmental radiation risk cannot explain the phenomena of radiation induced genomic instability and the bystander effect. Animal studies undertaken after the Chernobyl accident show evidence of long-term transgenerational effects which may apply to human populations. So far, the evidence from Sellafield and Belarus is only available for first-generation effects. It is not known to what extent even these are related to bystander effects and genomic instability.

Two important aspects of genomic instability, which to not appear to be addressed in the current radiation paradigm for genetic risk are: the long term effects in human populations from an initial dose to the first generation—the bank vole study suggests that in human terms, this might last at least 600 years; and whether the original genetic response to radiation follows a linear dose relationship at low levels of radiation.

8. CONCLUSIONS

The following conclusions are drawn from this report:

— The current radiation paradigm for genetic risk is based on spontaneous mutation rates in human genes and radiation-induced mutation rates of mouse genes, and not on human or animal epidemiological studies.

— The current radiation paradigm for genetic risk estimates an excess relative risk (ERR) of 0.4%–0.6% per Gray(Sievert) compared with an ERR for fatal cancer of 5%.

— Epidemiological studies of stillbirths on offspring of male Sellafield radiation workers suggest an ERR of 35.5 per Sievert for stillbirths with congenital anomaly.

— There is some evidence that genetic risk for women may be ten times greater than for that of men. The ERR for congenital malformations in Belarus after the Chernobyl accident are estimated to be 40 per Sievert for men and 400 for women.
— Animal studies in areas near the Chernobyl accident show increased levels of chromosome abnormalities and foetal deaths even after 22 generations. This has been attributed to transgenerational genomic instability effects.

— In human terms these animal results implies effects for at least 600 years.

Finally, it should be noted that radiation protection limits for somatic (cancer) risk from ionising radiation have been lowered five times, but little attention has been given to genetic risks, particularly associated with epidemiological studies. The new epidemiological data referred to in this paper for both animals and humans suggests the current radiation paradigm is not secure enough to provide a stable basis for decision making purposes.

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January 2010
The Welsh Anti Nuclear Alliance established in 1980 is comprised of individuals and organisations concerned about the safety, security and economics of nuclear power. It has given evidence at several nuclear public inquiries and House of Commons select committees over the last 26 years.

INTRODUCTION

The Energy and Climate Change Committee is “to determine whether the energy National Policy Statements provide a coherent and practical framework within which the Infrastructure Planning Commission can assess future planning applications for energy infrastructure.” This paper provides evidence that the draft Nuclear National Policy Statement is not fit for purpose because insufficient information has been put forward.

The Draft National Policy Statement for Nuclear Power Generation states of the Higher Level Wastes including spent fuel that:\(^1\)

“Having considered this issue, the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations. As a result the IPC need not consider this question.”

This absurd statement is a result of placing responsibility for managing radioactive waste with the department that is actively promoting nuclear power. Every local planning authority in the land has the right to know from the applicant what is to be done with any hazardous waste created on the site as a result of the development. This is uniquely important when the storage period of 160 years will outlast the developer, the waste is particularly dangerous and there are well-founded doubts about its safety and security.

HIGH BURNUP SPENT FUEL

The high burnup fuel proposed for new reactors uses more enriched uranium, and leaves it in the reactor for longer. This gets more output from the fuel, but increases the dangers of radioactive releases as the fuel cladding gets thinner. This increased danger persists throughout its storage and disposal. Burnup is expressed in thousand MegaWatt days per tonne of Uranium. Sizewell B has typically discharged fuel at 30,000MWd/tU compared with the proposed very high burnup spent fuel (60,000MWd/tU).

As high burnup spent fuel will be twice as hot and twice as radioactive as the legacy spent fuel that the government wants to dispose of, it will require twice as long to cool down before disposal. Sites of new nuclear power stations will accumulate and store this hazardous material above ground over very long periods. According to the International Atomic Energy Agency (IAEA) any benefits of lower electricity costs during the operation of reactors in this way will be offset by an increase in the cost of managing the spent fuel.\(^2\) The problem is that the costs will long outlast any benefits, in effect transferring burdens to future generations.

In 2007 the IAEA warned that Britain must not go ahead with a new generation of nuclear power stations until it has a “clear and robust” plan in place for dealing with the twin problems of decommissioning and waste treatment. The agency’s executive director said:\(^3\)

“The spent-fuel issue is the most critical one for nuclear. It will not develop if there is not a credible and satisfactory answer to the management of spent fuel and one which is convincing for the public.”

The draft Nuclear National Policy Statement, and its “evidence” says nothing about how the public and workers are to be protected from accidents and deliberate attacks, or how the deterioration of high burnup spent fuel is to be addressed over a 100 year cooling period.

As this lack of publicly available information on a vital part of the new nuclear programme fails to comply with Britain’s duty under Article 6 of the IAEA Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the IPC are under no obligation to determine any application made as a result of the draft Nuclear National Policy Statement. Article 6 of the convention states:\(^4\)

Each Contracting Party shall take the appropriate steps to ensure that procedures are established and implemented for a proposed spent fuel management facility:

(iii) to make information on the safety of such a facility available to members of the public;

The government’s “arrangements” statement also pre-empts the work of its own nuclear regulators whose Generic Design Assessment Step 3 reports on the EPR and AP1000 reactors require further work or additional information on:\(^5\)

“the safety of the long term storage of the fuel before final disposal focussing on the role of the levels of burnup”.

The government’s central claim is that “based on scientific consensus and international experience” high burnup spent fuel doesn’t require different solutions:\(^6\)

“…spent fuel from new nuclear build would not raise such different technical issues compared with nuclear waste from legacy programmes as to require a different technical solution”.

Memorandum submitted by the Welsh Anti Nuclear Alliance

The Welsh Anti Nuclear Alliance established in 1980 is comprised of individuals and organisations concerned about the safety, security and economics of nuclear power. It has given evidence at several nuclear public inquiries and House of Commons select committees over the last 26 years.
“The disposability assessments that have been conducted by the Nuclear Decommissioning Authority...have concluded that....no new issues arise that challenge the fundamental disposability of the wastes and spent fuel expected to arise from operation of the EPR and AP-1000 reactors.”

The issues are set out below. There is very little experience of the storage and management of very high burnup spent fuel (60,000MWd/tU) but many scientific and technical uncertainties about its characteristics have been identified which require separate and intense scrutiny.

**Science and Politics**

While decision making is political:7

“the role of scientific expertise is to identify technical options, specify areas of uncertainty and evaluate the technical component of risk.

The government of 1977 accepted a Royal Commission recommendation that the department responsible for the management of radioactive waste “should be independent of the responsibilities of Government Departments for promoting nuclear power.”8

Thus the Department of the Environment would have the responsibility to:9

“...ensure that waste management problems are dealt with before any large nuclear programme is undertaken.”

Radioactive waste remains an issue that is profoundly important and central to the acceptability of nuclear power. A government energy review commented in 2002:10

“The main focus of public concern about nuclear power is on the unsolved problem of long-term nuclear waste disposal, coupled with perceptions about the vulnerability of nuclear power plants to accidents and attack.”

The government now relies on attempting to answer two vague questions:11

— Do acceptable technologies exist, or are they likely to exist within an appropriate timeframe, for managing and disposing of the waste (given its expected characteristics and quantities)?
— Does capacity exist, or is it likely to exist within an appropriate timeframe, to manage and dispose of the waste in a manner which is safe, secure and which ensures environmental and sustainability impacts are manageable?

Despite the 2007 high court judgement that a consultation was “unlawful” because insufficient and “misleading” information had been made available by the government for consultees to make an “intelligent response”, the Government has still not put sufficient information into the public domain to enable an effective and informed dialogue on the extremely important issues being consulted on.12

The test of acceptability of arrangements for managing high burnup spent fuel is whether they command public confidence. Circular references to the Managing Radioactive Wastes Safely (MRWS) process fail to do this.

**Justification**

The Secretary of State could yet decide that proposed nuclear power station designs were not justified if he concluded, following the current consultation, that the radiological detriment to health outweighed the benefits, but it has been described as a regulatory “step” in the construction of new nuclear power stations.13

“This Justification process is yet another example of the facilitative actions the government is taking to support new nuclear power in the UK.”

The danger of allowing a department promoting nuclear power to make regulatory decisions is that in “reducing regulatory risks for investors” it will pre-empt proper consideration of health detriments. It is for good reason that both the European Union and the IAEA require nuclear regulation to be free from any influence that may affect safety.14,15

No practice (activity) involving exposures to radiation should be adopted unless it produces at least sufficient benefit to the exposed individuals or to society to offset the radiation detriment it causes.16 Waste management and disposal is regarded as an integral part of the one single practice of nuclear power generation so we have to consider all detriments, including that from the waste, before allowing any new nuclear programme.17

Confidence about “arrangements” is insufficient to justify the creation of such wastes because of the uncertain, but predictably serious health detriments that will be imposed on future generations. The test is whether the government will fulfil its obligations under article 4. of the IAEA Joint Convention on the Safety of Spent Fuel Management which states that each signatory to the convention.18

“shall take the appropriate steps to ensure that at all stages of spent fuel management, individuals, society and the environment are adequately protected against radiological hazards.”
In particular they shall:

(vi) strive to avoid actions that impose reasonably predictable impacts on future generations greater than those permitted for the current generation;

(vii) aim to avoid imposing undue burdens on future generations.

**Radiation Exposure**

The government acknowledge that high burnup spent fuel from the proposed reactors will be twice as radioactive as that from Sizewell B, but the neutron dose rate (which increases by the power of four with burnup) is stated to be “not significant for the management of the spent fuel”:20

“….since the total external dose rate from the spent fuel is dominated by the gamma radiation dose and not the neutron dose, which would contribute, at most (for example, for a burn-up of 60 gigawatt days per tonne of uranium (GWd/tU)), only 6% to the total external dose rate with the remainder being gamma.”

![Chart 1](image)

This is extremely misleading as Chart 1 illustrates. Neutron radiation becomes very significant over the 100 years storage period and will greatly increase potential exposure in handling accidents. A tonne of legacy spent fuel will emit approximately 33 million neutrons per second 50 years after discharge. Even after 100 years of thermal cooling before emplacement a tonne of new build spent fuel will emit 80 million neutrons per second, exposing the personnel emplacing new build spent fuel of the period 2125–2185 to two and a half times that possible for personnel emplacing legacy spent fuel.

**Confidence in Long Term Storage**

The nuclear regulators point out that:

“Extremely long time periods into the future increase areas of uncertainty not just associated with the spent fuel itself, but with the long term integrity of containment structures, and introduce inaccuracies associated with quantification of risk.”

The draft Nuclear National Policy Statement relies on a document setting out the arrangements for the management and disposal of waste from new nuclear power stations. This states that:

“PWR spent fuel interim dry storage is an established technology overseas, where cask storage systems have been licensed for the storage of spent fuels from other modern PWRs.”
Such statements cannot be applied to the very long term storage of high burnup spent fuel. After 18 years in cooling ponds the spent fuel from Westinghouse reactors would be transferred to Holtec Hi Storm dry casks, licensed for 20 years in the US, and assumed to be used for up to 50 years. No one has any idea of how they will stand up to heat and irradiation over a longer period, and the effects of heat build up on the long term integrity of the fuel is unknown. AREVA, the French reactor company have designed dry casks but have decided to store their British EPR spent fuel in ponds until it can be conditioned. In France pond storage for up to 300 years is being considered for high burnup spent fuel.

It is vital to examine the evidence that underpins the governments’ confidence:

“In the USA spent fuel has been safely and securely managed on arising sites for decades and the US Nuclear Regulatory Commission (NRC) has formally expressed its confidence that spent fuel can be safely and securely stored on-site, without significant environmental impact, for at least 100 years.”

The great majority of spent fuel in storage in the US has a burnup of less than 45,000 MWd/tU. A speech by the NRC Chairman in May 2009, while articulating general confidence, conceals NRC concern about high burnup spent fuel which has stated:

“…..there is limited data to show that the cladding of spent fuel with burnups greater than 45,000 MWd/MTU will remain undamaged during the licensing period. Limited information suggests increased cladding oxidation, increased hoop stresses and changes to fuel pellet integrity with increasing burnup up to and beyond 60,000 MWd/MTU. These burnup dependent effects could potentially lead to failure of the cladding and dispersal of the fuel during transfer and handling operations.”

The IAEA puts worldwide collective experience of spent fuel into context:

“…..the use of high burnup and MOX….fuels will lead to higher residual heat and will require long heat decay times, implying longer interim storage period before final disposal. Experience exists in long-term storage of about 30 years without any problems. However, much longer storage periods are expected.”

Chart 2

Concern about the long term storage of all spent fuel is shared by the industry itself with AREVA stating:

“Leaving the spent fuel onsite for extended periods of time was never intended and is not responsible. Independent Spent Fuel Storage Installations [ISFSIs] can safely operate past 100 years by implementing an ageing management program….but) More responsible options exist, recycling and final disposal need to be pushed forward”.
Chart 2 is based on official estimates of the amount of radioactivity that would be created by a 10GW new build nuclear programme, and stored on sites. We are now told that the earliest time that disposal of new build wastes would begin is estimated to be around 2130.

Any confidence that does exist in long term storage is based on spent fuel with a burnup of less than 45,000 MWd/tU. Only 5% of US spent fuel is in dry casks.

The reluctance to use dry storage for high burnup spent fuel is likely to continue, as the US Dept of Energy concluded in 2003:

“To minimize operational risks and lower costs, utilities can be expected to send the high-burnup fuel directly from their spent fuel pools to the repository. Under those conditions, (US) Department of Energy will assume responsibility for dry storage until the spent fuel is ready to be disposed.”

The long term storage of high burnup spent fuel is expected to result in greater fuel cladding failure, with consequent higher risk of radiation exposure for the generation attempting to retrieve and condition the failed fuel elements.

“The three areas where higher burnup has the potential to affect the long-term dry storage of spent fuel are stress driven cladding-failure lifetimes, thermal performance of the rods, and radionuclide inventory of the source term.

“Many of the degradation mechanisms for the cladding are stress driven. Extra corrosion of the Zircaloy cladding results in cladding thinning and a higher cladding stress.”

In Britain the nuclear regulators expect that:

“The waste form and its container should be resistant to degradation, waste packages should be inspectable, retrievable for inspection or reworking. The lifetime of the storage building should be appropriate for storage period prior to disposal. The facility should enable retrieval of wastes for final disposal (or restoring).”

The designers of facilities for the very long term storage of high burnup spent fuel face multiple challenges, as acknowledged in 2003 in an IAEA conference:

“…cask designers currently face a number of new challenges including storage of high burnup fuel with correspondingly higher enrichments.”

“The NRC has been focusing on the storage and transportation of high burnup fuel over the last few years because high burnup fuel is thought to have degraded mechanical properties as compared to lower burnup fuel. The staff has also become more aware of the various types of fuel assembly damage that may exist.”

The NRC confirmed the additional problems that accompany the use of high burnup fuel:

“…beyond 45 GW·d/tU, the oxide layer thickness on the exterior of Zircaloy cladding increases at a faster rate than at lower burnup levels….Additionally, as burnup levels increase, the cladding absorbs more hydrogen which affects the mechanical properties of the cladding and, depending on the environmental conditions of the cladding, can affect the mode of cladding failure.”

There are internationally accepted consequences associated with the long-term dry storage of spent fuel above 45,000MWd/tU. These include stress driven cladding-failure, through higher internal hydrogen gas pressure, and higher cladding corrosion.

**Encapsulation—The Unanswered Questions**

Before anyone accepts new reactors that discharge high burnup spent fuel, they should be aware of the prevailing attitude within the nuclear industry—that they may evade the responsibilities of creating high burnup spent fuel, storing it for 100 years and conditioning it for disposal. Prospective operators of new nuclear power stations have been open about wanting the taxpayer to take title to and responsibility for their high burnup spent fuel “as soon as practicable.”

From the perspective of corporate entities planning investments and returns, a twenty year horizon is perfectly sufficient for shareholders. If long term risks associated with spent fuel storage and disposal can be offset by effectively transferring burdens to future generations, it is a helpful inducement for investors. NII guidance to inspectors makes it clear that spent fuel should be stored dry:

“For spent fuel, the options are to reprocess or to dry store, prior to the availability of a final disposal route, and this choice is largely a commercial judgement by the operators, subject to satisfying planning and regulatory requirements.”

The EPR reactor developers are still unsure whether to store their spent fuel wet or dry. Both have serious problems. The problem with maintaining “wet storage” over 160 years is that pumps have to be kept going continuously and safety could be compromised by a terrorist attack that partially or completely drains the spent fuel pool. This could lead to the rapid heat-up of spent fuel to temperatures at which the zirconium alloy cladding would catch fire and release radiation.
However, handling dry 100 year old fuel will be a hazardous operation. In Finland where spent fuel below 45,000MWd/tU is to be encapsulated after about 40 years:43

“In case of accidents or mishandling, possible damages to the fuel assemblies would be more severe in air than in water.”

The cladding of spent nuclear fuel above 45,000MWd/tU is vulnerable to failure, especially during a handling accident in which it is dropped.44 Quenching embrittled 100 year old dry spent fuel in water, in order to provide shielding at the encapsulation plant, could cause fuel elements to fail, leading to their being rejected for disposal. In Finland these (lower burnup) failed spent fuel elements will be put in “special storage”.45

EDF think that encapsulation will take place just before emplacement underground (from 2130 presumably, which makes it rather unlikely that they will be doing it):46

“It is anticipated that conditioning (encapsulation) of spent fuel will not take place until the fuel is due for emplacement in the repository.”

THE NEW BUILD REPOSITORY FOOTPRINT

A series of unrealistic and misleading assumptions have lead the Nuclear Decommissioning Authority to conclude that ILW and spent fuel from the operation and decommissioning of the Westinghouse AP1000 and the AREVA EPR:47

“should be compatible with plans for transport and geological disposal of higher activity wastes and spent fuel.”

A central conclusion of the NDA’s disposability assessments for spent fuel from the reactors proposed for England and Wales is that, after 100 years cooling, the spent fuel may be disposed of in the same repository as “legacy” spent fuel because its additional footprint will be small relative to that of the legacy waste repository.

“A fleet of nine such reactors (AP1000) would require an additional area of approximately 1 km², excluding associated service facilities. This represents approximately 6% of the area required for legacy HLW and spent fuel per AP1000 reactor, and approximately 55% for the illustrative fleet of nine AP1000 reactors. This is in line with previous estimates for potential new build reactor designs.”

This one square kilometre assumes a uniform strong crystalline geology, and tunnels spaced at 25 metre centres. The NDA believes that UK geology will require only 8% of deposition holes to be rejected as unusable. It is now concluded that 23% of deposition holes are likely to be unusable at the Forsmark repository in Sweden.48 This combined with a tunnel spacing of 40 metre centres is necessary for the dispersion of heat from the (normal) spent fuel to be disposed of in Sweden. The 25 metre tunnel spacing used by the NDA and 6.5 metre canister spacing means that temperature limits in the repository are likely to be exceeded,49 defeating the object of the 100 year cooling period:50
Chart 3 allows a better judgement to be made of the likely footprint of spent fuel from new build. On all realistic and reasonable assumptions the spent fuel repository footprint necessary for 10 GW of new build would exceed the 3 km² required for legacy HLW and spent fuel. Doubling the footprint of the repository is not tenable for geological reasons. Operating it for over a century after the legacy repository is folly.

Simply in order to reduce costs for those considering investing in new nuclear stations the government is prepared to give us (and future generations) the worst of all worlds, keeping one facility open and disposing of both new and legacy radioactive waste in the same repository.

**Conclusion**

We have a fundamental choice before us. The IAEA have recognized that limits will be reached in the increase in fuel burnup because of the environmental, safety and licensing implications:

“…..the general burnup trend is heading up to still higher level, even though there should be a plateau level in confrontation with regulatory constraints.”

Investment in new nuclear power stations depends on getting the most energy from each tonne of uranium. The very long storage period that is required is commercially driven, a direct result of using high burnup fuel. High burnup spent fuel is more difficult and intractable to manage and dispose of, and will transfer greater burdens to future generations, exposing them to greater hazards than those that we are prepared to accept.

The assertion that very high burnup spent fuel is not much different from “legacy” spent fuel is confounded by international consensus. As such fuel would be far more hazardous but doesn’t yet exist, its creation requires a quite separate and more rigorous process to test and validate proposals for its management and disposal. The IPC’s framework is neither practical nor coherent, and will fail to command public respect unless a public inquiry with wide terms of reference is held to permit such scrutiny.

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9. Nuclear Power and the Environment” The Government’s Response to the sixth report of the Royal Commission on Environmental Pollution (Cmd 6618) (para 14)


11. The arrangements for the management and disposal of waste from new nuclear power stations. DECC November 2009


14. Article 5. 2 states that Member States shall ensure that the competent regulatory authority is functionally separate from any other body or organisation concerned with the promotion, or utilisation of nuclear energy, including electricity production, in order to ensure effective independence from undue influence in its regulatory decision making. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009L0071:EN:HTML:NOT

15. IAEA Convention on Nuclear Safety adopted on 17 June 1994 ARTICLE 8. states: Each Contracting Party shall take the appropriate steps to ensure an effective separation between the functions of the regulatory body and those of any other body or organization concerned with the promotion or utilization of nuclear energy. http://www.iaea.org/Publications/Documents/Infcircs/Others/inf449.shtml


20. Regulatory Justification of the AP1000 and the EPR. Vol 2—Secretary of State’s Proposed Decision para 4.36


24. The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence DECC November 2009. page 15, para 59

26. NRC Chairman Dale E. Klein to the Dry Storage Information Forum Bonita Springs, FL, 12 May 2009. The first NRC waste confidence decision was issued in 1984. In this initial note, the Commission found:
   — reasonable assurance that safe disposal of high-level waste and spent fuel in a geologic repository is technically feasible,
   — that repository capacity will eventually be available,
   — that high-level waste and spent fuel will be safely managed until repository capacity is available,
   — that spent fuel generated in any reactor can be stored safely and without significant environmental impacts for extended periods, and
   — that spent fuel storage will be available as needed.


31. The arrangements for the management and disposal of waste from new nuclear power stations: a summary of evidence DECC November 2009, page 14, para 62


34. TECHNICAL ASSESSMENT GUIDE—MANAGEMENT OF RADIOACTIVE MATERIALS AND RADIOACTIVE WASTE ON NUCLEAR LICENSED SITES T/AST/024 13/03/01 http://www.hse.gov.uk/foi/internalops/nsd/tech_asst_guides/tast024.pdf


41. TECHNICAL ASSESSMENT GUIDE—MANAGEMENT OF RADIOACTIVE MATERIALS AND RADIOACTIVE WASTE ON NUCLEAR LICENSED SITES T/AST/024 13/03/01

42. ibid http://www.hse.gov.uk/foi/internalops/nsd/tech_assst_guides/tast024.pdf


48. The layout for these underground excavations requires an area of 3.6 km2. The proposed layout (Figure 4–13) represents the area for a gross capacity of 7,818 canisters (ie allowing for a possible loss of 23% due to discarded deposition positions). Underground design Formark Layout D2 Svensk Kärnbränslehantering AB July 2009. http://www.skb.se/upload/publications/pdf/R-08-116webb.pdf

49. SKB Technical Report TR-07-12 RD&D Programme 2007. Programme for research, development and demonstration of methods for the management and disposal of nuclear waste September 2007, (page 337) Figure 26–1 Isolines for 90°C maximum bentonite temperature—Indicates that canisters spaced at 6.5m centres in tunnels at 25 metre centres exceed the 90°C limit, (to accommodate 10°C uncertainty) with rock initial temperature of 10.6°C. http://www.skb.se/upload/publications/pdf/TR-07-12%20FUD%202007%20eng%20webb.pdf


January 2010

Memorandum submitted by Westinghouse Electric Company

ABOUT WESTINGHOUSE

Westinghouse Electric Company, a group company of Toshiba Corporation, is the world’s pioneering nuclear power company and is a leading supplier of nuclear plant products and technologies to utilities throughout the world. Westinghouse supplied the world’s first Pressurised Water Reactor in 1957 in Shippingport, Pennsylvania. Today, Westinghouse technology is the basis for approximately half of the world’s operating nuclear plants.

Westinghouse is headquartered in Pittsburgh Pennsylvania and employs around 10,000 people around the world. The company has three core business areas—nuclear fuel, nuclear reactor services and nuclear power plants.

China will build four Westinghouse AP1000 reactors—two on the Sanmen site and two on the Haiyang site. Construction on the first of these plants, at Sanmen, began in February 2008, and is now well underway. A further six AP1000 plants have already been ordered in the US, with many more in the planning stage.

UK regulators are currently assessing two reactor designs in detail—including the Westinghouse AP1000—to determine if they meet the UK’s safety and environmental requirements.

In the UK, Westinghouse runs the Springfields site in Preston, Lancashire (where around 1,800 people are employed), on behalf of the Nuclear Decommissioning Authority. The vast majority of the UK’s nuclear fuel has been made at Springfields, over a period of more than 50 years.
1. Do you think that the Government should formally approve (“designate”) the draft Overarching Energy National Policy Statement?

Yes—most definitely.

The UK is in need of substantial investment in energy infrastructure over the next decade or so, and the nature of the market means that this investment needs to come from privately-owned power utilities, not from Government. Those utilities will wish to have a certain level of confidence in the successful delivery of their projects, and a major part of that will be predictability in timing of key decisions such as planning approval. It is well known that in the past such decisions have often been subject to long delays, therefore the planning reforms now introduced are a key enabler for the utilities in making investment viable. This is particularly important given the long timescales of some of the potential energy projects, such as nuclear power plants.

The National Policy Statements prevent individual planning applications from re-opening discussions on national policy, which have already taken place and been concluded in Parliament. In the case of energy policy, these decisions have been made with full public consultation at various stages, and so additional public consultation on matters of national policy is unnecessary at a site-specific approval stage.

2. Does the draft Overarching Energy National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

Yes, we believe that it does.

3. Does the draft Overarching Energy National Policy Statement provide suitable information to the Infrastructure Planning Commission on the Government’s energy and climate policy?

Yes, we believe that it does.

However we are surprised that no mention is made of the fact that nuclear energy offers significant attractions in respect of security of energy supplies.

4. Does the draft Overarching Energy National Policy Statement provide suitable direction to the Infrastructure Planning Commission on the need and urgency for new energy infrastructure?

Yes, we believe that it does.

5. Do the assessment principles in the draft Overarching Energy National Policy Statement provide suitable direction to the Infrastructure Planning Commission to inform its decision-making?

We believe that the direction provided is broadly-speaking appropriate. However we are somewhat concerned that the NPS seems to place urgency ahead of other considerations, such as CO2 emissions or security of energy supplies. This could lead to the IPC feeling that priority should be given to projects which can be delivered quickly over those (such as nuclear power plants) which will take longer to come on-stream.

We do not believe that this is intentional and suggest that some clarification might be added in the final version of the NPS. It is worth noting that—in fact—it is those projects with the longest timescales which most need the predictability of timing from the IPC.

6. Does the draft Overarching Energy National Policy Statement appropriately cover the generic impacts of new energy infrastructure and potential options to mitigate those impacts?

Yes, we believe that it does.

7. Do you have any comments on any aspect of the draft Overarching Energy National Policy Statement not covered by the previous questions?

No.

8. Do you think that the Government should formally approve (“designate”):

(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes most definitely.

These more specific statements go hand-in-hand with the Overarching NPS statement to ensure that the right groundrules are in place upon which the IPC can make decisions over specific projects.

In Questions 9 to 15, Westinghouse are only commenting in respect of the National Policy Statement for Electricity Networks Infrastructure (EN-5), as this is the only one where we—as a company dedicated purely to nuclear energy—have detailed relevant expertise.
9. Do the following draft National Policy Statements provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent:

(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes, we believe that, for EN-5, this is the case.

10. Do the following draft National Policy Statements appropriately cover the impacts of the specific types of new energy infrastructure covered in them, and potential options to mitigate those impacts:

(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes, we believe that, for EN-5, this is the case.

11. Do you have any comments on any aspect of the following draft National Policy Statements not covered by the previous questions:

(a) The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(b) The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(c) The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(d) The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

No—for EN-5 we do not.

12. Do you agree with the findings from the following Appraisal of Sustainability reports:

(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-1)?
(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

Yes, we believe that, for EN-5, this is the case.

13. Do you think that any findings from the following Appraisal of Sustainability reports have not been taken account of properly in the relevant draft National Policy Statements:

(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-1)?
(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?
(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

No—for EN-5 we do not.
14. Do you have any comments on any aspect of the following Appraisal of Sustainability reports not covered by the previous questions:

(a) Appraisal of Sustainability report for the draft Overarching Energy National Policy Statement (EN-1)?

(b) Appraisal of Sustainability report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?

(c) Appraisal of Sustainability report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?

(d) Appraisal of Sustainability report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?

(e) Appraisal of Sustainability report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

No—for EN-5 we do not.

15. Do you have any comments on the Habitats Regulations Assessment reports for the following draft National Policy Statements:

(a) Habitats Regulations Assessment report for the draft Overarching Energy National Policy Statement (EN-1)?

(b) Habitats Regulations Assessment report for the draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?

(c) Habitats Regulations Assessment report for the draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?

(d) Habitats Regulations Assessment report for the draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?

(e) Habitats Regulations Assessment report for the draft National Policy Statement for Electricity Networks Infrastructure (EN-5)?

No—for EN-5 we do not.

16. Do you think that the Government should formally approve (`designate’) the draft Nuclear National Policy Statement?

Yes—most definitely.

As previously noted, the full series of National Policy Statements is crucially important to securing a balanced and sustainable energy policy for the UK. Without the predictability of process which these Statements bring to the planning system, potential investors will be wary about the potential for planning applications to become long and drawn-out, as the UK has seen in the past.

In the case of nuclear energy in particular, predictability of timing is essential if new plants are to be delivered in time to replace the existing nuclear plants over the coming 10 to 15 years, retaining a significant fraction of UK electricity production from this low-carbon, reliable and affordable source.

17. Does the draft Nuclear National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

Yes.

18. Does the draft Nuclear National Policy Statement provide suitable direction to the Infrastructure Planning Commission on the need and urgency for new nuclear power stations?

Yes.

19. Do you agree with the Government’s preliminary conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced by new nuclear power stations in the UK?

Yes—most definitely.

It is important to recognise that the UK already manages all of its nuclear waste safely and effectively. There is now a clear policy for disposal of the higher-activity wastes which we currently have in the UK in a deep underground repository. This policy was developed with widespread public consultation and is consistent with international consensus and best practice. A process is currently underway to find a suitable location for such a repository.
Although the specifics of waste management from new nuclear power plants are a matter for the utility companies, it has been recognised that the volumes of waste produced from such plants are relatively small in comparison to the quantities already in existence. Furthermore, they have been shown to be capable of disposal in the same repository as legacy wastes, subject to that repository being suitably sized to accommodate them.

20. Does the draft Nuclear National Policy Statement appropriately cover the impacts of new nuclear power stations and potential options to mitigate those impacts?
   Yes.

21. Do you agree with the Government’s preliminary conclusion on the potential suitability of sites nominated into the Strategic Siting Assessment, as set out below? You can respond in general terms on the assessment as a whole, or against one or more specific sites.
   (a) General comments:
   The Government considers the following sites to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:
   (b) Bradwell;
   (c) Braystones;
   (d) Hartlepool;
   (e) Heysham;
   (f) Hinkley Point;
   (g) Kirksanton;
   (h) Oldbury;
   (i) Sellafield; and
   (j) Sizewell; and
   (k) Wylfa.
   The Government does not consider the following site to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:
   (l) Dungeness.
   In general, we do agree with the Government’s preliminary conclusion, and specifically we fully agree that the ten sites listed at (b) to (k) above are suitable for new nuclear build on the stated timescale.
   We also believe that the issues identified in respect of the Dungeness site are not sufficient to warrant that site being eliminated from consideration. We feel that the site should be included on the list in the NPS and that it should be up to the potential developers of that site to demonstrate that they can mitigate against the various issues identified. We believe that a great deal of mitigation would be technically achievable and it should be left to potential developers to choose if they wish to invest in such measures.

22. Do you agree with the Government’s preliminary conclusion that the three sites identified in the Alternative Sites Study, as listed below, are not potentially suitable for the deployment of new nuclear power stations by the end of 2025? You can respond in general terms on the sites identified in the Study as a whole, or against one or more specific sites.
   (a) General comments;
   (b) Druridge Bay;
   (c) Kingsnorth; and
   (d) Owston Ferry.
   We agree that these three sites are not ideally suited for deployment of new nuclear power stations by 2025, but we feel that they could well be suited to such development on a longer timeframe—as could many other UK sites.

23. Do you agree with the findings from the Appraisal of Sustainability reports for the draft Nuclear National Policy Statement?
   Yes.

24. Do you think that any findings from the Appraisal of Sustainability reports for the draft Nuclear National Policy Statement have not been taken account of properly in the draft Nuclear National Policy Statement?
   No.
25. Do you have any comments on the Habitats Regulations Assessment reports for the draft Nuclear National Policy Statement?

No.

26. Do you have any comments on any aspect of the draft Nuclear National Policy Statement or its associated documents not covered by the previous questions?

No.

27. Do you have any comments on the Impact Assessment report for the draft energy National Policy Statements?

No.

28. Does this package of draft energy National Policy Statements provide a useful reference for those wishing to engage in the process for development consent for nationally significant energy infrastructure, particularly for applicants?

Yes.

29. Do you have any comments on any aspect of the draft energy National Policy Statements or their associated documents not covered by the previous questions?

No.

January 2010

Memorandum by the Wildlife Trusts

INTRODUCTION

1. The Wildlife Trusts welcome the opportunity to comment on the proposed National Policy Statements for energy.

2. The Wildlife Trusts are a partnership of 47 individual Wildlife Trusts covering every part of the UK, together with the Isle of Man and Alderney. Together, we are the UK’s largest voluntary organisation dedicated to protecting wildlife and wild places wherever they occur, in the countryside, in cities and at sea. We are supported by more than 765,000 members, including 135,000 junior members, and our expert staff are aided by a formidable workforce of more than 39,000 volunteers. We manage almost 2,200 nature reserves, covering 80,000 hectares of land, ranging from inner city urban sites to the UK’s finest wildlife areas.

SUMMARY

3. The Wildlife Trusts support the Government’s ambitions to tackle climate change and meet UK targets to reduce greenhouse gas emissions. We share the sense of urgency in deploying and developing solutions to move the UK towards a low carbon society and to increase the proportion of overall energy generated from renewable sources.

4. We believe that securing widespread public support for the transition to a low carbon economy is critical. This would be helped considerably if the development of major new energy infrastructure is seen to respect the natural environment.

5. The National Policy Statements (NPS) provide a golden opportunity for the government to establish a clear strategy that sets out an appropriate balance between the urgency of the need for new energy infrastructure and the importance of protecting the UK’s most important wildlife sites. In their current form, we believe that the draft NPS have missed this opportunity.

6. Our key concern is that the NPS appear to be based on the premise if we are to move towards a low carbon society and reduce our dependence on fossil fuel we will inevitably need to sacrifice the protection of the natural environment and accept loss and damage to some of the UK’s most important wildlife sites. We do not share this view and believe that the urgency of the need for energy infrastructure does not preclude an appropriate level of environmental protection, including robust planning guidelines that protect national and European wildlife sites.

7. We accept that there is overriding need to tackling climate change. Including meeting the UK’s obligations to reduce greenhouse gas emissions. However, this does not mean that there is overriding need and no alternative to any proposal submitted by a commercial developer for energy infrastructure in any location, as the NPS suggest. In our view, the general environmental benefits of the overall policy do not preclude or downgrade the importance of project-level analyses of biodiversity impacts.
8. We question the adequacy of the NPS Appraisal of Sustainability. Due to the lack of specific information on the location and extent of the required infrastructure (with the exception of nuclear) it is not clear, even in general terms, what the overall environmental impact of the policies would be. We accept that there are significant environment benefits associated with reducing carbon emissions and combating climate change but this does not mean that any government policy with the objective of combating climate change is automatically “sustainable”, regardless of the likely project-level biodiversity impacts.

9. With regard to the specific policy for nuclear infrastructure, we note with alarm that all of the proposed locations have the potential to result in adverse impacts to Natura 2000 sites; including locations where unavoidable impacts on habitats and species of European importance such as coastal dune, costal lagoon, matterjack toad and otter would occur. In our view, such sites should not be considered suitable and should have been excluded by the Strategic Siting Assessment.

10. We question whether development of the nuclear infrastructure at sites where there would be a significant and unavoidable impact to Natura 2000 sites could comply with the Habitat Regulations. Even if the overriding need and lack of alternatives was demonstrated (in our view the NPS do not achieve this) we consider it unlikely to be feasible (either practically or economically) to implement the unprecedented levels of ecological mitigation and compensation that would be required.

APPRAISAL OF SUSTAINABILITY

11. With the exception of the nuclear NPS, no information on the location or likely extent of the proposed energy infrastructure is provided. Instead, we are informed that there are unlikely to be alternatives to any locations that come forward and all are needed. It is even stated that “the IPC [Infrastructure Planning Commission] should operate on the basis that consent should be given except to the extent that any exceptions set out in the Planning Act apply” (EN-1 Section 4.1.1). This suggests that project-level biodiversity assessments would not be given appropriate weight in the planning process and brings into question the conclusions of the strategic sustainability appraisal.

12. The conclusion of the sustainability appraisal can be interpreted to mean that because the overall objectives of the NPS are “sustainable” (ie they would result in a reduction in greenhouse gas emissions) any project-level effects are largely irrelevant.

13. Specifically with regard to impacts to biodiversity it is concluded that new infrastructure “may affect ecology as development may occur on previously undeveloped land” (EN-1 Section 1.6.1). Given the likely scale, location and timescale of the new energy infrastructure and the potential impacts to Natura 2000 sites, we consider this to be a wholly inadequate consideration of this issue.

14. The exceptions set out in the Planning Act which are referred to in the NPS and would preclude planning consent being granted by the IPC include: (i) where the IPC is satisfied that the adverse impacts outweigh the beneficial impacts (taking account of mitigation), and (ii) where granting consent would be unlawful.

15. These exceptions do not provide us with much confidence that project-level biodiversity impacts would be given appropriate consideration by the IPC. With regard to (i) it is stated in several places within the NPS that adverse impacts to biodiversity at a project-level should be weighed against the general adverse impacts to biodiversity associated with climate change. On this basis, it is hard to imagine any proposal that would not be considered to provide an overall “benefit” given the potentially catastrophic effect of climate change on biodiversity. However, reducing the argument in this way is misleading and based on the false assumptions that the government’s current proposed energy strategy is the only way to tackle climate change and there is no alternative to any proposal for major energy infrastructure in any location.

16. With regard to (ii) (ie proposals being unlawful) the government has set out its case for the overriding need and lack of alternatives to the energy infrastructure in the NPS. This limits the IPC’s ability to challenge proposals on the basis of non-compliance with the Habitat Regulations, which is likely to be a key legal compliance issue for the proposed energy infrastructure. The IPC is therefore put in a position where it would be very hard for it to challenge any proposals on the basis of adverse project-level biodiversity impacts.

17. We believe that the Government should give much firmer guidance on the extent and possible locations of the energy infrastructure and should not provide a policy that would support proposals on any site regardless of the project-level biodiversity impacts. In particular, much firmer guidance should be given on avoiding damage to wildlife sites of national and European importance.

COMPLIANCE WITH THE HABITAT REGULATIONS

18. The NPS set out the government’s energy and climate change objectives including transition to a low carbon economy and providing security of supply. The need for specific new energy infrastructure over the next 10–15 years is then set out against the background of these objectives. The basic premise is that in 2020 energy demand is likely to be the same or greater than now; whilst many existing power stations will have closed and c. 30% of power will need to come from renewables. The “low carbon strategy” is renewables...
(particularly wind), combined with nuclear and fossil fuels with carbon capture and storage. In addition to
new generation, the need for a better supply network (eg a network that can deal with supply from a greater
number of locations) is set out.

19. The over-riding conclusion based on the government’s predictions of demand is that there is a
significant short-term need for major new energy infrastructure and that any site that is proposed is needed.
In policy terms, this means that the “demonstration of need” and “consideration of alternatives” issues are
effectively closed and not something that should be considered in detail by the IPC when determining
applications.

20. Specifically with regard to the assessment of alternatives (as required under the Habitat Regulations)
it is stated that given the need for the energy infrastructure any assessment of alternatives should be
“proportionate” (EN-1 Section 4.4.3) and undertaken with consideration of “whether there is a realistic
prospect of the alternative delivering the necessary infrastructure in line with the urgency of the need” (EN-
1 Section 4.4.3). For nuclear infrastructure, no sites beyond the ten proposed can be considered as
alternatives and the sites should not be considered as alternatives to each other.

21. The impression is that the need for the infrastructure is such that it is unlikely that any alternatives
would be considered viable so this should not be a major line of inquiry for the IPC (eg “given the level of
need for energy infrastructure as set out in this NPS, the IPC should have regard for the possibility that all
suitable sites may be needed” EN-1 Section 4.4.3). Suitable in this context presumably meaning any sites that
have been brought forward by developers.

22. We accept that there is overriding need to tackling climate change. However, this does not mean that
any major energy infrastructure project should automatically be considered as meeting the tests given in the
Habitat Regulations, regardless of its location and design and without a full project-level environmental
assessment. We are dismayed by the apparent attempts to circumvent due process under the Habitat
Regulations by presupposing project-level analyses of need and alternatives.

23. We are also concerned that contrary to the NPS, the need for each element of the government’s energy
policy has not been fully established. The policy seems to be based solely upon meeting predicted increases
in demand without full appraisal of measures that could be implemented to manage and reduce this demand
or alternative means of meeting it.

24. In our view the NPS should be setting out a clear policy framework that prevents significant adverse
impacts to European Protected Sites, rather than downgrading the existing legislative position by effectively
circumventing appropriate project-level investigation.

SPECIFIC COMMENTS ON THE DRAFT NUCLEAR NATIONAL POLICY STATEMENT (EN-6)

25. The draft nuclear policy statement differs from the other NPS in that it lists the sites that the
Government has judged to be potentially suitable for the deployment of new nuclear power stations by the
end of 2025. It states that the sites are not alternatives to each other, because all are needed, although in an
apparent contradiction it raises the possibility that a number of the sites could fail at project level.

26. The Strategic Appropriate Assessment of the proposed sites indicates that all have potential for
adverse impacts to Natura 2000 sites, including direct impacts to priority features (eg coastal dune;
heathland; dune grassland; coastal lagoon) and European Protected Species (eg great crested newt; otter;
natterjack toad; bats). It states that project-level detail would be required to determine if these impacts could
be avoided or mitigated.

27. Based on our existing knowledge of some of these sites and the details of the infrastructure that would
need to be located within them (eg new roads; marine loading facilities; bridges; grid connections; pipelines
for the abstraction and discharge of sea water) we consider it highly unlikely that these impacts could be
fully avoided or mitigated and therefore compensation would be required.

28. Guidance provided by the European Commission for compensation for impacts to Natura
2000 sites 119 includes the following: “compensatory habitat must have the functions comparable with those
which justified the selection criteria of the original site” and “have or be able to develop the specific features
attached to the ecological structure and functions, and required by the habitats and species populations”. In
addition it is stated “there is general agreement that the local conditions necessary to reinstate the ecological
assets at stake are found as close as possible to the area affected by the plan or project” and that “there is wide
acknowledgement that [compensation] ratios should be generally well above 1:1”

29. We believe that providing an appropriate level of ecological compensation would not be achievable
either practically or economically given the massive scale of the impacts, the nature of habitats that would
be affected and compensation requirements (as detailed above).

119 Guidance document on Article 6 (4) of the “Habitat Directive” 92/43/EEC: clarification of the concepts of: alternative
solutions, imperative reasons of overriding public interest, compensatory measures, and overall coherence. European
Commission, January 2007, paragraph 1.3.1.
30. We question the “nomination driven” Strategic Siting Assessment for the nuclear sites, which is likely to have resulted sites being proposed on economic rather environmental grounds. We believe that significant adverse impacts to Natura 2000 site should have been an “Exclusionary” rather than a “Discretionary” criterion in the Strategic Siting Assessment stage.

CONCLUSION

31. We believe that in their current form, the National Policy Statements have failed to provide the appropriate balance between facilitating the energy infrastructure that we urgently need and ensuring protection of the environment. In particular, we are concerned that the NPS do not set out a framework through which even the nation’s important wildlife sites would be adequately protected. Instead, the statements seem to be laying the ground-work for project-specific environmental impacts to be a minor consideration in the planning process and for sites that are economically attractive but environmentally damaging being consented on the basis of the apparent need for the development and the apparent lack of alternatives.

January 2010

Memorandum submitted by Windcluster Limited

We are instructed by Windcluster 2000 Limited in respect of DECC’s consultation on the draft National Policy Statement (“NPS”) for nuclear power. Further to our letter dated 14 January 2010 our client has attended DECC’s national public consultation event in Cardiff and the local public consultation event in Kirksanton, Cumbria on the draft NPS for Nuclear Power. On day two of the Kirksanton consultation our client had some initial discussions with Tim Stone (Chair of OND), Mark Higson (CEO, OND) and Adam Dawson (Head of New Nuclear). As a result of these discussions and the national and local public consultation events we have amplified our previous objection letter to the draft NPS for nuclear power.

By way of context our client has an interest in a site in Kirksanton, Cumbria (“the Site”), where it operates four wind turbines out of eight on the Site. As part of the Department of Energy and Climate Change’s (“DECC”) nuclear siting process the Site has been nominated by RWE Npower plc (RWE) for a nuclear power station and was subsequently included in the draft NPS for nuclear power on 9 November 2009. Our client has engaged with DECC by submitting an objection to the Site nomination as part of the public consultation window which was open from 15 April–14 May 2009. Our client has also made subsequent requests for further information from DECC and following DECC’s refusal to disclose information requested an Internal Review on 29 October 2009.

EXISTING SUSTAINABLE ENERGY AND DRAFT NPS FOR NUCLEAR POWER

1. Paragraphs 5.11.133–5.11.135 of the draft NPS on nuclear power refer to the wind turbines operated by our client on the Site and explains that it is too early to say how many wind turbines would be affected as it would depend on the final layout of the facility. DECC have failed to comprehend that there is no scope for the coexistence of the wind turbines and a nuclear power station, even in the commissioning period, as physically the two uses are incompatible and in any event the connections for the turbines run directly across the Site. The proposed nuclear power station will result in the demolition of all of the wind turbines in the vicinity of the Site.

2. DECC have also failed to acknowledge that even those turbines that fall outside the actual area proposed will not be able to continue to operate due to them being immediately adjacent to the proposed plant. We understand that it is the policy of nuclear power operators to object to wind turbines operating in the vicinity and indeed footnote 250 to the draft NPS for nuclear power concedes that it is likely that the removal of any turbines which pose a hazard to the nuclear power station would be required. The reality of which means the extinguishment of all of the turbines on Site.

3. There is public support for the wind turbines on Site and it is widely regarded as an exemplary example of sensitive and sustainable wind energy development. To replace one form of sustainable energy at a prime wind site with another energy source is inequitable, particularly as there is no guarantee that the nuclear power station will be able to operate. There are many viable locations for nuclear power stations around the country which do not house existing sustainable energy and in light of the fact that wind energy sites are difficult to locate as the success of the site is dictated by favourable meteorology data; it could be problematic to relocate this project.

4. The wind turbines are well established with a grid connection and a supply agreement with Centrica to the electrical grid. As an alternative to the proposal, if our client was able to use the whole Site designated for the nuclear power plant it would be able to generate in excess of 50MW of energy capacity. In accordance with section 15(2) Planning Act 2008 that project would classify as a Nationally Significant Infrastructure Project under section 14 Planning Act 2008. It should not follow that a nuclear power plant should take precedence over an already existing sustainable energy source. Both projects would take on National Significance.
5. We believe that the development of a nuclear power plant in this location would prejudice permitted off-shore wind energy projects and the viability of developing offshore wind farms in the vicinity such as the proposal by Dong Energy, which should have a total of 102 turbines in the Irish Sea by 2012, with a total capacity of 367 MW. This is a prime location for both onshore and offshore wind turbines.

6. We find it quite extraordinary that it is necessary to remind DECC that the government has renewable energy targets that it needs to meet in the short term (2010) as well as those for the longer term. The existing wind turbines on the Site make a contribution to these targets now. This contribution has not been taken into account in making the current proposal. It appears to our client that the existence of its wind turbines on this Site has been ignored (see paragraph 15–19 below).

7. Despite outlining the above points to DECC as part of the public comment window the draft NPS for nuclear power fails to address these matters. Please find attached a copy of the HM Government’s Code of Practice on Consultations (“the Code”) which DECC has signed up to as shown on web page: http://www.berr.gov.uk/whatwedo/bre/consultation-guidance/page44420.html. It is clear that the Code must be followed by the Government when it decides to run a formal consultation exercise. We have drawn the breach of the Code to the attention of DECC, but have been informed that the public comment window which our client responded to on 13 May 2009 was not a formal consultation process and the Code does not apply. However there was no distinction made on DECC’s public comment website and our client has incurred continued costs in trying to protect its position only to be informed that it must reiterate its objections so that they can be considered in the instant consultation. We refer to the following criterion:

Criterion 6: Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation. Notwithstanding the limited references to our client’s interest in the draft NPS, to date our client has not received feedback in relation its objections to the nomination.

8. DECC have asserted that although it does not believe the Code applies it has taken account of our client’s comments. This is clearly not the case and the Code has manifestly been contravened. This provides evidence to support the assertion that the process being employed by DECC is fundamentally flawed and open to legal challenge. DECC will need to ensure that the Code is adhered to in the instant consultation and our client will expect full feedback on how its objections have been taken into account.

DECC’S CONCLUSIONS IN THE DRAFT NPS FOR NUCLEAR POWER REGARDING THE SUITABILITY OF THE SITE IN ACCORDANCE WITH THE STRATEGIC SITING ASSESSMENT CRITERIA (“SSA”)

9. Although DECC concludes at paragraph 5.11.88 of the draft NPS for nuclear power that the Site passes criterion D8 of the SSA it states at paragraph 5.11.88 that the new nuclear power station “will have a negative visual impact on the landscape which could be seen from parts of the Lake District National Park” and that “fully effective mitigation of adverse visual effects during the construction and operational phases is highly unlikely.” Given these assessments there is no evidence to support the conclusion that the Site passes this criterion.

10. DECC has conceded that the nuclear power station will have a negative visual impact but has failed to appreciate that the Site is only 100 metres from the Lake District National Park and the detrimental impact the nuclear power station will have in terms of a nationally designated area of high amenity. As admitted in the nomination form submitted by RWE the proximity to the National Park will have a degree of “intervisibility” from view points within the National Park and the erection of cooling towers would further increase the degree of visibility. RWE’s method of mitigation, as required by D8 of the SSA criteria, provides that consideration will be made during the design period. In addition DECC contend at paragraph 5.11.89 of the draft NPS for nuclear power that “mitigation can only be fully assessed when detailed plans come forward”. Both RWE’s and DECC’s proposals for mitigation are substandard as they can not prevent the negative impact of the plant and a cooling tower, the sheer scale of which can not be designed in a way to placate the views from the National Park.

11. DECC asserts at paragraph 5.11.101 of the draft NPS for nuclear power that RWE have specified a preference for direct cooling from the sea. Although this would dispense with the need for cooling towers the plant will still have adverse visual impacts on the National Park. In addition we are concerned that RWE will have to cool water by pumping sea water through the turbine condensers and returning the hot water to the sea and this will have impacts on marine habitats in the Irish Sea and the Duddon estuary (which is a nationally designated area of ecological significance) as the temperature of water would be elevated. DECC’s analysis of this criterion at paragraphs 5.11.101–5.11.104 shows that the Appraisal of Sustainability and ecological significance) as the temperature of water would be elevated. DECC’s analysis of this criterion at paragraphs 5.11.101–5.11.104 shows that the Appraisal of Sustainability and advice from the Environment Agency outlines that thermal impacts of cooling water discharges could effect nationally and internationally designated habitats and there are important nursery grounds for both bass and sole on this coast. Following these findings it is inconceivable that DECC could have reached the conclusion that the Site passes this criterion.
12. At paragraph 5.11.27 of the draft NPS for nuclear power DECC states that part of the Site is contained within Flood Zone 2 and 3 and is subject to medium and high probabilities of flooding. DECC then contradicts its own analysis by surmising at paragraph 5.11.33 of its assessment that the Site passes the criterion as there is a low risk of flooding. Although RWE contend that land falling under Flood Zone 3 would primarily be avoided, as Flood Zone 3 forms part of the development site there is no guarantee it would not be developed on. If RWE require space for cooling towers it is highly likely that it will need to utilise the whole of the Site. Despite the requirement under D1 of the SSA criteria RWE have provided no evidence of how this would be mitigated to ensure the Site is located in the lowest flood risk zone possible. Furthermore the Appraisal of Sustainability referred to at paragraph 5.11.28 of the draft NPS for nuclear power has only found that mitigation may be possible, which indicates no definitive conclusions have been reached. For a development of this type, we believe that it is essential that such a facility is located on land where there is little or no risk of flooding. It is also important to note that the existing wind turbines and any additional turbines erected on the Site would be compatible with the level of flood risk identified.

13. Our client was not consulted by DECC regarding the finalisation of the SSA criteria and was dismayed when we informed it that the invitations to the consultation meetings held around the country were restricted to those who had been made aware of the consultation and registered their interest. It is inequitable that our client was not consulted on the criteria that will determine whether the proposed site reaches the list of sites on the draft National Policy Statement. The narrowing of the criteria without proper consultation has clearly resulted in the wind energy industry’s objectives being excluded, effectively by default. If our client had been consulted it would have raised its concerns that the criteria fail to contemplate the need to protect areas such as this, which already have existing sustainable energy projects on them. It is apparent that this eventuality has not been considered by DECC and it follows that this is a further ground to reject this Site. We have previously with DECC and this concern has been provided with an explanation of how the SSA criteria consultation was carried out, however we have not received a response as to why the criteria fail to consider existing sustainable energy projects.

NOTIFICATION OF THE SITE NOMINATION

14. By virtue of Section A4 of the nomination criteria set out at Annex C of the Government response to consultations on the SSA process and siting criteria for the new nuclear power stations in the UK, RWE were obligated to notify those with interests in the land proposed for the Site of their intention to nominate. Our client did not receive such notification. The guidance to section A4 of Annex C clearly states that if the steps taken to raise awareness are insufficient it may not be possible for a particular nomination to be considered further.

15. We note that in response to Question A4 regarding raising awareness of the proposal with owner(s) of the proposed site that RWE refer to a supplemental statement. This statement refers to a template letter sent to landowners on 23 March 2009. After numerous letters to DECC requesting a copy of the correspondence apparently sent to our client, DECC stated that it was satisfied that RWE had met the precondition for raising awareness and sent a copy of the letter from RWE dated 26 March 2009 which it believed satisfied Section A4 of the nomination criteria (please see attached). Upon reviewing the letter it is clear that it was not sent to our client, but sent in error to Wind Prospect Group Ltd. Our client has never been part of the Wind Prospect Group Ltd and this is apparent from the most cursory consideration of the Wind Prospect Group Ltd and Windcluster websites. It is standard practice when identifying landowners to conduct a search of the land at the Land Registry. Had this been done RWE would have obtained the attached office copy entries which clearly show that the leasehold interest in the Site is registered to Haverigg III Limited, which is a wholly owned subsidiary of Windcluster 2000 Limited. In addition a simple search of the Companies House free web check service which provides the correct name and registered office for all companies registered in England and Wales would have provided RWE with the necessary information to notify our client of the nomination. RWE would simply have needed to type in the name or company number provided on the office copy entries and it would have been provided with the up to date registered office of Haverigg III Limited which is the same as for Windcluster 2000 Limited. Alternatively if RWE had typed the word Windcluster into the free web check service it would have been provided with the correct name for our client, Windcluster 2000 Limited. The reference made to our client in the letter dated 26 March 2009 is incorrect as there is no such company as Wind Cluster Ltd.

16. The letter dated 26 March 2009 which was sent to the Wind Prospect Group Ltd is not the same as the template letter which RWE exhibited in its supplemental statement. The template letter (also attached) refers to discussions between RWE’s agent and the recipient of the letter; whereas the letter dated 26 March 2009 does not refer to any discussions. If RWE had entered into discussions it would have immediately become apparent that our client is not part of the Wind Prospect Group Ltd and this would have enabled RWE to engage with the correct party. Our client has reiterated to DECC on numerous occasions that it has not received a copy of the letter; if it had been provided with a copy of the letter dated 26 March 2009 when it was first requested in May 2009 our client would have been in a position to prove the breach of Section A4 of the SSA and would not have incurred undue expense engaging further in this process. As stated previously our client is a small business and it is inequitable to expect it to incur the continued costs associated with trying to protect its wind turbine enterprise on the Site when the nomination criteria have not been complied with.
17. Wind farm development is not the same as other types of development which necessitate employees on site. As such, other activities undertaken by RWE would not have raised any level of awareness with our client that the proposal was being made. As a company which undertakes its own wind farm development, RWE would have been well aware of this. Our response to the public comment window on 13 May 2009 and subsequent correspondence clearly highlighted to DECC that RWE had not notified our client of the nomination or established any contact. The breach of the SSA criteria highlights that DECC had no power to include the Site in the draft NPS for nuclear power.

18. We note from DECC’s email to our client dated 8 February 2010 that it acknowledges that RWE’s letter dated 26 March 2009 was not sent to the correct address and it will be following this up. We expect to be informed of the outcome of this investigation without delay. We are dismayed that it has taken DECC since 13 May 2009, when we first informed it that our client did not receive the nomination letter, to investigate this matter. If it had been investigated sooner DECC would have realised it had no remit under the SSA criteria to publish the Site in the draft NPS for nuclear power.

INTERNAL REVIEW

19. Our client requested an Internal Review under Regulation 11(2) of the Environmental Information Regulations 2004 (“EIR”) on 29 October 2009 in relation to DECC’s decision dated 4 September 2009 not to disclose information to our client in relation to the nomination of the Site. In response to this request DECC admit that although it has considered the points raised by our client in the letter dated 13 May 2009 as part of the public comment window, it does not hold information setting out its views specifically in relation to the letter. DECC confirms that the draft NPS for nuclear power only includes its views on some of the issues raised by our client in its letter dated 13 May 2009, which indicates that DECC have failed to formally address our client’s objections. The feedback which is available within the draft NPS for nuclear power is therefore deficient and unsubstantiated. (See paragraphs 1–13 above).

20. DECC state within the response to the request for an Internal Review that it contacted our client direct to offer it the opportunity to discuss DECC’s assessment of the Site under the draft NPS for nuclear power and any concerns that it may have in relation to the assessment. To date our client has not received any direct contact from DECC in this regard, despite assertions to the contrary.

EXCESSIVE LAND AREA

21. The Government’s targets for nuclear energy can be accommodated more than adequately through the other more appropriate nominations which are largely pre-existing nuclear sites. The draft NPS overreaching national policy statement for energy states at page 13 that the Government’s target for energy by 2025 is 25 GW of which the majority is expected to be provided by nuclear power. To reach this target the land required would be 675 Ha. This is calculated using the international average land required for a medium sized nuclear power plant of 27Ha/GW and multiplying it by the Government target of 25 GW (see attached spreadsheet.) The total size of all the nominated sites is 1,708 Ha, which far exceeds the total land required by the Government to meet its target. It is inconceivable that DECC should allow the Site to reach the final NPS for nuclear power, when the total land nominated for all of the sites is vastly in excess of the land take required, particularly in light of the existing sustainable energy on Site. DECC needs to look to its pre-existing nuclear sites, such as the Bradwell and Sellfield sites which in combination have almost the required total of land to meet Government targets.

COMPATIBILITY WITH HAVERIGG PRISON

22. RWE have failed to take into account that the Site is located in close proximity to Haverigg Prison which has a capacity of 644 inmates. Following a safety incident at the proposed nuclear power station it is implausible that 644 inmates could be evacuated by the prison staff at speed and transported away from the Site to safety. As highlighted at page 34 of the transcript from the public consultation in Kirksanton, it took 12 hours to safely evacuate the prison inmates when the occupancy was only a fraction of the current number. As the positioning of the nuclear power station would place the prison in a critical incident zone and there are no prospects of evacuating the prison quickly HM Prison Service would have no choice but to close the prison due to the serious health and safety implications to the prisoners and staff which will ensue from situating a nuclear power station at the Site.

23. A report published on 8 December 2009 by the Committee for the Prevention of Torture indicates at paragraph B1 (a) that 87 of 142 prisons in England and Wales are above normal occupancy levels. This shows that the HM Prison Service will struggle to relocate these prisoners without further impacting on the already crowded state of the prisons in England in Wales. In addition a further consequence of closure of the prison will be the loss of an established major employer in the area. Although it is conceded that the nuclear power plant will balance out the loss of jobs in the area by the creation of new jobs, the majority of these will only be available during the construction period and the nature of the skills of the local demography will mean that they will not have the requisite knowledge and ability to take on the roles offered by the nuclear power plant. This will mean inevitably skilled workers commuting to the proposed nuclear power station making these jobs less sustainable in environmental terms than those suitable for people in the immediate locality.
**Haverigg Prison Wind Turbine Proposals**

24. Following our letter to DECC dated 28 September 2009 explaining that Haverigg Prison has launched a new initiative in conjunction with Partnership for Renewables to use a plot of land to the south of the Haverigg Prison and adjacent to the Site to position seven wind turbines, DECC confirmed it had subsequently written to Haverigg Prison to make it aware of the consultation on the draft NPS for nuclear power. The draft NPS for nuclear power fails to take into account that if the proposal for the nuclear power station is successful the new initiative for wind turbines adjacent to the proposed nuclear power station will no longer be viable and there will also be insufficient wind available for a viable operation.

25. The Select Committee should be aware that two government bodies are running and putting resources into initiatives which entirely contradict each other. It is clear that HM Prison Service’s initiative is aimed at complementing our client’s wind turbine site and contributing to the government’s renewable energy targets. It appears that not only has our client’s contribution to renewable energy targets not been taken into account but also the future contributions which would be gained from Haverigg Prison’s new initiative.

**Tourist Industry**

26. The erection of a nuclear power station on the Site will have serious implications for the tourist industry in proximity to the Site. The British Holiday and Home Parks Association indicated at the public consultation in Kirkosanton that for the nine month period, commencing the week prior to Easter there are 2,000 people per week occupying the caravan sites and cottages in the locality. This trade is likely to cease if a nuclear power plant is erected on the Site and as a consequence jobs which are dependant on this industry will be lost. The inclusion of this Site in the final NPS for nuclear power will be adverse to Planning Policy Guidance Note 21 Tourism (PPG21) which acknowledges the major contribution which tourism makes to the economy and to the prosperity of many areas and asserts that the Government is committed to encouraging tourism in Britain. It also emphasises that only development which contributes to the quality of the environment rather than detracting from it should be supported. Contrary to PPG21 the presence of a nuclear power station 300 metres from the Lake District National Park will neither encourage tourism to the area nor contribute to the environment.

**State Aid**

27. At page 9 of the transcript from the Kirkosanton public consultation Mark Higson (CEO OND) states that RWE would need to have insurance in place to protect against the release of radiation from the nuclear power plant. However Mark concedes that RWE’s insurance liability would be capped so in the event of a very large release of radioactivity the Government would have to bear the additional costs. As this is public sector money and derives from state resources it is subject to European Union legislation regulating the payment of state aid by Member States.

28. State aid law assumes, as a starting position, that it is inappropriate for public monies to be used to support a commercial venture where that funding favours one business over another. For this reason, public sector funding may not be made available to the recipient unless it is cleared by the European Commission (“Commission”). Illegal state aid is recoverable, with interest, from the recipient.

29. The Government will therefore need to seek clearance from the Commission; the relevant legislation requires that the state aid is notified to its dedicated State Aid registry, whose officials will review its potential effect on competition. The Commission will refuse to give clearance for the public funding where it finds that it distorts or threatens to distort competition. The funding would distort competition as other energy ventures are receiving no such incentives. By way of example our client must bear the cost of full insurance for its wind turbine operation. Please let us know if the Government has sought such clearance as it should be borne in mind that a decision from the Commission as to whether to give clearance can take over 18 months.

30. In our view, the proper procedure in this case would have been for DECC to notify the proposed state aid to the Commission and to obtain confirmation that it is legal before starting the consultation on the draft NPS for nuclear power. It is unreasonable for the DECC to suggest that the proposed nuclear power plant will come to fruition within a specific timeframe when it has not even ascertained whether the proposed funding to cover the nominator’s liability beyond the capped amount is legal.

**Full Costs of Infrastructure Improvements**

31. The Site does not have the transport links required for such a large scale development and would not be able to accommodate the traffic generated by over 5,000 employees reaching the Site on a daily basis during the construction period or the traffic generated by the emergency evacuation of the Site and Haverigg prison. This is a rural area with a small network of roads and by way of illustration the size of the turbines our client was able to erect on the Site was limited by the width of the road network. It follows that it will not be possible to bring the necessary materials to the Site for construction of the nuclear power station without major works to the current transport network first. This will cause delays to DECC’s timetable for generating nuclear power and is a further reason why the Site is unviable. DECC have failed to address this with RWE to date and no proposal has been put forward by RWE for improving transport links or to show it has the necessary funds.
CAPACITY TO CONNECT ALL THREE SITES IN CUMBRIA TO THE NATIONAL GRID

32. Although it has been asserted by the nominators that there are agreements in place for the necessary grid connections for the three individual sites in Cumbria, DECC have not explained in the draft NPS for nuclear power whether all three sites are capable of being connected to the grid at the same time or whether the grid connections are mutually exclusive. It seems highly unlikely that all three sites in Cumbria could be connected at the same time without putting enormous strain on the grid and it is uncertain whether this is even feasible. DECC should bear this point in mind before designating sites to the final NPS for nuclear power. In any event it is disproportionate that Cumbria should bear the burden of three nuclear power plants when the majority of the energy will be exported to other areas of the country where demand is high.

PLANNING BLIGHT

33. Pursuant to s175(2) Planning Act 2008 which amends the TCPA 1990 by inserting paragraph 25 into Schedule 13, the Site and surrounding land will be classified as blighted if the land appears in the NPS for nuclear power as suitable (or potentially suitable) for nuclear power. In accordance with s169 (6) TCPA 1990 as inserted by s165A (6) Planning Act 2008 unless a statutory undertaker is named in the NPS for carrying out the development, (which Adam Dawson found unlikely at the Kirksanton public consultation (page 13 of the transcript)) the Secretary of State will be deemed as the appropriate authority for the purpose of serving blight notices requesting the purchase of the blighted land. DECC should be looking to sites which are already owned in order to save the Government yet further costs associated with blighted land.

COMPULSORY PURCHASE

34. If the Site successfully makes it to the final NPS for nuclear power, RWE will need to seek authority to compulsorily purchase the Site at the same time as its application to the IPC for development consent. DECC have failed to address this point in the draft NPS for nuclear power. Our client has no desire to accept monetary compensation as part of a commercial arrangement with RWE as it has invested time and resources into this sustainable energy project and secured over 40 investors in the process. This is a project our client believes strongly in and as a consequence our client will object to the compulsory purchase of the Site. Instead of wasting resources on a highly contentious Site such as this, DECC should be selecting the sites which do not have added problems of compulsory purchase and existing sustainable energy projects.

CONTACT WITH RWE

35. RWE made no attempt to disclose its presence at the Kirksanton public consultation meeting. Our client vocalised its arguments at the meeting, but the representatives from RWE did not attempt to engage with our client afterwards. Our client managed to find out who the representatives from RWE were and spoke with Alison Chappell, Head of UK Nuclear Development for RWE who admitted that RWE’s notification to our client in respect the nomination was not “ideal” (see paragraph 14 above). Despite this conversation, neither Alison nor any other members of RWE have made any attempt to contact our client to enter into discussions.

CONCLUSION

By way of summary DECC have failed to take into account our client’s objections to date, the existing sustainable energy arguments, the breaches of the SSA criteria, RWE’s failure to notify our client of the nomination in contravention of Section A4 of the SSA criteria, the lack of infrastructure in the area, closure of Haverigg Prison, Compulsory Purchase, Planning Blight issues, lack of National Grid capacity, the availability of adequate areas of land for nuclear power provided for in other nominations, state aid and Haverigg Prison’s new initiative to position seven wind turbines adjacent to the Site.

The process to date has not been handled in a way to minimise costs to interested parties/objectors and it seems that the process is weighted highly in favour of the nominators which have substantial resources at their command, not taking into account that objectors such as our client will need to protect its position and may only have limited resources. We look forward to receiving a full explanation of how DECC has allowed this Site to be published in the draft NPS for nuclear power despite the issues raised above. In addition we require assurance that the objections which have been ignored to date will be fully addressed in the instant consultation as they clearly show that the Site is unsuitable for inclusion in the final NPS for nuclear power.

TLT LLP

Memorandum submitted by WWF

EXECUTIVE SUMMARY

1.1 WWF welcomes the opportunity to submit evidence to the Energy & Climate Change Select Committee on the draft National Policy Statements on Energy Infrastructure currently being consulted on by the Department for Energy & Climate Change (DECC). WWF believes in a future where people and nature thrive. Best known as the world’s leading conservation body, we have seen first-hand how wildlife, the environment and human activity are all interlinked.
1.2 WWF regards climate change as one of the most serious threats facing the planet and human development, and one which demands urgent global and national action. We believe that a major and urgent switch from polluting fossil fuels to renewable energy sources in the UK is essential to mitigate the impacts of climate change. Our absolute priorities must be a strong drive for energy efficiency, demand reduction and sustainable, low-impact renewable energy technologies. We strongly support the government’s commitments to reduce the UK’s greenhouse gas emissions by 80% by 2050 and to deliver the UK’s fair share of the EU renewable energy target for 2020, but in doing so it must respect wider concerns over environmental sustainability.

1.3 When National Policy Statements (NPSs) were first proposed in the Planning White Paper\(^\text{320}\), WWF saw them as an opportunity to develop clear national policy that would benefit the proper planning of the UK’s infrastructure needs. However, the draft energy NPSs are highly deficient as planning documents that are to properly guide decisions of the Infrastructure Planning Commission (IPC). Our particular concerns are:

(a) the NPSs are not fit for purpose planning documents. They lack spatial elements (with the exception of the Nuclear NPS), they are not integrated with each other or with the existing planning system, the content provisions within the Planning Act 2008 are not properly addressed, they may unlawfully fetter the discretion of the IPC in making decisions, and they do not have as a central objective the achievement of sustainable development;

(b) the Appraisals of Sustainability, incorporating Strategic Environmental Assessment, have been carried out in a very poor manner and do not comply with the requirements of the SEA Directive\(^\text{321}\). In particular, the narrow focus of the objectives of the NPSs are such that they preclude the proper framing and assessment of all reasonable alternatives and the AoSs, therefore, fail to positively influence the development of the NPSs;

(c) the Habitats Regulation Assessment carried out is also flawed and inadequate. It fails to properly apply the tests of the Habitats Directive\(^\text{322}\) and may detrimentally impact on the proper consideration of these tests at the project level;

(d) the public consultation and parliamentary scrutiny processes are not sufficiently robust and proportionate given the significance of the NPSs. There has been no early and effective engagement of key stakeholders and the public generally, which may lead to unnecessary delays and the potential for legal challenge;

(e) there is no remit for the carbon and climate change impacts of proposals to be considered by the IPC, and it is specifically directed not to consider carbon budgets or the benefits of one technology over another. This places undue faith in policy interventions and market practice to deliver a low carbon economy;

(f) the NPSs set out an unlimited, urgent need for all types of energy infrastructure, yet there is no attempt to guide how much and what type of infrastructure is needed or where it should go. This statement of unlimited need effectively gives unjustified, overwhelming weight to fulfilling this need, whilst significantly diminishing the importance and weight of local social, economic and environmental impacts; and

(g) there is significant uncertainty about how the NPSs will relate to existing Welsh planning policy, particularly TAN 8, and what status such policies will have in IPC decisions. This raises concerns as to whether positive planning policies for renewable energy in Wales will be made redundant.

1.4 Given the above concerns, WWF does not consider that the NPSs are fit for purpose to provide a satisfactory and robust decision making framework for the IPC.

2. WWF and its Role in Planning Reform

2.1 WWF followed with interest the progression of the Planning Bill through parliament and engaged in the debate by submitting briefings and amendments on various aspects of the Bill, both individually and as part of the Better Planning Coalition\(^\text{323}\). Since the Planning Act 2008 received Royal Assent, WWF has been and wishes to remain a key stakeholder in finalising the processes to be adopted for the purpose of implementing the Act.

2.2 WWF believes that the planning system is integral to delivering required action for mitigation of and adaptation to climate change and that good planning is essential for achieving sustainable development and biodiversity conservation. Our aim is to ensure that implementation of the new planning system for

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\(^{323}\) The Better Planning Coalition was established in 2007 and comprised 17 of the UK’s main environmental, conservation and civic organisations who came together out of a deep concern over many of the recommendations of the Barker Review of Land Use Planning. For more information on the work of the Coalition see: http://www.wcl.org.uk/betterplanning_home.asp
nationally significant infrastructure projects (NSIPs) delivers a framework for furthering sustainable development while facilitating positive planning for full decarbonisation of the UK energy sector by 2030. We believe there should be an integrated approach between marine and terrestrial planning which protects biodiversity and the environment while supporting the Government’s commitments to lead a shift towards a green, low carbon economy.

3. EVIDENCE

The Nature of NPSs as Planning Documents

3.1 Both the Barker Review324 and the Planning White Paper stated that a fault of the existing planning system is that there is no clear national policy framework for the development of major infrastructure. In the past, this has caused uncertainty and delays in decision-making whilst the national policy and the need for the development are clarified at the public inquiry stage. It was therefore proposed that a central element of the planning reforms under the Planning Act was for the case for NSIPs to be set out in National Policy Statements. It was government’s intention that NPSs would “set the policy framework for the infrastructure planning commission’s decisions and identify any special considerations which the commission should take into account”325.

3.2 As part of the Better Planning Coalition, WWF supported in principle the introduction of NPSs and were of the view that clear national policy would benefit the proper planning of the UK’s infrastructure needs. Many organisations saw this reform proposal as an opportunity to develop a national spatial strategy, to create a proper strategic framework for decision-making on individual projects which fully incorporated environmental considerations. In particular, NPSs could be used to ensure a successful transition to a decarbonised UK energy sector by 2030. However, we have been disappointed with the draft NPSs produced, as they fall far short of developing and describing a national vision for sustainable infrastructure development within the UK or a positive and proactive framework for delivery of low carbon and clean energy infrastructure.

3.3 As the system of NPSs do not fit easily within the context of existing planning policies and practice, it has been difficult to predict the level of information that would or should be included. The Planning Act326 sets out a number of requirements for the development and content of NPSs which are useful to consider. Even though a number of content requirements are not mandatory, they are indicative of what NPSs are intended to include. WWF would argue that a number of the provisions have not been met by the draft NPSs and this therefore diminishes their ability to adequately set the policy framework for IPC decisions. For example:

(a) they do not set out the amount, type or size of development which is appropriate nationally or for a specified area. Rather, the government states that it will be left to the market to determine the projects that are brought forward127. There are no references to appropriate numbers of projects, sizes or types for particular areas, or even what local considerations may give rise to limitations on the amount, size or type of development. In some cases, the IPC is even asked to permit developments without certainty of design details329 and is advised that technology type is not a relevant consideration330;

(b) whilst attempting to outlining some “factors influencing site selection”, it is arguable whether the NPSs provide any useful criteria to be applied in deciding whether a location is suitable for development. The factors mentioned largely include matters which may affect the technical or financial feasibility of projects, such as grid connection, transport links and access, interest in the land. Other planning considerations that are not included, but may be relevant to determining suitable locations are missing—for example: proximity to human populations, designated sites, other infrastructure development and other required resources; previous land uses and zonings by other planning authorities; existing known development restrictions or controls; availability of the resource relied on (eg wind); suitability of the land type for development (eg whether the particular soil type or substrate is suitable for particular infrastructure types); archaeological interests;

(c) whilst the NPSs set out many matters which the IPC should not consider relevant or important, they do not set out the relevant weight to be given to specified criteria that the IPC is to consider. In fact, there are many examples of where it is not clear how the IPC is meant to consider and apply certain provisions of the NPSs because the provisions of the NPS appear to be merely a restatement of existing policy or fact130;

325 Planning White Paper, pg 43 para 3.4.
326 Section 5
328 For example see Draft National Policy Statement for Renewable Energy Infrastructure (EN-3), paras 2.5.28–29 on biomass, pages 25 and 26 on offshore wind, 58 and 59 on onshore wind. In contrast, we note that the Draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2) prescribes the use of grampion conditions used in local planning permissions to require details and evidence to be submitted to the IPC before construction can commence. WWF suggests that similar requirements could be imposed in respect of the uncertain details surrounding wind farm developments.
329 For example, see EN-1 para 3.3.11, para 4.18.12; EN-3 pages 22–24 and 56–57 on factors influencing site selection and design, Draft National Policy Statement for Electricity Networks Infrastructure (EN-5) paras 2.2.5 and 2.2.6
(d) apart from the Nuclear NPS, none of the NPSs identify one or more locations as suitable for infrastructure development;

(e) there is limited if any criteria specified for the design of development. For example, the Fossil Fuels NPS sets out the policy requirements for new coal-fired power stations and that the IPC is not to consent a project that fails to meet these requirements. However, there are no criteria specified for the design of power plants in order that they should meet these requirements. In a local development situation, one would expect to see detailed criteria on the design of acceptable development dealing with height, dimensions and siting of buildings and other infrastructure on the site, materials to be used, façade detail, considerations for minimising visual and environmental impact, density limitations, etc;

(f) there is not always clearly identified reasons for all the policies set out within the NPSs. Much of the time, the reader is required to decipher the reasons from the overall context of the document;

(g) whilst the government’s policies on climate change mitigation and adaptation are mentioned and summarised within the NPSs, there is a failure to explain and connect how the policies within the NPSs take account of and contribute to the achievement of such climate change policy, or even the necessary cut in carbon emissions set out in the Climate Change Act 2008. In this way, it is difficult to link the provisions related to government policy and need in the Overarching Energy NPS (EN-1) with the more detailed criteria provided within the technology specific NPSs.

3.4 It is important to remember that the IPC is a planning authority when considering the NPSs and how they will assist the IPC in making decisions. The critical role of planning in delivering climate change and sustainable development objectives, as well as the increased public interest and involvement in the planning process, means that there is an ever pressing need to ensure transparency and accountability in decision-making. Like other planning authorities, the IPC will have a difficult balance to strike between approving proposals that will help to drive forward change, whilst at the same time being sensitive to public opinion and maintaining the highest standards of probity and good administration. There will be a heightened need to demonstrate that any decision reached has been properly arrived at and is legally right—that the decision is arrived at after taking into account all relevant considerations, ignoring irrelevant considerations and is not unreasonable or tainted by bias or pre-determination. For these reasons, it is essential that the NPS (as the primary document for consideration by the IPC) sets the appropriate backdrop with the appropriate level of detail for allowing the IPC to make legally right decisions.

3.5 The Planning Act provides fairly broad discretionary powers to the IPC in making decisions on NSIPs, as is generally the case with planning authorities given the need to assess each application on its planning merits. In making a decision, the IPC is to have regard to any applicable NPS, any local impact report, any prescribed matters relating to the development, the appropriate marine policy documents331, and any other matter which the IPC thinks is important and relevant to the decision332. What is “important and relevant” has not been defined in either the Planning Act or secondary legislation and guidance.

3.6 It is worth noting that the well known term “material considerations” used in local planning decisions has not been used here. What is a material consideration has been well defined over time, both in legislation, planning documents and the considerable case law on the subject. Whilst planning authorities are not allowed to make decisions on grounds not accepted in law as material considerations, which particular considerations are material will vary from planning application to planning application and what is accepted as being material has expanded significantly over time. Despite the legal limitations, it is essentially at the discretion of the planning authority deciding the application to decide what is material to the decision and, therefore, must be taken into account.

3.7 In contrast, what is “relevant” to a decision is not so easy to define and is ultimately left to the consideration and discretion of the decision maker, subject to the right to judicially review a decision on the grounds that a determination as to what is relevant is flawed. There are many examples within the NPSs where the government clearly seeks to advise the IPC what is not relevant and important to consider333. In some cases, WWF would argue that the matter to be excluded from consideration may actually be relevant and important in a planning sense. This is particularly so in respect of the carbon impact and the technical and financial viability of developments. We question whether this is lawful. In effect, this approach by government may actually fetter the discretion of the IPC and therefore limit its decision-making powers. Our concern is that this could result in the IPC failing to take into account all relevant considerations, being guided by government bias or lobbying pressure as to the type of infrastructure that should be built and thus rendering its decisions unlawful. We query whether these limitations would be applied to decisions made by the Secretary of State.

3.8 It is arguable whether the NPSs are fit for purpose planning documents—WWF would say that they are not. It is clear that the NPSs are not spatial plans or policies. They are merely restatements of existing government energy policy seeking to establish an unbridled need for energy infrastructure coupled with information on impacts to be considered in examining applications. They do not include any vision or sense

331 An amendment introduced by the Marine and Coastal Access Act 2009, Section 58(5)
333 For example, see EN-1 paras 2.1.1, 2.1.5, 3.1 (conclusions on need), EN-3 paras 2.5.11, 2.5.13, 2.5.17, 2.5.23, 2.5.41, 2.5.42, 2.6.30, 2.6.32, 2.7.10.
of place, no indication of where national infrastructure should be or can be suitably located (apart from nuclear), no aspirational policies to achieve decarbonisation of the energy sector whilst protecting the environment, and they fail to adequately address two essential elements of spatial planning—(a) the management of the competing uses for space; and (b) the making of places that are valued and have identity.

3.9 Furthermore, because the NPSs are not spatial, they are not integrated even though they have been presented as a package. There is no sense in which the published NPSs fit together to form part of a single strategic national infrastructure plan, but rather each NPS is presented as a separate plan or programme for the particular infrastructure type. Whilst the overarching energy NPS is intended to be read with each of the technology specific energy NPSs, there is a distinct lack of connectivity between each of the technology specific NPSs.

3.10. WWF is also concerned about the interaction of NPSs and the planning regime for national infrastructure with local infrastructure development. We advocate for increased development of community renewable energy schemes where possible. In our view, not only do such schemes contribute to meeting targets for renewable energy, but they also increase local knowledge and awareness of the benefits of renewable energy and improve acceptance of new clean energy projects through community funded projects (which may provide profits for the community). We are concerned that the implementation of the planning reforms under the Planning Act may lead to a further and repeated centralisation of energy infrastructure, where energy infrastructure projects are deliberately built bigger to be above the threshold of the Act so that advantage can be taken of the benefits of a faster system leading to smaller, community based schemes being seen as unnecessary, despite the UK having goals for much more embedded generation, distributed energy and district heating with CHP. This is not helped by the statements made within EN-1 that the Government does not consider that decentralised and community energy schemes are likely to lead to significant replacement of larger-scale infrastructure and, therefore, their effect on the need for new large scale infrastructure will be limited. Our concern is that this could adversely impact on the economic development and sustainability of communities, as well as on the positive involvement of communities in renewable energy provision. In our view, there must be improved links between national, regional and local energy infrastructure development to enable development at all levels.

Environmental Assessment

3.11 In drafting the NPSs, the government has undertaken Appraisals of Sustainability (AoS), incorporating Strategic Environmental Assessment (SEA), and a Habitats Regulation Assessment (HRA). It is WWF’s view that the environmental assessments undertaken are fundamentally flawed and fail to comply with the necessary legal requirements. In fact, it could be argued that the way in which the assessments have been carried out is nothing less than a case study on how to circumvent the spirit of the Directive, incorporating Strategic Environmental Assessment (SEA), and a Habitats Regulation Assessment (HRA). It is WWF’s view that the environmental assessments undertaken are fundamentally flawed and fail to comply with the necessary legal requirements. In fact, it could be argued that the way in which the assessments have been carried out is nothing less than a case study on how to circumvent the spirit of the Directive.

3.12 WWF and RSPB jointly commissioned Collingwood Environmental Planning to undertake a review of the AoSs for the NPSs. Attached at Annex A is a table summarising the key outcomes of the review in respect of each NPS. The consultants concluded that the quality of the assessments was variable, but often poor and in some cases had critical failings. The most problematic areas arose from the overall approach adopted and the context in which the AoSs were used. The way in which sustainability was conceived within the AoSs, as “weak sustainability“, and the assumption that low carbon equates to sustainability meant that a satisfactory assessment of the environmental impacts of the NPSs was not achieved.

3.13 The way in which NPS objectives and the AoS assessment framework were defined was variable and inconsistent. The NPS objectives are narrow and lack focus, they also fail to have as a central objective the achievement of sustainable development. As a result, significant constraints are placed on the nature of what might be considered a reasonable alternative. Whilst the consultants undertaking the AoSs raised a number of alternatives for consideration, these were dismissed by DECC as unreasonable and were, therefore, not considered within the appraisal. In this way, the framing and consideration of alternatives was flawed and it is questionable whether those actually considered were reasonable. This resulted in lost opportunities to engage in a real debate and further specify existing policy as well as avoid environmental impacts through the appropriate selection of the most environmentally favourable options. The proper consideration of alternatives is crucial because this allows for refinement of a plan/programme to avoid adverse environmental impacts. The consultants commented that “[t]he alternatives considered are often those considered reasonable for Government rather than reasonable from the point of view of being possible and plausible alternatives to the objectives of the plan in question, as required by the Directive.”

334 Draft Overarching National Policy Statement for Energy (EN-1), pg 20, para 3.3.18.
335 Draft Overarching National Policy Statement for Energy (EN-1), pg 21, para 3.3.23.
3.14 In many cases, the appraisals were not actually assessing the impact of the NPSs on the environment, but rather the impact of the NPS on the consenting process—which is not the same. The real physical effects of the consequences of NPSs, their ability to speed up the planning process and result in greater impacts that occur sooner, were not assessed. In this way, it can be said that the quality of the assessment was insufficient to meet the requirements of the SEA Directive. Further, there was an over-reliance on mitigation which leads to a missed opportunity of seeking to avoid impacts by assuming that mitigation measures will work and failing to undertake a proper assessment.

3.15 It is difficult to ascertain the extent to which the appraisal process has actually influenced the development of the NPSs in an effective manner. Only if real alternatives had been considered, such as different technology mixes, might the process have been able to influence the direction of the NPSs. An assessment of all energy technology mixes could have been done and would have been highly beneficial to help provide a useful policy framework, but the AoSs show either a poorly conceived approach by the Government or an actual intention to circumvent the purpose of the SEA Directive. The application of SEA appears disingenuous because there appears to be little real intention to allow the assessments to influence the planning process.

Habits Regulation Assessment

3.16 In WWF’s view, the HRA is completely inadequate and it is questionable whether it adds any value to the NPS process at all. Government has stated that this has been done at a strategic level because of the inability to identify particular designated sites that may be impacted, and therefore the impacts that may arise as a result of development, yet this should not be used as an excuse for a sweeping assessment that fails to properly address any of the tests of the Habitats Directive.

3.17 Whilst the HRA correctly outlines the background to the Habitats Directive, the relevant stages of assessment and screening and the law and policy surrounding the treatment of European sites, the assessment itself wholly departs from these principles. The need to exhibit a precautionary approach on a case-by-case basis to the consideration of proposals aecting European sites is replaced by a blanket assumption that all proposals will proceed on the basis that there is a “need for new nationally significant energy infrastructure”338. As a result, there is inadequate assessment of alternative solutions and an assumption that such projects will automatically satisfy the test of Imperative Reasons of Overriding Public Interest (IROPI). This is a deeply worrying assumption to give to the IPC which has no basis in the text of the Habitats Directive, European guidance or the case-law of the European Court of Justice.

3.18 WWF is concerned to note that paragraph 7.2 of the HRA appears to fundamentally misrepresent the provisions of Article 6(4) of the Habitats Directive. It is the feature(s) of interest on a European site that determines which limb of Article 6(4) applies, not the nature of the plan or project in question. Furthermore, the extent to which a plan or project meets either the IROPI test or “beneficial consequences of primary importance for the environment” will vary on a case by case basis depending on the nature of the site and the type, location and scale of the proposed plan or project. To assert that such proposals will automatically satisfy the test in either limb, and thus never require an opinion from the Commission, is potentially unlawful and deeply troubling. WWF would ask the Government to correct this misunderstanding in the HRA as a matter of some urgency.

3.19 WWF is also concerned to note that the environmental assessments focus wholly on the provision of new sources of energy, with scant regard for the contribution that energy conservation or demand management can make to reducing the UK’s energy requirements. Given that measures targeted at curbing energy use could apply across the UK, it is entirely appropriate for them to be addressed at the strategic level within the NPSs (and thus the HRA and AoS/SEA) and, clearly, measures aimed at reducing energy consumption would be very beneficial for designated sites as they would reduce the pressure for damaging developments affecting them.

3.20 In addition, the NPSs themselves do not provide sufficient guidance to the IPC or applicants on how to properly consider the tests under the Habitats Directive for specific projects that negatively impact on Natura 2000 sites. Coupled with the flawed approach taken to considering the tests in the strategic HRA and the restrictive test for considering alternatives proposed by EN-1, there is a real risk that HRAs undertaken at the project level will not properly apply the tests to consider all alternative solutions and IROPI. WWF is concerned that, in the absence of proper guidance in the NPSs, project level HRAs may seek to rely on the strategic HRA as evidence that these tests have been met, rather than giving the required consideration to the precise details and objectives of the proposal in terms of assessing the specific impacts of a proposal on designated sites, framing and assessing alternatives and determining what IROPI would be in the particular case.

338 See para 4.10
Public Participation in Decision-Making

3.21 Whilst WWF acknowledge that there is not a legal requirement to consult in the early stages beyond the statutory consultees, we have been frustrated by the lack of positive and early engagement by DECC in the drafting of the NPSs and particularly the environmental assessments, despite numerous attempts to provide our expertise and assistance. Any information that was provided to us was very general (normally headings only), caveated by the fact that the NPS was in early stages of drafting and therefore subject to change, and we were completely cut off from the process of Appraisal of Sustainability/SEA and Habitats Regulation Assessment.

3.22 WWF has considerable concerns about how robust and influential the public consultation and parliamentary scrutiny processes will be. Whilst the consultation period is 15 weeks, it has been over the period of the Copenhagen summit, which fully engaged many energy and climate change specialists, and the Christmas and New Year break. Further, the timetable for parliamentary scrutiny has meant that those wishing for the Energy & Climate Change Committee to consider their responses have had a shorter period to consider the NPSs and prepare their submissions. We have also heard that the public events organised by DECC, albeit welcomed, have been poorly attended.

3.23 WWF is mindful that the UK is a contracting Party to the “Aarhus Convention”339. Having ratified the Convention in February 2005, the UK is expected to apply the provisions of Article 6 of the Convention to public participation in decisions on specific activities, which we believe covers consultation before designation of the NPSs. Article 6(2) requires the government to inform the public concerned, either by public notice or individually as appropriate, early in an environmental decision-making procedure, and in an adequate, timely and effective manner of a number of matters concerning a proposed environmental decision.

3.24 Given the importance and highly technical nature of the NPSs, we feel it is crucial that local communities and local authorities are engaged from an early stage and made aware of how the decision making processes and their involvement in them will be changed. However, it appears that the efforts of the government to allow for public engagement have been kept to a minimum, barely enough to meet the necessary legal requirements, and the processes used are lacking in creativity and effective measures for useful engagement. This is disappointing. We submit that such an approach is insufficient and that more needs to be done to ensure active, effective and extensive involvement of the public so that they can truly have a say about how their energy is to be supplied in the future.

3.25 In respect of the Appraisal of Sustainability/SEA process, WWF submits that it is highly unsatisfactory that the assessments were undertaken in complete isolation from any wider stakeholder or public participation—contrary to practices adopted for Offshore Energy and Severn Tidal Power. Undertaking SEA effectively so as to deliver the objectives of the SEA Directive requires time and resources invested early in the planning process and a receptive planning process to avoid unnecessary expenditure and delay later on. The more consultation and assessment is squeezed in the planning process, the more likely that recourse will be sought through judicial review and the less likely that the objectives of the SEA Directive will be achieved. One of the key ways in which SEA can benefit strategic decision-making is to provide a framework within which strategic participation of the public and stakeholders can occur. The inclusion of public participation can assist in better informing options at scoping stages and in the assessment of options, can provide opportunity for social and institutional learning by those undertaking the SEA and allow for the exchange of knowledge and information among stakeholders and participants340. Rather, the NPS asserts that existing policies are not relevant to IPC decisions. For example, EN-1 outlines the important policies for greenhouse gas emission reductions in the UK, but then advises the IPC that it does not need to assess individual applications for their carbon emissions against carbon budgets341. Rather, the NPS asserts that existing energy and climate change policy, such as the EU Emissions Trading Scheme (EU ETS) and Carbon Capture and Storage (CCS), is sufficient to ensure that the right technology and energy mix will come forward to achieve the transition to a low carbon economy so that the IPC does not need to consider the relative advantages of one technology over another. This is a false assumption, which places undue faith in unproven policies to deliver and may still lead to approval and construction of highly carbon intensive infrastructure.

339 The UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters
340 These comments are taken from the CEP Review of the AoS/SEA process for NPSs commissioned by RSPB and WWF.
341 See EN-1 page 8, para 2.1.5.
3.27 Whilst WWF agrees that the planning system cannot deliver all aspects of energy and climate change policy, we would argue that the government cannot pick and choose which parts of the policy will be relevant for the IPC. The planning system is an essential element in the delivery of low carbon infrastructure and what projects are consented by the IPC will undoubtedly have an impact on the ability of the UK to meet its targets for greenhouse gas emission reductions and renewable energy provision. We submit that it is a fundamentally flawed approach to advise the IPC to disregard aspects of government energy and climate change policy merely because it is not the delivery vehicle. If the IPC is to make decisions in order to achieve the core purposes of the NPSs and to contribute to the achievement of a low carbon energy sector, surely the carbon impacts and emissions of each and every development are likely to be an important and relevant factor for the IPC to consider.

3.28 In the absence of the Government accepting the Committee on Climate Change’s (CCC) recommendation of the need for the energy sector to be almost decarbonised by 2030, new electricity generating capacity will be consented in a vacuum with no clarity over the emissions trajectory required of the sector which would guide investment, and the decisions taken by the IPC. Under these circumstances and without the IPC being allowed to explicitly take carbon emissions into account it is hard to see how we have guarantees that energy generation will follow a low carbon trajectory.

3.29 EN-1 provides a reiteration of Government policy which relies on the EU ETS as the main mechanism to deliver emission reductions from the power sector. It has been clearly recognised by the CCC that the carbon prices need to be “buttressed” to prevent lock in to further high carbon infrastructure. Also, this reiteration of the EU ETS mantra further ignores the CCC recommendation for the need for the power sector to be close to decarbonised by 2030. Under the trajectory for the EU ETS emissions cap from 2013 onwards, a 1.74% annual reduction means that emissions will not reach zero until around 2070 (or in reality much later as access to significant levels of offset credits from outside the EU are not included in this projection). This is 40 years after the deadline for the power sector recommended by the CCC. Whilst this is more of a criticism of Government policy rather than the NPS per se, it provides an example of how government policy and the markets created by policy/decision-makers (eg the EU Emissions Trading Scheme’s carbon market) cannot be relied upon to ensure that only low carbon infrastructure projects are submitted for consent to the IPC. Reliance upon the EU ETS implies that what actually happens on the ground in terms of energy infrastructure does not affect carbon budgets (eg if we exceed our cap we will just buy allowances which means someone somewhere else will have to reduce their emissions)—regardless of whether it locks the UK into another 30–40 years of high carbon infrastructure. This is an incorrect and flawed approach.

3.30 WWF submits that the IPC must have a remit to consider the carbon impacts and carbon emissions from proposals submitted to it for consent. Not only is this a relevant consideration, it must be recognised that the planning system is an integral element for delivery of a low carbon energy sector. At the local and regional level it is becoming increasing common for planning authorities to take into account the sustainability of project proposals and how they may contribute to increasing climate change impacts. For this reason, it is wrong to exclude a carbon assessment of a project as part of the full and proper examination of the planning merits of an application.

Assessment of National Need

3.31 The question of need is not new in the planning system and lies at the heart of strategic planning. There are many examples of where need is considered within planning policy, such as for retail and business development, housing and development within the green belt. However, in each case there is a test applied to determine the need and this is backed by significant evidence establishing the need and how proposals will fulfil this need.

3.32 Case law has considered the question of need in planning and a recent case which is relevant to mention here is Vicarage Gate Ltd v Secretary of State for Communities and Local Government and Kensington & Chelsea RBC. Judge Gilbert QC commented:

"‘Demand’ is not a synonym for ‘need’, nor necessarily a proxy for it.... ‘Need’ is a term which can cause difficulty if not used carefully, and problems can and do occur when definitions are extracted from dictionaries and applied in a way which is inappropriate to a planning decision. The true position is that ‘need’ is properly used in the planning context to express a strong planning case being made for provision of some type of development. Thus for example, if a planning policy ... looks to meet an identified demand for a type of use or development, and does so in a way which expresses a strong planning case for its being met, then there will be a ‘need’ in planning terms to meet that demand."

3.33 WWF submits that the way in which the NPSs seek to establish need for energy infrastructure is not consistent with the test stated above nor appropriate in a planning context. In fact, we would argue that the need sections of the NPSs address aspirations for meeting projected demand and potential national benefits of secure energy supply rather than actual need and the planning case for it being met. As a result, what is
established is an unbridled need for all infrastructure types, at any point in time, and the IPC is advised that it is to start from the basis that need is established for all applications regardless of the facts and details of any particular application. This statement of significant need is then used throughout the NPSs to limit the consideration of alternatives and other relevant planning considerations and provide an overriding presumption in favour of development for all forms of energy infrastructure, even highly polluting ones.

3.34 In attempting to establish need, the NPSs rely on data which shows a projection of expected future demand energy. No provision is made in this data for reducing future demand below currently projected levels. This, therefore, indicates a “predict and provide” approach implying a lack of serious consideration of options for demand management. That this is the NPSs’ approach is confirmed by the brevity and content of the paragraphs on reducing demand. Clearly, there is a need for bulk generation and a need for new large energy infrastructure. However, the Planning Act suggests that the NPSs should quantify these needs. This cannot be achieved without a serious and quantified assessment of the potential of demand management and energy efficiency measures.

3.35 It is also elementary economics that demand cannot be assessed in isolation from price. Any quantification of future total demand for electricity should be based in part on projections of future energy prices, which in turn depend partly on expected future price impacts of national and international measures to reduce carbon emissions (eg emissions trading systems). Similarly, any Government strategy for future provision of electricity supply should be based partly on an assessment of the potential for using economic instruments (such as taxation and emissions trading systems) as a means of reducing demand below projected levels. The NPSs fail to make any such assessment, or even to consider the need for such an assessment.

3.36 WWF disputes that there is a significant, urgent need for the development of all types of energy infrastructure, despite the fact that there will be closures of existing plant. A report from energy consultants Pöyry in 2008 concluded that over the next 10–20 years, around 30% of our conventional, climate damaging electricity generation capacity is scheduled to close. However, if the UK meets its own 2020 targets of 20% energy savings and sourcing 15% of energy from renewable technologies, there will be no “energy gap” and no new unabated conventional power stations will need to be built before 2020, either as base load or for back up electricity. This analysis shows that, in contrast to the views of some parts of the government and industry, there is little or no need for large scale investment in new conventional baseload technology to “keep the lights on” in the UK up to 2020. Instead, the focus should be on delivering existing targets and commitments for renewable energy and reducing energy consumption.

3.37 EN-1 provides as part of the justification for establishing need that sufficient generating capacity needs to be available to meet demand at all times, with a safety margin or spare capacity to accommodate peak demand. Further, “the larger the difference between available capacity and demand, the more resilient the system is in dealing with unexpected events, and consequently the lower the risk of a supply interruption.”

However, a recent DECC consultation states:

“The approximate relationship between the capacity margin and expected energy unserved is shown in chart 1.18. What this highlights is that, while initially the expected energy unserved falls very rapidly as the margin of spare capacity increases, it later levels off. We therefore face diminishing returns in terms of increased security from increasing the capacity margin. This relationship between expected energy unserved and the capacity margin is key when looking at the benefits from increasing capacity or reducing (peak) demand. Relatively small changes to either can make a significant difference to a system that is not particularly secure—and conversely, for a system that is already quite secure, it may be very expensive to significantly increase the level of security. 1.10 However, we should not focus too closely on the capacity margin as a means of ensuring security of supply, as this relationship may not hold when the mix of generating technologies is significantly different from today. For example, simply de-rating renewables generation capacity may not capture all its complexity such as the way the output from different wind farms may be correlated.”

3.38 EN-1 advises that additional back up generation capacity will be required to cope with the higher levels of “intermittent and unpredictable wind.” A recent review of evidence completed for WWF and others by David Milborrow shows that concerns about the “intermittency” of wind power can now be put to rest. There is no technical reason why a significant amount of electricity generated by appropriately and sensitively sited wind farms cannot be used to supply the National Grid. David Milborrow found evidence, and a consensus of expert opinion, over many years that demonstrate:

(a) wind power can significantly reduce our climate damaging CO₂ emissions;

(b) wind power can significantly reduce our climate damaging CO₂ emissions;

(c) wind power can significantly reduce our climate damaging CO₂ emissions;

(d) wind power can significantly reduce our climate damaging CO₂ emissions;

345 EN-1 paras 3.3.16–19, pages 19 and 20.
347 EN-1, page 15, para 3.3.1
349 EN-1, page 17, para 3.3.9
(b) fluctuations in wind strength can be managed technically and at modest and declining cost;
(c) high proportions of wind power in our energy mix are feasible, and are already successfully integrated in other countries; and
(d) a range of technological developments already underway could allow for a steadily increasing use of wind power and the phasing out of conventional carbon-based fuels as a backup technology. Additional short term operating reserve (plant that can power up in under four hours) will likely be required, but additional back-up plant are not likely to be required.

For these reasons, it is misleading to suggest that wind is more “intermittent” than existing generation capacity, for example nuclear. Indeed wind is variable rather than intermittent, but this variability can be managed.

Implications for Devolved Administrations

3.39 Energy policy is a reserved function. In Wales, the IPC will be the relevant body to decide NSIPs. However, it is currently the case that all decisions relating to renewable energy in Wales must take account of the Assembly Government’s policy as defined by TAN 8. TAN 8 was developed “for efficiency and environmental reasons...” to ensure that large scale (over 25MW) onshore wind developments could be concentrated into particular areas defined as Strategic Search Areas (SSAs) that could minimise any environmental impacts—and this policy has been a successful one. TAN 8 has had a significant impact on developer confidence by offering a clear policy framework within which to operate and since its publication there has been an increasing stream of planning submissions and approvals.

3.40 It is unclear how the NPSs will relate to existing Welsh planning policy, particularly TAN 8, and what status such policies will have in IPC decisions. WWF is concerned that if TAN 8 and the SSAs are not considered within the NPSs or IPC decisions on sites located in Wales, that this will affect the favourability of the sites. It is unclear if the applications will still carry a presumption a favour of development of renewable energy. Further, it is uncertain if there will be certainty in approach between consenting of NSIPs and energy projects below the threshold that will be decided in consideration of differing national policies and how this will consequently affect confidence from both investors and communities.

3.41 Given the limitations on the jurisdictional application of the new planning regime for NSIPs, there are going to be clear differences across the UK in terms of policy. The obvious example being nuclear energy where Wales has clear concerns about this technology option. The NPSs do not reflect differing national preferences or the fact that Wales has adopted more ambitious targets for emissions reductions and renewable energy. TAN 8 has been developed with the specific intention of meeting challenging and specific renewable energy targets for the region. As a result, it is difficult to know if Wales can have confidence that a decision making framework and body that is not responding to or is defined by the particular needs of devolved administrations will be able to respond in a way that ensures delivery of its specific targets.

3.42 It has been identified that in Wales there will still be alternative consenting regimes for major infrastructure developments. Applicants will have the choice of applying under the Transport & Works Act (T&W Act) for offshore energy projects. If one of the stated objectives of the new planning system is to streamline procedures, consolidate and reduce the complexity of consenting regimes and ensure consistency in approach, how will this be achieved if there are still alternative consenting regimes? It is unclear why the reforms are different in respect of Wales. WWF queries what will determine whether one regime is adopted over the other, how public participation and stakeholder engagement will be guaranteed in both regimes, what the status of the NPSs will be in an application under the T&W Act and how consistency in decisions can be assured.

3.43 In respect of developments within England, the applicant can include within an application to the IPC all associated development or ancillary matters that form part of the development. This would include things such as cabling, substations, etc. This has benefits in allowing all aspects of infrastructure development to be considered as one application for the developer in terms of costs, time and progressing the development, but also for other interested parties in considering the full impacts of the development proposed. However, the IPC is stated not to have power to consent associated development for proposals in Wales. This means such development will have to be consented by the local planning authority under the existing regime. WWF queries why there is a difference in approach for Welsh developments and whether this will cause delays and problems for the developer which are intended to be addressed. This again is contrary to the stated intention and objectives of the planning reforms to streamline the system, reduce the number of consents required and ensure the whole of the project is considered as one.

352 In Wales the One Wales agreement sets out a commitment to deliver a 3% cut each year in carbon dioxide emissions to 2011 in areas of devolved competence. http://www.plaidcymru.org/uploads/publications/281.pdf The Welsh Assembly Government has adopted a target of 4TWh of electricity per annum to be produced by renewable energy by 2010 and 7TWh by 2020. In order to meet these targets the Assembly Government has concluded that 800MW of additional installed (nameplate) capacity is required from onshore wind sources and a further 200MW of installed capacity is required from offshore wind and other renewable technologies. See TAN 8, para 1.4 pg 3 http://wales.gov.uk/desh/publications/planning/technicaladvicenotes/tan8/tan8main1e.pdf?lang=en and the Joint Ministerial Assembly Government Energy Statement, July 2004.
4. **WWF Recommendations**

4.1 That the Appraisals of Sustainability and Habitats Regulation Assessments be re-considered and further assessment undertaken to allow for full and proper consideration of alternatives and their environmental impacts.

4.2 That time and resources are given for a further review of the draft NPSs in view of the reports of scrutiny by the Energy & Climate Change Select Committee.

4.3 That the draft National Policy Statements be revised:

(a) in light of the outcomes of the further environmental assessments and to include any refinement to the options that therefore arise;

(b) in order to address the content requirements of the Planning Act;

(c) to incorporate spatial elements and criteria, and a more integrated approach, to assist applicants and the IPC in determining the most suitable locations for such infrastructure;

(d) to refine the statements of need such that there is a more accurate assessment of what is the actual need in planning terms and what infrastructure must be built to fulfil this need. This must be done in conjunction with a serious and quantified assessment of the potential of demand management and energy efficiency measures; and

(e) to allow the IPC to play its role in delivery of the UK’s climate change policies by requiring the IPC to consider the carbon impacts of each development and provide it with the discretion to refuse development that would adversely impact on the ability of the UK to meet its greenhouse gas emission reduction targets;

4.4 That the interrelationship between national, local and regional infrastructure development be considered in greater depth, so as to ensure that decentralised and community based schemes do not become superfluous.

4.5 That further, more effective ways of engaging key stakeholders, experts, the communities impacted and the wider public in a debate over the country’s energy infrastructure needs are explored and utilised.

4.6 That the interrelationship between the NPSs and devolved planning regimes and policies be considered in greater depth. Where necessary to revise the NPSs to ensure there are no inconsistencies between devolved policies and the NPSs, and to ensure that the NPSs do not constrict the ability of devolved administrations to guide major infrastructure development so as to achieve their own higher emission reduction and renewable energy targets.

*January 2010*
### Annex: Extract from final report by Collingwood Environmental Planning (January 2010)

#### Table 1: Summary of comparative review of national planning and policy documents

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<th>Scotia nd SEA</th>
<th>National Policy Statements Appraisals of Sustainability</th>
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<td><strong>AoS/SEA objectives</strong></td>
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<td>NPF2</td>
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<td>Scoping</td>
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<td>Baseline</td>
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<td>Alternatives</td>
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**Commentary**

- **NPF2 SEA objectives**: all SEA topics + more detailed sub-criteria, designed to protect and enhance the current state of the environment.
- **Energy AoS objects** seek to promote sustainable development and cover all SEA topics.
- **Nuclear AoS objects** seek only to avoid potential adverse impacts without any aspiration to enhance the current state of the environment or promote sustainable development.
- **Ports’ AoS objects**, though suggested to be ‘aspirational’, most are aimed at ‘preserving’, ‘protecting’ or ‘avoiding’ negative impacts rather than enhancing and/or improving.

**NPF2 assessment – no environmental topics scoped out.**

- **Energy AoS**: excluded noise and landscape features for not being relevant to a high level appraisal, but scoped back in following the consultation.
- **Nuclear topics** identified in the scoping report apparently were kept, but some of the AoS objectives have been excluded with no justification.
- **Ports**: none of the key sustainability topics have been scoped out from the assessment.
- **General public** has only been involved in the consultation on the scope of the NPF2. Only statutory consultees have been consulted on the NPSs.

**NPF2 - overall, good coverage of baseline information.**

- **Energy AoS baseline data** is satisfactory, although at times superficial and not focused.
- **Nuclear AoS** – description of baseline is clear, providing quantitative information where appropriate for each sustainability topic, but usually very brief and therefore does not seem to provide sufficient information for defining potential impacts.
- **Ports** AoS – an inadequate description of the current state has been given with most of the sustainability topics being described within a single sentence and generic and/or irrelevant to the coast/ports, and no evolution of the baseline evaluation.

**NPF2 considered two types of alternatives**: high level alternatives representing a selection of policies and the project-level alternatives, the number of which has increased throughout the assessment period. While the former alternatives might be considered reasonable (although not entirely logical), the project-level alternatives are quite inadequate – they are not alternatives to each other, more a wish list of possible developments by interested parties.

- **Energy NPS objects** have been defined so narrowly as to exclude possibility for reasonable competing alternatives (contrary to consultants’ recommendations). **No alternatives** have been put forward for the technology-specific NPSs.
- **Nuclear NPS** – the ‘hierarchy’ approach for considering alternatives is welcomed yet the ‘location’ aspect, under which alternative options have been narrowed to ‘suitable’ sites for nuclear power stations highlights that in fact this NPS is operating more at the programme not plan level and in the absence of higher policy level environmental assessment.
- **Ports** AoS alternatives are alternative options to selected policies of the NPS not to the plan itself. **Ports AoS does not consider BAU scenario.**
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<th>Impact identification and assessment</th>
<th>National Policy Statements Appraisals of Sustainability</th>
<th>Key</th>
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<tr>
<td>NPF2 - relatively good assessment of high level impacts taking into account their potential significance and duration, although rather superficial assessment at project level. Energy AoSs very brief and somewhat opaque description of potential impacts has been provided often concluding that there is no effect for the issue concerned. Moreover, a very superficial assessment of cumulative effects has been undertaken for the NPS 1 AoS, whereas technology-specific NPS AoSs have not assessed cumulative effects at all. Ports AoS is confused, failing to assess significant effects arising from the implementation of Ports NPS; inadequate cumulative effects assessment. Poor assessment of Energy and Ports NPSs also linked to sometimes inadequate baseline information.</td>
<td>Overall good coverage/quality</td>
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<tr>
<td>Mitigation</td>
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<td>Overall poor coverage/quality because of significant omissions or inadequacies</td>
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<td>Consultation/ participation</td>
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<td>Overall satisfactory coverage/quality despite some omissions or inadequacies</td>
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<td>Monitoring</td>
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<td>Reporting</td>
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<td>Non-technical summary (NTS)</td>
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**Commentary**

- **Impact identification and assessment**
  - NPF2 - reasonable outline of mitigation measures, although somewhat general and not clear how successful these measures are likely to be. No mitigation measures provided for additional national developments.
  - Energy AoSs emphasised the importance of mitigation rather than suggesting measures to avoid the potential impacts. Only the NPS 4 provides any concrete mitigation measures.
  - Nuclear AoS proposes some mitigation measures for topics likely to be significantly affected.
  - Ports AoS makes a number of recommendations throughout, not targeted mitigation measures.

- **Consultation/ participation**
  - NPF2 - consultation took place early and all responses have been documented and indications given as to how they have been taken into account.
  - Energy and Nuclear NPSs consulted statutory authorities early, but no early public or non-statutory consultation.
  - Ports NPS - consulted statutory authorities early, but no early public or non-statutory consultation.

- **Monitoring**
  - NPF2 - ER provides a comprehensive table with the proposed monitoring data, but the data do not specifically refer to the significant environmental effects of the NPF2.
  - Energy AoS identifies the effects that need to be monitored yet the proposed measures are not clearly defined and explained.
  - Nuclear AoS does not consider monitoring at this stage, rather it proposes the monitoring strategy to be outlined in the AoS Statement, to be published at the same time as the Nuclear NPS, thereby excluding monitoring from consultation and the requirement in Annex I.
  - Ports AoS - monitoring is proposed for sustainability as a whole rather than for the potential effects.

- **Reporting**
  - NPF2 - ER is easily readable, systematic, largely transparent and covers key issues required.
  - Energy AoSs and Ports AoS, cover key factors required under Annex I, but generally superficial.
  - Nuclear AoS has a good structure to the report yet some key issues like baseline information or mitigation measures are not included in the main report and outlined only in annexes.
  - Ports AoS - not easy to follow; lacks clarity in the approach adopted.

- **Non-technical summary (NTS)**
  - NPF2 NTS well structured and produced as a stand-alone document written in non-technical language, providing a clear summary of the ER.
  - Nuclear AoS NTS - a good summary except no outline of the baseline information or mitigation measures (only in annexes of the report), therefore not compliant with Annex I.
  - Energy AoS NTSs simply cut and pasted from the main report, and NTS is longer than the report itself for most of the technology-specific energy NPSs. Questionable whether compliant with Annex I.
  - Ports NTS does not fully summarise the content of the AoS Report, and it fails to summarise the environmental effects, therefore not compliant with Annex I.