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HOUSE OF COMMONS
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GENERAL COMMITTEES

Public Bill Committee

INFRASTRUCTURE BILL [*LORDS*]

Eighth Sitting

Tuesday 13 January 2015

(Morning)

CONTENTS

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Saturday 17 January 2015

STRICT ADHERENCE TO THIS ARRANGEMENT WILL GREATLY FACILITATE THE PROMPT PUBLICATION OF THE BOUND VOLUMES OF PROCEEDINGS IN GENERAL COMMITTEES

The Committee consisted of the following Members:

Chairs: † Mr Jim Hood, Sir Roger Gale

† Blackman-Woods, Roberta *(City of Durham)* (Lab)
† Browne, Mr Jeremy *(Taunton Deane)* (LD)
† Burden, Richard *(Birmingham, Northfield)* (Lab)
† Burt, Alistair *(North East Bedfordshire)* (Con)
† Coffey, Dr Thérèse *(Suffolk Coastal)* (Con)
† Greatrex, Tom *(Rutherglen and Hamilton West)* (Lab/Co-op)
† Hayes, Mr John *(Minister of State, Department for Transport)*
† Heaton-Harris, Chris *(Daventry)* (Con)
† Jenrick, Robert *(Newark)* (Con)
† Jones, Graham *(Hyndburn)* (Lab)
† Kwarteng, Kwasi *(Spelthorne)* (Con)
† Miller, Andrew *(Ellesmere Port and Neston)* (Lab)
Newmark, Mr Brooks *(Braintree)* (Con)
† Parish, Neil *(Tiverton and Honiton)* (Con)
† Raynsford, Mr Nick *(Greenwich and Woolwich)* (Lab)
Ruane, Chris *(Vale of Clwyd)* (Lab)
† Rudd, Amber *(Parliamentary Under-Secretary of State for Energy and Climate Change)*
† Shannon, Jim *(Strangford)* (DUP)
† Whitehead, Dr Alan *(Southampton, Test)* (Lab)
† Williams, Stephen *(Parliamentary Under-Secretary of State for Communities and Local Government)*
† Zahawi, Nadhim *(Stratford-on-Avon)* (Con)

David Slater, Marek Kubala, *Committee Clerks*

† attended the Committee

Public Bill Committee

Tuesday 13 January 2015

(*Morning*)

[Mr Jim Hood *in the Chair*]

Infrastructure Bill [*Lords*]

9.25 am

The Chair: Before we resume consideration of the Bill, I have to inform the Committee that, due to an administrative error, a new clause tabled on Thursday in the name of Tom Greatrex was not printed at the time. It has now been printed and appears in today's amendment paper as new clause 20. Although the new clause has not met the usual deadline, given the circumstances, I have used my discretion to select it for debate today. It has been grouped with amendment 1. A revised selection list is available in the Committee Room.

Clause 37

Levy on holders of certain energy industry licences

Tom Greatrex (Rutherglen and Hamilton West) (Lab/Co-op): I beg to move amendment 67, in clause 37, page 43, line 31, at end insert—

"(j) encouraging the development of CO_2 storage potential."

I am grateful, Mr Hood, for your ruling on new clause 20, which we will come on to later. Amendment 67 continues where we finished on Thursday, on carbon capture and storage. As Members will recall, we discussed an amendment to include CO_2 storage in the competences of the new Oil and Gas Authority. This amendment would ensure that the Oil and Gas Authority was able to raise levies against CCS-relevant activity. Last week the Minister argued that changes to include CCS in the remit of the OGA were premature and that it was envisaged to include CCS at a later date. My concern is that leaving the levy-raising powers of the OGA to a later date may be too late.

The amendment does not distort the core functions of the OGA. Following on from our discussions last week, it leaves plenty of room for the OGA to be amended to included carbon capture storage during the next Bill. It ensures that, if and when the time comes and the Oil and Gas Authority turns its attention to CCS, it can raise the necessary revenue to be able to do so. I do not think there is any good reason that the Government would want to deny the OGA this power, to be called upon when necessary.

Clause 37 sets out functions that can be supported through the use of levies. Subsections (1)(c) and (5)(a)(vii) both refer to CO_2 storage; however, there are a series of activities listed under subsection (5) which are highly germane to the development of CO_2 storage in the UK—for example, access to the information and data covered in paragraph (b). The wording in the clause implies that the OGA would not be able to recover costs for these activities from CO_2 storage projects if they do not directly contribute to "maximising…economic recovery". This would cover all CO_2 storage activities that did not contribute to enhanced oil recovery.

My concern is that that risks creating a strong disincentive for the OGA to work on CO_2 storage matters and could slow the development of that technology—again, the discussion that we had last week. The amendment would address this concern by making it clear that the OGA can recover costs for such activities at the point at which it takes on those responsibilities and that focus in future.

Amber Rudd (Hastings and Rye) (Con): It is a pleasure to serve under your Chairmanship, Mr Hood.

I thank the hon. Member for Rutherglen and Hamilton West for moving this thoughtful amendment, which would broaden the scope of activities undertaken by the Secretary of State which could be funded by a levy on licence holders to include activities that encourage the potential for carbon dioxide storage. I share the hon. Gentleman's desire to ensure that the potential for carbon dioxide storage is realised. I would like to reassure him that the UK has one of the most comprehensive programmes anywhere in the world to support the commercialisation of CCS technology and to develop the industry. We have created a regulatory framework to encourage and enable the development and deployment of CCS, and have set aside up to £1 billion of capital plus operational support for commercial scale CCS projects. We are also supporting R and D, including providing £2.5 million of funding to accelerate the development of the UK's strategic storage capacity.

However, the Government see no need to amend clause 37 as the amendment proposes. The clause intentionally focuses the scope of the levy to enable the Wood review recommendations to be implemented so that the urgent challenges, which we discussed last week, facing the oil and gas extraction industry can be addressed. The Government have set out their intention to bring forward legislation to establish an arm's length body, to be called the Oil and Gas Authority, to act as regulator, steward and licensing authority over the UK's oil and gas reserves, as well as to undertake licensing activities in relation to carbon dioxide storage.

The levy-raising powers set out in clause 37 are not intended to limit the OGA's role beyond the petroleum production sector. While we are keen to ensure that the OGA's focus is firmly on maximising the economic recovery of offshore UK petroleum, it is our intention that its activities will be able to benefit other offshore activities, including CCS, where appropriate.

The hon. Gentleman questions whether it would be "too late"—in his phrase—if that is done later. I would like to reassure him that it would not be. The clause allows what he desires to take place, but we do not feel that now is the right time, or that this is the right place, to set that out. Our intention is to establish the OGA with its role, functions and powers in legislation early in the next Parliament. We will do so with the close input and involvement of the respective industry trade associations to ensure that appropriate arrangements are in place to encourage CCS potential. I hope that reassures the hon. Gentleman that now is not the time to do this and that when it is done, it will be done in consultation with industry members, so that we get it absolutely right.

The difference between the hon. Gentleman's proposal and the Government's is that we feel that CCS, vital though it is to our industry, is still a nascent technology and does not yet merit the same powers when it comes to maximising oil and gas recovery. I hope that he has found my explanation reassuring and will consider withdrawing his amendment.

Tom Greatrex: I thank the Minister for her explanation. I do not want to be unduly uncharitable, but I am afraid that the stance she has taken only serves to reinforce the concerns I expressed in moving the amendment. She refers to CCS as a "nascent technology", yet as we discussed last week and as she is aware, it is now a commercially operating technology in Canada and is increasingly likely to become one in China soon. It is moving from being a nascent technology to being something that is achievable.

As we discussed last week, in the UK we have the competition, and there are two projects undergoing FEED—front-end engineering design—studies. However, it is important to make sure that CCS is something that the Oil and Gas Authority can push now. The danger of returning to this later is that there may well be a delay before the OGA can take on those functions and ensure an agenda that is clear about the desire for CCS to be properly achieved.

As we discussed last week—and as we discussed with the Minister's colleague, the right hon. Member for South Holland and The Deepings, who is sitting alongside her, when he was in her Department—a number of Members from across the parties, including both Government parties, have put a lot of attention on the importance of CCS. My concern is that the Government's attitude to this amendment is indicative of a wider attitude that still says that CCS is something that may well be somewhere in the future, rather than preparing all the ground, so that if the progress that we want to see in both FEED studies is achieved, we can get on and make progress as soon as possible. As we have reflected before, without carbon capture and storage technology, the opportunity to properly reduce emissions from a balanced energy mix and a number of industrial processes is, if not impossible, then very difficult indeed. I am afraid that I am therefore not convinced by the Minister's response to the amendment, and I intend to push it to a vote.

Question put, That the amendment be made.

The Committee divided: Ayes 8, Noes 10.

Division No. 6]

AYES

Blackman-Woods, Roberta	Miller, Andrew
Burden, Richard	Raynsford, rh Mr Nick
Greatrex, Tom	Shannon, Jim
Jones, Graham	Whitehead, Dr Alan

NOES

Browne, Mr Jeremy	Jenrick, Robert
Burt, rh Alistair	Parish, Neil
Coffey, Dr Thérèse	Rudd, Amber
Hayes, rh Mr John	Williams, Stephen
Heaton-Harris, Chris	Zahawi, Nadhim

Question accordingly negatived.

Clause 37 ordered to stand part of the Bill.

Schedule 6 agreed to.

Dr Alan Whitehead (Southampton, Test) (Lab): On a point of order, Mr Hood. I would like to raise the issue of the availability of a report that is very important for the Committee to make effective decisions on the clauses we are about to debate. The report is by the rural communities policy unit at the Department for Environment, Food and Rural Affairs and is entitled "Shale Gas: Rural Economy Impacts". However, it is not available to the Committee or other Members in unredacted form. Indeed, in its present form, it has over 70 redactions concerning the issues of shale gas, rural communities and, in particular, the accumulation of drilling in those communities. The availability of the report was raised recently in the Liaison Committee, and the Prime Minister indicated that he would look into it and give an answer about whether the report could now be published unredacted. Are you able to use your good offices, Mr Hood, to ensure that the report is available to the Committee in unredacted form in the very near future, so that we can undertake an informed discussion of these clauses?

The Chair: I thank the hon. Gentleman for his point of order and for giving prior notice that he would raise it. I have to tell him and the Committee that it is not a point for me; however, I am sure that the Minister has heard his comments. I will leave it with the hon. Gentleman to see what develops from it.

Clause 38

PETROLEUM AND GEOTHERMAL ENERGY: RIGHT TO USE DEEP-LEVEL LAND

Tom Greatrex: I beg to move amendment 68, in clause 38, page 45, line 13, after "deep level land", insert "subject to subsection (5A),"

The Chair: With this it will be convenient to discuss amendment 69, in clause 38, page 45, line 25, at end insert—

'(5A) The carrying out of hydraulic fracturing in connection with the exploitation of unconventional petroleum in relevant land shall be prohibited.

(5B) In subsection (5A)—

"relevant land" means land which is located within the boundary of a groundwater source protection zone as specified by the Environment Agency from time to time;"

Tom Greatrex: I am conscious that we are now moving on to the two clauses that will probably receive the greatest public attention of all aspects of the Bill. They concern proposals for the extraction of unconventional gas and geothermal heat recovery.

We will discuss a wide range of different issues, but before I turn to the specifics of amendments 68 and 69, which relate to groundwater protection zones, let me say to the Minister that there have been, as she knows, a number of reports on unconventional gas and its regulatory regime. They include reports by Select Committees, the House of Lords and eminent bodies. The point of order just raised by my hon. Friend the Member for Southampton, Test concerned the heavy redaction of the report produced by the Minister's colleagues at the

[Tom Greatrex]

Department for Environment, Food and Rural Affairs. Releasing the report only in such a heavily redacted form does not sit well with the commitments given by the Prime Minister before the Liaison Committee and also frequently by Ministers in the Department of Energy and Climate Change and other Departments.

Andrew Miller (Ellesmere Port and Neston) (Lab): My hon. Friend will be familiar with the Government using the excuse that something is in commercial confidence for redacting information. However, does he not find it a little odd that the conclusions of the report, in section 4, are so heavily redacted? There are more than 10 different redacted items. Can he see any logic for conclusions being redacted? Maybe there is some justification for redacting some of the initial input, but surely this does not apply to conclusions.

Tom Greatrex: My hon. Friend makes an important and telling point. The front of the report says that it is written by: "Redacted". That is how heavily it has been redacted. If the Government's position—which seems to have shifted in recent months to become more cautious and responsible—is that people need to make their judgments based on evidence, science and the information available, then I would have thought that they would set much greater store by ensuring that the information in the report was available. It should be available not only to us—it is important for us to be able to examine it to enable scrutiny and to inform our discussions about this part of the Bill—but to members of the public and others who are interested, as people can sometimes be provided with information that is very alarmist and not necessarily completely accurate.

It is important that as much as possible of the information that is around is available to people so they can make that judgment. I hope that when the Minister responds she is able to reflect on that. Perhaps she could provide members of this Committee with an assurance that we will be able to see the full report, certainly before the Bill reaches Report. That is vital to ensuring that we are able to do our jobs and properly scrutinise the legislation before us and the effects it will have.

Amendments 68 and 69 concern groundwater protection zones. The DEFRA study is supposedly on cumulative impacts, and there are a number of different impacts. One of the most important areas of concern is the potential impact of shale gas extraction on water supply. Many members of the public have expressed this concern to me, and have also expressed it publicly and in their correspondence about different aspects of the Bill. That will not be a surprise to the Minister. Some of the early experiences of the United States led to some of that concern, which is quite justified, given what has happened in other parts of the world. The issues include water resource requirements and the potential contamination of ground and surface waters, and aquifers with methane and other pollutants used in both the fracturing process and also, significantly, the drilling process.

9.45 am

Our two amendments focus on the level of protection for groundwater protection zones. I am sure that the Minister is aware, as members of the Committee may also be, that groundwater protection zones are divided into three categories: the imaginatively titled zones 1, 2 and 3. Zone 1 is defined as the 50-day travel time from any point below the water table to the source, and has a minimum radius of 50 metres. Zone 2 is defined by a 400-day travel time from a point below the water table and a minimum radius of 250 or 500 metres around the source, depending on the size of the abstraction. Zone 3 is defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source.

There are two potential risks to groundwater zones. First, faulty wells that travel down through an aquifer could leak fluid or methane directly into the water. Secondly, in rare instances—my hon. Friend the Member for Southampton, Test has tabled an amendment that would reduce such instances to almost nothing—there is a potential that hydraulic fracturing could be close enough to the aquifer that a vertical fault could discharge frack fluid or methane into the water.

My view—from the information I have been able to glean and from talking to people involved in the water industry and people who are aware of issues around the substances that are involved in such techniques—is that those risks could be manageable within the context of robust regulation. However, I want to test that with the Government, because I am not sure whether that has significantly been provided for in relation to groundwater protection zones. We have tabled the amendment to seek clarity on the existing protections for groundwater protection zones and to test whether they go far enough.

At various points the Government have made it clear that they will not allow shale gas development in zone 1 areas. However, I have been informed by the industry that permission has already been granted in some of those areas. Will the Minister explain the exact nature of the current protection for groundwater protection zone 1? On how many occasions has the Environment Agency denied a permit on the grounds that activity was in a groundwater protection zone category 1? What grounds will there be for considering an exception to the presumption that the Environment Agency says it has against development? We have tabled the amendment because it has been difficult to get a clear answer from the Government over many months.

There is a series of questions about why the Environment Agency has taken this approach with groundwater protection zone 1, but not with zones 2 or 3. If water flows from groundwater protection zone 3 into zone 2, and from zone 2 into zone 1, will the Minister clarify why existing protections extend only to zone 1? I anticipate that she might say that it takes some time for water and chemicals to travel from zone 3 to zone 1, and that some of them leak into the surrounding soil and, therefore, dilute the effect. What work has her Department, the Environment Agency or others done to assess what proportion of chemicals leaked into a groundwater protection zone 3 eventually arrive in groundwater protection zone 1?

I am sure that the Minister and many members of the Committee will appreciate the real concerns about the potential impact on water supplies. Once a groundwater protection zone or an aquifer is contaminated, it cannot be uncontaminated; that is why there a level of concern. We are keen to ensure that the protection in relation to groundwater is clear and absolute, so that there is no

danger or realistic concern that the impact of anything leaking into a groundwater protection zone 3, where there is no protection, ends up contaminating a groundwater protection zone 1, where apparently there is a protection, albeit not absolute. My amendments are designed to put those protections in place and to ensure absolute clarity that activity will not be able to take place in groundwater protection zones.

Amber Rudd: Britain needs more home-grown energy. The shale gas and geothermal resources have the potential to bolster our energy security, create jobs, increase tax revenue and provide a critical bridge to a greener future. Difficulties obtaining underground access pose a barrier to exploring the new shale and geothermal industries, and the rules in place at the moment for accessing underground land mean that one landowner could delay shale gas development for the whole community and, in the case of geothermal, potentially stop the project entirely.

What we propose will simplify procedures for new methods of underground drilling that are currently costly and disproportionate. The right of use will apply at depths so far below the surface that it will not have any impact on the landowner's use of the land.

Let me clear: we are not proposing any changes to surface access or to the robust regulatory system that deals with potential risks associated with drilling and hydraulic fracturing. We are fully committed to ensuring that our groundwater and drinking water supplies are accorded a high degree of protection. The Environment Agency published a document entitled "Groundwater protection: principles and practice (GP3)" that sets out its policy on the protection of groundwater.

Jim Shannon (Strangford) (DUP): The Minister knows that this is a devolved matter for Northern Ireland and therefore something that the Northern Ireland Assembly will make decisions on. There have been some applications for licences in Northern Ireland that have not got anywhere. Has the Minister had any time or opportunity to discuss these matters with the Northern Ireland Assembly and the Ministers responsible, Arlene Foster and Mark Durkan, to see whether we could get a universal policy, which would be helpful across the whole of the United Kingdom of Great Britain and Northern Ireland?

Amber Rudd: I thank the hon. Gentleman for his suggestion. I have not had those conversations yet. He is correct: this is a devolved matter, but I would be happy to have those conversations if he thinks it would help the devolved Northern Ireland Assembly and us. I will write to him.

The Environment Agency will not permit unconventional oil and gas extraction activities where there is a significant risk that pollution of groundwater may occur, including in source protection zone 1 areas. Source protection zones identify areas close to drinking water sources where the risk associated with groundwater contamination is greatest, with source protection zone 1 being the areas most vulnerable to groundwater pollution. No drilling activity will be permitted in such areas.

The hon. Member for Rutherglen and Hamilton West asked specifically what protection is in place for groundwater in the protected zones. Let me try to spell out and—I hope—reassure him about the robust protection that is already in place. The Environment Agency will not permit activities where there is a significant risk that pollution of groundwater will occur, specifically including source protection zone 1 areas. He asked what exemptions there have been. I will have to come back to him on that point, but I am not aware of any at the moment.

Source protection zones identify areas close to drinking water sources where the risk associated with groundwater contamination is greatest, with protection zone 1, as the hon. Gentleman said, being the most potentially vulnerable. The Environment Agency has been clear on that. Outside source protection zone 1 areas, extraction activities would be permitted only if they did not pose a significant risk to groundwater, and that is to be determined by the Environment Agency on the basis of a site-specific assessment. I ask the hon. Gentleman and other Committee members to take comfort from the significant expertise of the Environment Agency, which has done this for so long and is our source of contact and reassurance in protecting our groundwater. Outside source protection zone 1 areas, extraction will be permitted only exceptionally, and the Environment Agency will assess each case in turn.

The hon. Member for Southampton, Test mentioned the DEFRA report in a point of order, and the hon. Members for Ellesmere Port and Neston and for Rutherglen and Hamilton West also mentioned it. The report was a draft rural economy impacts paper. It was an internal document. It is not analytically robust. It is a literature review of existing studies and is not exhaustive. This is a highly sensitive and fast-moving policy area, as we know, and releasing such information shared across Departments risks undermining our ability to deliver effective policy. The full list of references on which the report was based, which I am sure the hon. Member for Southampton, Test looked at, has been released under environmental information regulations. The redacted material has not been released for those broader reasons. Redactions were made to the draft paper, based on exceptions under the environmental information regulations and the Freedom of Information Act and to remove material not relevant to the request. Redactions were made on that basis, not on the basis of sensitivity of materials. I hope that reassures hon. Members on the DEFRA report.

Dr Whitehead: Would it not be better for the Committee to judge whether the material is in the public interest and is robust or otherwise, rather than our depending entirely on the word of the people making the redactions about whether the material is or is not relevant? Will the Minister pause for a moment to review her stance? I suggest it would be in her interest and that of the Committee's discussions for that material—complete or not—to be here rather than hidden in a cupboard at DEFRA.

Amber Rudd: I recognise the good will and honest intention behind the hon. Gentleman's intervention, and his concern that only half the evidence is out there. However, this is a draft document that has been presented by DEFRA. I do not feel it adds to our important deliberations.

Out of respect to the hon. Gentleman, I will take on board his point. If he asks me to, I will bring it up again during further deliberation this afternoon or next week

[Amber Rudd]

in Committee, in order to reassure myself further. However, I have spoken to the representatives at DEFRA and they reassure me that it is policy work, that it is current and that there are often changes to it. There is no further assessed, certified and firm position from a DEFRA analysis that could help the hon. Gentleman and the rest of the Committee in our deliberations.

I hope I have addressed the matter sufficiently for now, although I will consider further what the hon. Gentleman said about the DEFRA report. I hope I have reassured the hon. Member for Rutherglen and Hamilton West on his points about groundwater by talking about the Environment Agency's strong record and its reassurances. Therefore, I hope he will withdraw the amendment.

Tom Greatrex: I almost felt sorry for the Minister when she read out her response to my hon. Friend the Member for Southampton, Test. That was the thinnest justification I have ever heard from the Government for not publishing a document. It appears it is not because there is anything significantly commercially. She said it is because it is a fast-moving policy area. It is indeed, and we have had reports from a number of different organisations and agencies on aspects of it over the past two or three years, some of which have been superseded by developments or progress in regulations and responses.

We in this House, now and on Report, have to make a judgment on the appropriateness and effectiveness of the legislation in front of us. An important part of that is the potential impact of onshore and unconventional gas extraction. That partly includes the impacts on communities and, particularly in the report that we have been discussing, rural areas. It is not the only report—we have had others from a wide range of organisations, with eminent people looking at the science and the energy impacts. That is all part of the suite of information that should be available to Members of the House so that we can make a judgment. Information from the Government, in particular, should be available, even if it is in a fast-moving policy area and the information is currently in a draft state.

Chris Heaton-Harris (Daventry) (Con): Leaving aside that particular report, when the hon. Gentleman was an adviser to a former Chief Whip, or former Secretaries of State for Scotland, or was working at the Ministry of Agriculture, Fisheries and Food, he would have seen, as did previous Ministers currently sitting behind him, a number of papers such as this. They are draft papers to bring policy forward and suggest things to Ministers, which they would have dismissed.

Dr Whitehead: No, this is not.

Chris Heaton-Harris: As a general principle, surely the hon. Gentleman can understand—maybe it is not the case for this particular paper; we can discuss that later—that there is a case for allowing civil servants to write things down so that ideas can flow through Ministries in a decent way, some of which may be dismissed.

The Chair: Order. The intervention is too long.

10 am

Tom Greatrex: I thank the hon. Gentleman for his intervention. In passing, I will say that I do not think I ever saw anything that was particularly sensitive when I was in the Whips Office—I may have done in other places. It was before most people used electronic communications, as well; it was a long time ago.

The hon. Gentleman's point is not relevant to this report. This is about a specific report; it is not necessarily about the principles of freedom of information and commercial information that may need to be redacted or may necessitate reports being released in part. This is a report on the impacts on rural areas, which was commissioned by the Government. It is not about policy development and moving areas of policy, it is about an area of policy that we are considering in the Committee, and the information should be available to Members in forming their judgment. That point was made to the Prime Minister at the Liaison Committee by his colleague the hon. Member for Thirsk and Malton (Miss McIntosh), the Chair of the Select Committee on Environment, Food and Rural Affairs.

This is about confidence for the public, as well. I have made the point a number of times in discussing this matter that members of the public have a range of legitimate environmental concerns. This is not a new process, but it is being applied in a novel way. Concerns have arisen because of things that have happened in other parts of the world. There is a huge amount of misinformation as well, and there are people who take absolutist positions on both sides of the debate, but the vast majority of people whom we represent want us to be able to make our judgment on legislation based on the best information available. The report is an important part of that.

I hope that the Minister is serious about returning to her colleagues and officials in DEFRA on this point, because if the report is not available before Report, we will find that this is not a party political issue. Many Members on both sides of the House will be concerned about having to vote on things without having had the opportunity to look at the assessments and potential impacts. That is why the matter is important in the context of this Bill and why I hope that the Minister is serious about reflecting on it and ensuring that we are provided with the information. It will be hard for us to say that we have taken into account all the different issues if that information has not been available to us.

Returning to groundwater protection zones, the Minister said that we should be confident in and comforted by the experience—the long experience, I think she said—of the Environment Agency. In relation to hydraulic fracturing and the impact on groundwater, there is no long experience. That is part of the point. My concern—I know the Minister said she would come back to us on this point, and I request that she writes to all members of the Committee if she is not able to respond this afternoon before we finish with this part of the Bill—is about what exceptions have been granted, because my understanding is that there have been some. At one turn the Minister said it is absolute—there will not be anything happening in groundwater protection zone 1 areas—and then she said she was not sure what the exceptions were. Members of the Committee deserve greater clarity on that point, which is important in ensuring that there is proper protection for groundwater protection zones.

I will obviously take the Minister at her word that she will come back to us on that point, so I will not press the amendment to a vote now, although we reserve the right, depending on what the Minister comes to us with, to pursue the matter on Report. I beg to ask leave to withdraw the amendment.

Amendment, by leave, withdrawn.

Dr Whitehead: I beg to move amendment 36, in clause 38, page 45, line 22, leave out "300 metres" and insert "1000 metres".

The Chair: With this it will be convenient to discuss new clause 3—*Shale gas extraction: devolution*—

'(1) The Scotland Act 1998 is amended as follows.

(2) In Schedule 5, Part II, section D2, after "gas other than through pipes.", insert—

"the licensing of onshore shale gas extraction underlying Scotland.

responsibility for mineral access rights for onshore extraction of shale gas in Scotland."'

Dr Whitehead: Amendment 36 proposes to alter the level below which there should be undisputed and unrestricted access to underground drilling rights—under anybody's land, whether or not they have given permission for that drilling to take place—from 300 metres to 1,000 metres. There are some prudent and straightforward reasons for suggesting that change. I believe the Committee will want to consider them carefully and conclude that it is the safe and correct thing to do in moving to a regime, if that is what the Committee wants to do, of enabling unrestricted access for drilling that would result in fracking and the production of gas.

Where does the 300-metre limit in the clause come from? It appears to come from nowhere. The consultation paper on underground drilling access, which was produced by the Department in May last year, has this explanation: "This underground access"—

that is, the unrestricted access—

"would only apply to companies seeking to extract energy (in the form of petroleum or naturally-occurring heat) from land below 300m. It is important to note that fracturing would not take place at 300m; it would be much deeper—usually over a mile down. 300 metres has been chosen as the landowner is very unlikely to have any use of the land below this level and below this depth the vertical drill may need to start changing direction."

It is suggested that the landowner might have some residual thought for the use of the land above 300 metres, but below that, it is extremely unlikely that they would. That is the logic that governs the suggestion in the consultation paper.

Of course, there are a number of other considerations that are also important in deciding at what metreage unrestricted access might be available. There is the question whether it really is the case that drilling, as the consultation paper suggests, would always be much deeper, usually at over a mile down. It is usually the case that such drilling—that is, the lateral drilling for fracking—would be much deeper. However, it is not always the case, and certainly has not been the case in, for example, the United States, that horizontal fracking drilling has always taken place at over a mile or so underneath the land. Indeed, in a number of instances in the United States, horizontal drilling has taken place at much shallower depths of 600 metres or less. In more than one documented case in the United States where shale gas fracking has taken place at that sort of level, it appears that there is a distinct possibility that the fracking itself—that is, the fractures that are induced in the rock—can fracture as far as penetrating aquifers and underground water supplies.

I do not say that to the Committee as a tendentious statement, but to report a study that was recently published in the journal *Marine and Petroleum Geology* by researchers from Durham university and a number of other places. They looked at the question of how far the artificial fracturing of rock could travel from a horizontal fracking well, and concluded that it was very unlikely that fracking depths of 2 kilometres to 3 kilometres below the surface would lead to contamination of shallower aquifers that lie above the gas resources. They concluded that the chance of a fracture extending more than 600 metres upwards was very low and that the probability of fractures of more than 350 metres was 1%. Nevertheless, they concluded from a vast database of the fracturing effects of a range of horizontal drilling operations across the world that that circumstance was by no means impossible; the risk was by no means negligible; and there was a not insignificant possibility that fracturing could extend at least 350 metres and possibly as far as 600 to 750 metres upwards. Indeed, some natural fractures in rocks have been documented at well over one kilometre. The geology of the UK is considerably fractured, to a far greater extent than for a number of basins used for fracking in the United States. It is possible that such substantial natural fractures exist in rocks in the UK in addition to those that might be created by the fracking process.

We can reasonably conclude—not from my advocacy but from this extensive study—that if fracturing of rocks for extraction is undertaken less than 600 metres from water supplies, which includes shallow-lying aquifers as well as sub-surface water, there is a real possibility that over the course of time the fracturing process could lead to contamination of those water supplies. In extreme instances, it can even penetrate relatively close to the surface. That leaves the clause in some difficulty, as the proposed 300-metre level has been invented purely because of an assumed lack of use of the land by the landowner; it is not a scientific analysis of what the process of fracking might produce at those depths under the surface.

That seems to be a considerable omission in the thinking that has gone into how this level might be determined. Once this permission has been given—and for a number of reasons I am very concerned about the overall question of how the permissions may roll out—there is nothing whatsoever stopping anybody drilling at levels immediately under 300 metres, even if it is normally suggested that drilling may take place at much greater depths. It may turn out to be the case that no one in the UK will drill at depths between 300 and 1,000 metres, because the shales simply will not exist at those depths. However, we do not know that for certain, because there is still a great deal more work to be done to prove where those shales are, whether they are productive and how they might play a role in the overall development of fracked gas and the industry that goes with it. Quite simply, it would be very imprudent to give an assurance that people on the surface, below which those horizontal fracking activities may take place, will be safe from the effects of fracking on land, the rights to which have been given away by this Bill.

10.15 am

If fracking always takes place a mile underground, there should be no objection whatsoever to having a limit of 1,000 metres on land with has automatic access. The reservation of the area between 300 metres and 1,000 metres for a further process might be determined, if necessary, by the courts, which would decide whether there should be access at that particular point.

I need to emphasise that this is a one-stop measure. Once we have given away the rights to that sub-surface land, there is no going back. If we give away the rights to that land—with extremely inadequate arguments about the level at which it should be given away remaining in the Bill—I suggest that we might well live to regret that. We do not want to do that in passing the Bill.

Andrew Miller: To assist the Committee as a long-standing member of the Liaison Committee, I have e-mailed the staff of that Committee to ask whether we have had a response from the Prime Minister. If it comes during the course of our proceedings, I will make it available to this Committee.

My hon. Friend the Member for Southampton, Test has proposed a hugely important measure. I remind the Minister of what she said on clause 37. The whole Committee will agree that our deliberations should be evidence based. We are developing a technology, as my hon. Friend rightly said, in a geology which is not the same as US geology. There are parts of the UK where parallels can be drawn, and parts where there are fundamental differences that require more cautious approaches. I have found something curious in the drafting of the Bill. In clause 37, the Minister argued in favour of site-specific judgments. However, it appears that here she has already put in a very shallow level restriction at 300 metres. I think the Shard is 306 metres high, to give people a reference point. I appreciate that is quite a depth, but given the variability of UK geology, the determination of this matter ought to be site-specific. There is an argument for saying that the figure that goes in the Bill should be much bigger, except perhaps where the science has demonstrated that a less rigorous approach could be adopted.

The drafting of the Bill in this context does not provide for a solid, evidence-based approach, unless the Minister can produce the evidence that demonstrates the basis on which 300 metres is sustainable for each and every potential site in the UK. I am pretty certain that she cannot produce that evidence. I remind the Committee of Cmd Paper 8980, "Our plan for growth: science and innovation" published in December by the Treasury and the Department for Business, Innovation and Skills. Its executive summary mentions

"modern demand for openness and engagement with the world".

Later on, it talks about openness:

"We are committed to encouraging scientists to engage with the public on their work and to the greater use of dialogue with the public on science and technology policy issues, as part of open policy making."

It goes on to say:

"The UK is committed to the principle that publicly funded academic research is a public good and that making it openly available with as few restrictions as possible will realise more effectively the social and economic benefits of spreading knowledge."

No more can that be true than in the context of dealing with controversial technologies. It is equally true, for example, for genetically modified food. I urge the Government to follow their own stated policy of openness. The executive summary states:

"Technology allows openness and public scrutiny of research that was not possible until now—going far beyond the ability to share a published paper through open access, the data and the information behind the paper can be made available to all."

I urge the Minister, in the context of the whole of this part of the Bill, to be mindful of her Government's policy position published in December 2014. It is not an old document, but a current one. I hope that, when we are dealing with the remaining clauses in this part of the Bill, the Government refer to their own policy position and ensure that the evidence is available, nothing is redacted—going back to the previous clause—and that the evidence base for figures such as 300 metres is made publicly available.

Tom Greatrex: I do not want to detain the Committee too long on this matter. I just want to ask the Minister about something. My hon. Friend the Member for Southampton, Test referred to an academic report—I think it was by the university of Durham—that looked at vertical fracture growth, with evidence from the USA, Europe and Africa. The Minister may be aware that that was cited in the report by the Royal Academy of Engineering. That is a good report—it is part of the suite of evidence available to us—and it sets out a wide range of the issues. It explains:

"The weight of the overlying rock formations is one component of the total geological stress. This weight increases with depth, meaning that the direction of maximum principal stress, and hence the direction of fracture propagation, tends to be vertical. At shallower depths, where the direction of maximum principal stress tends to be horizontal, fractures will tend to propagate more horizontally".

That says to me that operating within 200 to 400 metres of the surface increases the likelihood that a vertical fracture will reach the atmosphere. As my hon. Friends the Members for Southampton, Test, and for Ellesmere Port and Neston made clear, if we are talking about a potential resource that is a lot deeper than 1,000 metres—probably at its shallowest 1,000 metres—will the Minister explain why that point that the Royal Academy of Engineering has drawn to our collective attention is not reflected in the point at which the restriction on underground access is set at 300 metres? That is an important consideration that will aid us in discussing the issues.

Amber Rudd: On a point of order, Mr Hood, I thought we were taking new clause 3 with the amendment. Are we just going to address amendment 36?

The Chair: I assumed that we were discussing new clause 3.

Tom Greatrex: I apologise for not moving on to new clause 3. I do not know why I was not ready to do so, because I am probably the Committee member with the greatest local interest in the new clause. I am grateful to the Minister for helping me along with that, otherwise that would have been remiss of me.

We are all aware that in relation to these issues in Scotland, because of the planning process, the permitting powers and the role of Scottish Environmental Protection Agency, the Scottish Government have an effective veto over any shale gas development. That is not something which has always been made clear by the Scottish Government or which is necessarily widely understood in the public and political debate in Scotland, but it is important that we make that point at the beginning of our deliberations.

The measure not currently devolved is effectively a secondary planning power—the underground mineral access rights. Part of the rationale for the change—and the Minister has referred to this—is to do with issues around trespass and trespass law. I am sure that the Minister is aware, and members of the Committee will wish to be aware, that there is no trespass law in the same form in Scotland. In any case, the application of clause 38 to Scotland would be more complex than to England because of the different legal system. However, given that the primary planning powers are and always have been devolved to the Scottish Parliament, and that the permitting regime is responsible through SEPA to Scottish Ministers, it would make sense to bring coherence, clarity and understanding to the public debate that what is effectively a secondary planning power is also within the remit of the Scottish Government. Nothing could happen in Scotland without their approval, but there is a degree of confusion, particularly in relation to clause 38.

Even Committee members who do not have much to do with Scotland will be aware that there has been a lot of constitutional debate in recent times. The Smith Commission considered enhanced devolution subsequent to the people of Scotland deciding that Scotland should remain part of the UK—a decision that I wholeheartedly endorse. During that process, I made a submission calling for the additional devolution of underground mineral access rights for the reasons that I have just set out. The Smith Commission became the Smith agreement and was signed up to in November by five political parties, including the Scottish National party. One of its recommendations was that this should be devolved, along with a range of other powers. The Government have made it clear that they intend to introduce draft clauses to set out the devolution of matters agreed by Smith and that there will be legislation after the general election. Our party has made it clear that that would be in the first Queen's Speech under a Labour Government after the general election.

There is no disagreement on this particular policy point that I can see between any of those parties. They have all signed up to this. The reason for including the policy later was that it required primary legislation. However, we have the opportunity to make the change through an amendment to this Bill, and that is what I am proposing with new clause 3. Previously, the argument seemed to be that it would be neater if we did everything altogether afterwards, but that is not consistent with what the Government have done on other issues. For example, secondary powers to enable the introduction of votes for 16 and 17-year-olds for the Scottish Parliament in time for the 2016 elections have effectively been passed to the Scottish Parliament, and when we considered the Recall of MPs Bill, the exclusion applying to the Scottish Parliament was made on the basis that it was something which, at that point, was to be considered by the Smith Commission.

So it is not as straightforward as saying we will do it all in one go. Given that this is an issue of live debate and concern, I think it is important that the Government indicate and make good their commitment—a commitment on which, as I said, in policy terms, there is no disagreement. The Minister's party, my party, the other party in the coalition, the SNP and the Scottish Green party have all agreed that this should be devolved. We should use the proposed new clause to do so.

10.30 am

Will the Minister clarify a point that has been made a number of times in this debate? As we have made clear, the planning power is with the Scottish Parliament. It is also proposed that licensing for onshore gas should be devolved. It has been suggested that it is not the planning permission that is important, it is the licensing, and that there are certain things that can be done with a licence prior to planning permission or permits. That is not my understanding. I have sought clarity on the matter a number of times from Ministers, colleagues and by tabling a written question.

Will the Minister clarify absolutely that being granted a licence does not enable someone to undertake any underground extraction or exploration, and that those would depend on achieving the relevant planning permissions and environmental and health and safety permits? It is important for that point to be absolutely clear, given that there has been some doubt about that in public debate. New clause 3 would make good a commitment that has been made by all parties. This is a sensible opportunity to do that through the provisions of the Bill.

Amber Rudd: I shall turn first to new clause 3, tabled by the hon. Member for Rutherglen and Hamilton West. The UK Government have welcomed the Smith Commission report, which recommends, among other things, that both licensing of onshore oil and gas extraction, and responsibility for mineral access rights for underground onshore extraction of oil and gas, be devolved to the Scottish Parliament. However, until those powers are devolved, petroleum extraction remains a reserved matter. The provisions on underground access are concerned with the right to use deep-level land and, while they do not change existing planning authority procedures or powers, Scotland will continue to control shale gas and oil, as well as geothermal developments, under its own planning procedures.

I have given further consideration to whether it is appropriate for these provisions to remain applicable to Scotland. I have listened carefully to the concerns raised by the hon. Member for Rutherglen and Hamilton West, specifically on the issue of clause 38 applying to Scotland. Following careful consideration, I can announce the Government's intention to table an amendment on Report to remove Scotland from the scope of provisions concerning the right to use deep-level land. That means that no change to existing access rights will be made in Scotland; oil and gas operators and geothermal companies will need to negotiate access with all landowners under

[Amber Rudd]

which their proposed activities would be carried out, or obtain a court order granting the access rights, as is currently the case.

Whoever forms the Government after the May 2015 general election will introduce draft legislation for further Scottish devolution in the next Parliament. I hope the hon. Gentleman finds that explanation reassuring. I have sought to answer specifically his point about licensing and planning. The Government have welcomed the Smith Commission's recommendations, but they need to be considered as part of the overall devolution package.

Amendment 36 was tabled by the hon. Member for Southampton, Test and supported by the hon. Member for Ellesmere Port and Neston. In proposing a 300-metre depth limit, the Government are ensuring that the right of use applies only at depths where it will not affect landowners' use of their land, but that it is shallow enough to enable the industries to develop in a responsible way. An extension of the depth limit to 1,000 metres would not add to landowners' enjoyment of their land at the surface, but may unnecessarily complicate the drilling of wells. Even though we expect most activity to be at substantially greater depths than the proposed 300 metres, as the hon. Gentlemen referred to, operators may need to change the direction of drilling in the early stages of constructing the vertical well, to avoid fault lines or difficult geological formations. Enabling them to do that, by setting a limit of 300 metres, should make drilling safer overall.

It is not possible at this stage to assess reliably how different depth limits will impact on the industry. The 300-metre limit offers greater flexibility, allowing operators to reduce the surface footprint of shale pads. The hon. Member for Ellesmere Port and Neston pointed out that 300 metres was about the height of the Shard. It is also considerably deeper than London underground stations, which are about 32 metres below ground, or the channel tunnel, which has a lowest point of 75 metres. We have consulted on the level and the Government are of the view that 300 metres is quite sufficient not to interfere with landowners' enjoyment.

Dr Whitehead: *rose—*

Amber Rudd: I will come on to the water issue before I take any interventions. Water and aquifers were raised in particular. A 300-metre limit certainly does not mean that fracturing will be automatically allowed below that level—it is not a blanket permission. With regards to the safety of aquifers and groundwater at that depth, the environmental regulators are best placed to address such risks. Any minimum distances should be decided on a case-by-case basis by regulators with the relevant expertise.

In every development for shale or geothermal sites, the environmental regulator will assess the risk to water resources. Where the risk to water is determined to be too great, it can be expected that a permit for that development will not be granted. It is important to remember that our proposed legislation will not change any of the existing regulatory regimes that manage the potential risks of hydraulic fracturing. The hon. Member for Southampton, Test implied that anything below 300 metres—his specific concern was about anything between 300 metres and 1,000 metres—could be covered, but that is not the case. The company looking to develop shale or geothermal will still need to obtain all the necessary environmental and planning permissions and it is those, rather than the depth limit, that will provide the relevant safeguards.

Dr Whitehead: Will the Minister inform the Committee whether, in her opinion, the Environment Agency and other responsible agencies can have foreknowledge of the extent to which fractures might occur between 1,000 metres and 300 metres when exploration and scientific examination has not yet been undertaken and no plans exist for that to be done in the future? What value does she place on the assurances she just gave in the light of that?

Amber Rudd: I thank the hon. Gentleman for that point. I am going to come on to another point that he made in his speech. I think he said that we cannot go back once we have decided the depth limit, which seems to be the question that he raised in his intervention, but that is not true. Parliament could amend the 300-metre limit in future. An amendment would not have retrospective effect, but I do not accept that there is no going back, as he suggests.

We have consulted and given consideration to this. I am not aware that the Royal Academy of Engineers has set out what limit it would like to see, but it has made recommendations that the Government have accepted. Its report specifically concludes that hydraulic fracturing can be safe if well regulated, which it is. The hon. Gentlemen should be in no doubt that we have consulted the experts on the science, but we remain open-minded. We can return to this if required, but we are confident that that is the right level, so I hope that they will not press their amendments.

Tom Greatrex: I thank the Minister for her response in relation to new clause 3. I am heartened to hear than she has listened to the arguments and taken them on board. We look forward to scrutinising the new clause that she will table on Report to deal with such matters. For that reason, I do not intend to press new clause 3 to a Division.

Dr Whitehead: I am not at all convinced by the assurances that the Minister has given. It would be far preferable to put the limit right in the first instance and possibly review that in future rather than the other way round, as the Minister suggested.

Andrew Miller: Did my hon. Friend notice that the Minister did not address my observations about her Government's openness in science policy? She seems to have some concern about responding to that, which leads to suspicion. I urge my hon. Friend to press the amendment to a vote.

Dr Whitehead: I did observe that but, out of delicacy and kindness, I did not raise that matter further. I am not at all convinced by the arguments that have been made about why what seems to me to be a straightforwardly

prudent device should not be added to the Bill at this stage. I would therefore like to press amendment 36 to a Division.

Question put, That the amendment be made.

The Committee divided: Ayes 7, Noes 11.

Division No. 7]

AYES

Blackman-Woods, Roberta	Miller, Andrew
Burden, Richard	Raynsford, rh Mr Nick
Greatrex, Tom	
Jones, Graham	Whitehead, Dr Alan

NOES

Browne, Mr Jeremy	Kwarteng, Kwasi
Burt, rh Alistair	Parish, Neil
Coffey, Dr Thérèse	Rudd, Amber
Hayes, rh Mr John	Williams, Stephen
Heaton-Harris, Chris	Zahawi, Nadhim
Jenrick, Robert	

Question accordingly negatived.

Tom Greatrex: I beg to move amendment 1, in clause 38, page 45, line 22, at end insert—

'(3A) The Secretary of State shall, before the award of licences in relation to the use of deep-level land for onshore oil and gas exploration, issue additional planning guidance introducing a presumption against such developments within or under protected areas and functionally linked land."

The Chair: With this it will be convenient to discuss the following:

Amendment 37, in clause 38, page 45, line 25, at end insert—

'(6) The Secretary of State shall be required to commission and consider reports on—

(a) the cumulative impacts of water use in fracking and refracking of exploratory and productive gas wells;

(b) the cumulative impacts of flowback and waste water arising from fracking and refracking activity; and

(c) the cumulative impacts on communities of road and vehicle movements from fracking and refracking activity

before providing any permission for the exploitation of petroleum on deep level land where one or more exploitation facility exists within one mile of a proposed site."

New clause 1—*Exploitation of petroleum on deep-level land: cumulative impacts—*

"The Secretary of State should amend the National Planning Policy Framework to require planning authorities to consider the cumulative impacts of exploiting petroleum on deep-level land."

New clause 20—*Planning notification for the extraction of unconventional oil and gas—*

"'(1) The Town and Country Planning (Development Management Procedure and Section 62A Applications) (England) (Amendment No. 2) Order is amended as follows.

(2) In Article 2, "Amendments to the Town and Country Planning (Development Management Procedure) (England) Order 2010", paragraph (4), after "consisting of the" in inserted paragraph (2A), insert "conventional"."

Tom Greatrex: Amendment 1 concerns protected areas. We have had some discussion this morning on the place of regulation and whether, with proper regulation, unconventional gas extraction can be safe. I have made the point a number of times over three years or so that it can be safe, with the right regulation and if we ensure that there is comprehensive monitoring. However, we must also recognise that there are areas with particular sensitivities that need to be observed in the way that we deal with this and in the planning regime. That is why amendment 1 seeks to introduce a presumption against development in protected areas. Members of the Committee will have received a briefing from the National Trust, the Royal Society for the Protection of Birds and the Wildlife Trust, which are supportive of this amendment.

I will try to anticipate the Minister's objections, because I can probably anticipate some of them. She may be able to respond to my anticipated remarks. When announcing a round of new licences for onshore oil and gas in July last year, the Government introduced additional planning guidance for developers concerning national parks, the broads, areas of outstanding natural beauty and world heritage sites. However, notwithstanding that, those provisions are not completely accurate, particularly because they do not cover many internationally and nationally important sites, sites of special scientific interest, special areas of conservation and special protection areas.

10.45 am

I have not listed each of the areas to be covered in the amendment, but I know that the National Trust briefing did and I am sure that will be available to hon. Members if they wish to peruse the list. It is a lengthy list and that level of detail might be more suited to secondary legislation. However, by adopting the amendment, the Government could provide themselves with the opportunity of extending planning guidance to those areas. I am sure the Minister will be able to explain why that was not the case when the Government introduced additional planning guidance back in July to coincide with the announcement of the licensing round.

Where the Government guidance applies, I am not sure that it is strong enough, because there is a recommendation to reject planning applications except when it is in the national interest. I recalled—and went back to check—a statement made by the previous Energy Minister, the right hon. Member for Sevenoaks (Michael Fallon), back in May last year. He said:

"It is in the national interest that we do everything we can to find out how much of this potential can be brought into production."

What is and is not is in the national interest seems to come down to a reasonably loose definition. The fact that that is included in the planning guidance, which came after the then Minister made that statement, leads me to question how robust that exception is. The Government guidance also allows shale gas extraction in "exceptional circumstances", but I have not been able to find a definition of that. Perhaps the Minister will enlighten the Committee on exactly what those exceptional circumstances might be.

The Government provisions do not fall evenly. National parks receive one form of limited protection, but world heritage sites receive less. Paragraph 133 of the national planning policy framework makes it clear that shale gas extraction should be prohibited in world heritage sites only where it

"will lead to substantial harm to or total loss of significance of a designated heritage asset."

The Government's protection for world heritage sites seems to apply only in more extreme circumstances.

The national planning policy framework goes further and suggests that even if it led to the destruction of the heritage site, shale gas could still go ahead if it passed a simple cost-benefit analysis. Therefore, shale could be allowed to destroy a world heritage site if

"it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss."

As I said, I suspect the Minister will say that the amendment is not necessary because sites are already protected, but I am not clear that that protection is worth much at all. Will the Minister set out in what circumstances, if any, she thinks the current planning regime would prohibit shale gas extraction in world heritage sites? The way in which the planning framework is phrased suggests that there are none.

The Government provisions relate only to surface activity, ignoring the fact that of course horizontal drilling for shale gas might exceed 2 km in any given direction. Given that some of the environmental impacts could be felt along that horizontal pathway, it makes sense for any presumption against development to include the coverage of functionally linked land, as set out in the amendment. My concern is that in many ways the Government's existing protections are not worthwhile protections. They do not apply to all protected areas and, where they do apply, they seem not to make a huge difference or are uneven and fail to take account of underground activity. That is why I believe the amendment —which is supported by the RSPB, the National Trust and others—is necessary in setting a clear presumption against development in protected areas.

That is not to say that we are talking about something that, in the words of one of the Minister's colleagues, should take place only in—I think he said—the desolate north-east. However, he had slightly misunderstood that the resources are probably more likely to be in the north-west, which I am not sure is desolate either. Wherever we are—the north-west, north-east, south-east or Scotland—it is important that protected sites in particular are exempted and that it is on other sites that exploration and potential extraction may be allowed to take place.

Let me turn to new clause 1, which deals with cumulative impacts. Shale gas developments are unlike many other infrastructure developments, in that they require lots of relatively small operating sites, rather than single large blocks. That introduces some challenges for the planning regime, which has to anticipate the interaction of each of those sites, which may be close to each other. Again, that is complicated by the fact that many processes associated with extracting unconventional gas are non-uniform. Traffic movements could vary significantly between different phases of development; water use tends to be focused in particular periods when high-volume hydraulic fracturing is taking place; and noise and other forms of pollution will vary considerably at different stages. It is not just a case of many small sites, but of many smaller sites varying their demands on the local environment, sometimes in complicated and related ways.

New clause 1 would simply require an amendment to the national planning policy framework to ensure that those interactions and the cumulative impacts of developments have to be considered by planning authorities. Without that, or an equivalent provision that the Government might provide, there is a risk that planning authorities will consider developments case by case, failing to take into account the cumulative impact on local communities. What we are proposing would be similar to the sequential test used by planning authorities when assessing applications for shopping centres, for example. New clause 1 would make a sensible amendment and I encourage the Government to consider it.

New clause 20 relates to notification—I am grateful to the Chair for clarifying the amendment's selection at the start of today's proceedings, following some confusion yesterday. In 2013, the Government altered the notification requirements for shale gas operators. That was cited at the time by the then Energy Minister, almost proudly, as an opportunity to simplify the shale gas process. Before 2013, shale gas operators were required to notify people individually of local activity. The Government's amendments to the Town and Country Planning (Development Management Procedure) (England) Order 2010 exempted shale gas from that requirement. Instead, operators simply have to publish a generic public notice.

If we reflect on our earlier discussions today and the debate about this issue during the past few years, it seems extraordinary, given the level of public concern, that the procedures in place do not ensure that the maximum available information is made available to those in areas that may be affected. I suggest to the Government that a concern is not overcome by hiding from it. People need to feel informed and aware of developments in their area, to develop their understanding and views and come to their own judgments. That is particularly relevant in respect of an issue that is as sensitive as this one currently is.

My next point may seem slightly odd at first, but it is important. Lancashire county council published its health impact assessment report recently. In a range of information available to us, that is a helpful report in many ways. One point made by the council in its report, which drew a degree of initial hilarity, was that one of the three key risks was that

"stress and anxiety from uncertainty"

from lack of public trust and confidence

"could lead to poor mental wellbeing".

The important point is that the report surveyed residents who are concerned about

"inconsistencies in the information provided by the applicant…a lack of trust and/or confidence in the statutory and regulatory authorities",

and information that they have received from campaigners —not necessarily well-informed information, which is sometimes presented in an alarmist way, as we touched on in earlier exchanges—that led to

"fear, anxiety and stress",

which may affect people's mental well-being.

I refer to that because it relates to a wider point about people's stress, anxiety and concern about this issue. Those concerns may not be particularly well founded, but unless and until people have access to significant information, particularly in relation to local developments, those strong feelings might give rise to understandable concern. The decision to exclude shale gas operators from the need to notify individually—a requirement that is still placed on other areas with horizontal activity, such as geothermal heat extraction—may have been

based on relieving operators of a small administrative burden. That is one examples of where such an exclusion is more likely to engender mistrust, suspicion and concern.

It would be much better if the simple process of notifying people individually of local activities is retained, particularly given that any potential operators will be spending considerable time seeking to explain to communities what they are proposing to do. As we have discussed before, we are potentially at an early stage of something that has caused a degree of concern. It is important that legitimate environmental concerns are properly addressed and that people can make an objective and evidence-based judgment. That is why we have tabled new clause 20.

Dr Whitehead: I rise to support my amendment 37, which is included in this group. It seeks to place a requirement on the Secretary of State to commission and consider reports on

"the cumulative impacts of water use in fracking and refracking,"

both in exploration and production, on "the cumulative impact" of the waste water arising from those processes, and on

"the cumulative impacts on communities of road and vehicle movements from fracking and refracking activity".

The amendment asks the Secretary of State to receive reports on that cumulative impact, should an application come before him or her for further fracking drilling to take place. Where there was an exploitation facility within one mile of a new application, the amendment would require reports to be undertaken on what the cumulative impact would look like for that area.

I hope the Committee will agree that I have tabled amendment 37 for very sound reasons. If we look at the likely cumulative impact of shale gas exploitation in this country, we potentially have several numbers before us. For example, the effect of one fracking pad with perhaps 10 wells being drilled on it would be multiple vehicle movements over time. The Institute of Directors has suggested that there would be tens of thousands of vehicle movements during the period of operation of one pad and multiple thousands of cubic metres of water —and, indeed, fracking fluid—used in production in just one pad.

11 am

When it comes to the cumulative impact over a period of time, the Ricardo report, which was produced for the Environment Agency, gave various growth scenarios for fracking. It suggested that more than 3,000 wells would be drilled in the medium-growth scenario and more than 12,000 wells in a high-growth, US-style scenario. That would involve a number of wells per fracking pad; nevertheless, the number is of that order—perhaps more than 1,000 wells drilled per year at peak production. That is where things get a little difficult, because the question then is where the wells are likely to be drilled. They would not be drilled equally over the country, because the shale deposits to be accessed are not distributed equally over the country, but are distributed over relatively limited parts of the United Kingdom, in particular in southern England—the weald, Sussex and Surrey—the north-west of England and parts of the north-east.

The detail of the areas likely to be affected by shale gas licensing would therefore suggest that a large number of rural communities in those areas would be affected far more intensely than if drilling took place on an undifferentiated, national basis—that is, the number of wells suggested by the Ricardo report would be very much clustered in those areas. I would like to set out for the Committee exactly what effect that would have by quoting the DEFRA report, "Shale Gas Rural Economy Impacts". It contains a very good map showing those areas; unfortunately, all the text underneath it has been redacted, so I cannot say anything further.

However, the question arises from the drilling of such wells of whether the claimed economic benefits to the area would outweigh a number of the difficult environmental consequences of cumulation. Some suggest that a number of the wells would be affected by the so-called boom-and-bust cycle, with intensive activity leading to a rapid degradation of activity as the wells degraded. I would like to tell the Committee about how that cycle might work, but in spite of an interesting chart in the DEFRA rural impacts reports, the text accompanying it has been redacted—other than the statement:

"The international evidence on this is weak"

—so I cannot tell the Committee anything further.

What about the social impacts of the potential cumulation on various communities?

Mr Jeremy Browne (Taunton Deane) (LD): As the hon. Gentleman expands on his theme, will he also consider that we have had extractive industries in this country for an extended period? The whole debate that took place as I was becoming more interested in politics was about the social impact of reducing the effect of extractive industries on different communities around the country. Inevitably, there is an impact if industries become more or less popular or necessary, but it seems odd to argue that it is a bad thing to have both more and less simultaneously.

Dr Whitehead: On the contrary, it is the point made by the hon. Gentleman that is rather odd. I was arguing about the concentration of potential fracking activity in particular areas of the country—

Mr Browne: Like coal mining and so on.

Dr Whitehead: Indeed, but we are not discussing coal mining, we are discussing shale gas and the impact of the relatively concentrated extraction of shale gas upon the areas in which it is technically possible to undertake it. The hon. Gentleman is right, of course, to say that in previous generations the same thing applied to areas where there were coal seams. Had we had environmental impact assessments when the first coal mines were being developed in this country, no doubt that might have been a factor, but we are discussing what will happen to particular areas of the country if the provisions in the Bill go ahead. Should there be any substantial development of the industry in those areas? That is all I am attempting to ascertain; I am not drawing any wider conclusions. I hope that the Committee will be with me in addressing that issue.

[Dr Whitehead]

Bearing in mind the large number of wells that could be drilled if there was an ambition to extract, let us say, 10% of the UK's gas supplies through the fracking process, that would clearly have the sort of impact I have described on rural communities because of the density of pads, the vehicle movements, the water and so on. The shale gas rural economy impacts report from DEFRA says about the social impacts:

"Evidence from the literature review suggests that rural communities face three major social impacts associated with shale gas drilling activities, which are set out below."

Then it says, "Redacted", "Redacted", "Redacted", "Redacted", so I cannot tell the Committee what those major social impacts are. It has unfortunately been redacted, although there are some statements about housing demand and property prices.

Chris Heaton-Harris: The hon. Gentleman is making an interesting case. I just wonder why he has been so silent in the past on other energy infrastructure projects that have caused great problems of a very similar type, such as onshore wind. Is his concern really because this is a carbon-based energy project rather than a renewable project?

Dr Whitehead: The hon. Gentleman and I have had debates on this matter on previous occasions. He can be reassured that my concern is very much about what would happen were this specific industry to come to maturity. There are concerns, of course, and always have been, about the impact of other forms of energy, particularly renewable energy. For example, there have been concerns about onshore wind's cumulative effect on particular areas and the wisdom of agreeing particular planning arrangements in particular parts of the country. Indeed, he will know that that is very much a matter of concern and consideration by the planning committees involved and that a number of such developments are rejected on precisely those sorts of grounds. So that form of energy does go through that process.

However, as far as onshore wind is concerned, there is no effect, or very little effect, of having to dispose of material related to the ongoing process of turbines going round and round. The main issue has always been the visual aspect of turbines for the community. Fracking is about a number of other issues as well, including vehicle movements, water, fracking fluids and the intensity of site developments.

I had hoped to conclude my little survey of the cumulative impacts on communities by citing the shale gas rural economy impacts report in support of my point. Unfortunately, all the relevant conclusions of that report have been redacted, so I cannot offer that information to the Committee. Instead, I will just offer the view that whoever decided to make 62 redactions to a report that contains important public information needs to think carefully before doing such a thing again, because it seems to serve no positive purpose whatsoever and does not move our debate forward.

Unfortunately, therefore, I cannot support my case as well as I might otherwise have been able to. Nevertheless, the Committee should consider the issue of cumulative impacts as being very important, and the requirement that the amendment would place on the Secretary of State would be a prudent addition to the Bill. It would ensure that, if shale gas production went ahead and its cumulative impacts were considerable, then—just as is the case with other forms of energy—action would be required. The Secretary of State would have the power to take that action, and the relevant considerations would be placed firmly in front of any application for any development in an area that already had substantial fracking and drilling activity.

Mr Browne: I had not intended to speak at this time, but I was stimulated to do so by the previous contribution. I will just put some thoughts to the Minister before she addresses the Committee.

I am looking now at all three Labour Front Benchers, all of whom are using electronic devices. I am not in the least bit offended by that, because they are not required to listen to me, but they are all choosing to use energy, and indeed the additional energy that they are using would not have been used by members of this Committee if we had been serving here in Parliament 15 or 20 years ago.

We have extensive energy requirements and all of them, to varying degrees, are controversial. In the next-door constituency to mine, a nuclear power plant is being built. That is a very big project, and members of the Committee can put their hands up if they are volunteering to have a nuclear power station near their constituency. I would venture that a nuclear power station is not a universally popular development to have in one's neighbourhood, and that is probably why the Government have chosen to put new nuclear developments where there are existing nuclear sites.

That gets to the nub of my point, which is about risk aversion, because if a Government announce that they are going to close a nuclear power station, people complain about job losses in the local area, but if they announce that they are going to open a nuclear power station people in the nearby area, people complain about the environmental impact. We can see that situation even with the current oil price. A year ago, the public debate and the debate in Parliament seemed to be about the pressure on motorists because of high petrol prices, but the debate at Prime Minister's questions last week was about the impact of low oil prices on jobs in and around Aberdeen. So, people seem to have a confused, or at least an inconsistent, attitude towards how we procure our energy.

No party is more confused or inconsistent than the Labour party. In my intervention on the hon. Member for Southampton, Test, I spoke about my formative political years. I was born in 1970, so in the mid-1980s I was in my mid-teens. I remember the genuine anger—there was nothing synthetic about it at all—in parts of the country where people felt that an important extractive industry was being wound down; in other words, coal mines were being closed.

11.15 am

Of course, that only affected some parts of the country. It did not affect the part of the country in which I lived, where people's passion on the subject was much less intense because it did not have the immediacy that it had for people living in Yorkshire, Nottinghamshire, south Wales or other parts of the country where there

was a high density of coal mining. It seems difficult to urge a Government always to side with the emotional impact on people at any given point, when people are emotionally resistant to having extractive industries introduced into their area and to having them removed from their area.

We need to acknowledge collectively, as a country and as politicians, that we will continue to have significant energy demands. I add an extra caveat: given that a lot of energy that we are required to buy from outside our country is sourced from countries that have some political governance and values about which we should feel uncomfortable, there may be value in ensuring that we have a reasonable ability to generate energy from within this country.

Given that the technology that we are discussing today has seen a substantial decrease in the cost of energy globally, which has made a bigger impact on the so-called cost-of-living crisis than the entire cumulative speeches of the Leader of Her Majesty's Opposition, we should be serious about encouraging science-based, intelligent exploitation of this resource. We should be mindful of concerns that people have about changes in their area, because change always unsettles people, but at the same time we should recognise that if we refuse ever to change and to seek out new technology, we will refuse to make the collective advances as a country—including serving our own energy needs—that we need to be successful in the future.

Andrew Miller: I did not intend to speak at this point, but the hon. Member for Taunton Deane has prompted me to. Hydraulic fracturing is going on in my constituency and I am supporting it; let us be clear about that. The first well that IGas put down produced only about five letters of objection, whereas the second has produced a protest camp so let me knock on the head the hon. Gentleman's remarks.

The debate is not about being for or against a technology, but about ensuring that we use modern standards to ensure that the regulatory process is fit and proper for the 21st century in the UK. I was reading some US documents while the hon. Gentleman started his remarks, and saw the defence from the industry of not having regulation in part of the States. I am sure that he would say that is inappropriate.

Mr Browne: I agree with that. For the avoidance of doubt, I am strongly in favour of having a reasonable regulatory regime, and I think that people living in the affected areas would, rightly, expect that. I do not wish to imply anything to the contrary; I just do not want the regulations to be so excessive and onerous that their real intention is to frustrate the legitimate aspirations of the industry as I see them.

Andrew Miller: That is precisely what the Prime Minister told me on the Floor of the House some weeks ago. He believes that the position that we are adopting is seeking to block the technologies. I would not have scars on my back about the protest camp in my constituency if that were my objective. I put it to the Government that, had we been using the technologies of the 1970s when I first introduced students in Portsmouth to drilling—we acquired a rig from Cementation Ltd, mounted it on a lorry, and taught students drilling technologies—and applying those technologies to hydraulic fracturing today, I would be opposing it very strongly. The technology has advanced phenomenally, our understanding of sub-surface geology has moved on and so has our ability to measure the environmental impacts, all of which makes me believe that we can produce a regulatory structure that works.

However, to have public confidence in that, which is what I seek to achieve, we have to have transparency. It is outrageous that documents have been redacted. By the way, I have just had an email that may be helpful to the Committee. It says that the questions raised in the Liaison Committee will be answered to the Liaison Committee, and therefore in the public domain, next Monday, before we finish our proceedings. I hope the Minister will use her good offices to ensure that No. 10 supports the release of the document in question. If not, how can she look my constituents in the eye and tell them that she is in favour of a transparent regulatory regime? It is hugely important that we bottom out this argument and make progress on the basis of the most open approach we can possibly adopt.

Chris Heaton-Harris: Briefly, I completely understand where this amendment has come from and the concerns of the hon. Member for Southampton, Test about how the department operates. As he knows, I have a big constituency interest in the inappropriate siting of large onshore wind projects. There are concerns about noise from those projects, and unfortunately the Department concerned seems to pooh-pooh the claims about amplitude modulation. Indeed, many have dismissed out of hand the former noise report ETSU 97 as being completely useless, but the Department still sticks to it. It is just about to commission a piece of work to change that.

So there are concerns in other, similar industries in which former Governments have railroaded projects through. I am torn between what my hon. Friend the Member for Taunton Deane has said and the amendment moved by the hon. Member for Southampton, Test because they are both right. We need this energy and we need to make sure that the protections are in place for the communities around them.

I would like the Minister to assure us all that, no matter what the industry, the concerns of the communities affected are properly taken on board and that, if there is a reason to question the science or practice, we are encouraged to do so and the Department will be open in answering.

Amber Rudd: We have had a very interesting debate and covered a wide range of concerns. I will do my best to address all of them. I will take each of them in turn, starting with protected areas.

I welcome the Opposition's desire to protect areas that are important in terms of environment, landscape, geology or biodiversity. Baroness Young raised similar concerns in Grand Committee in the Lords. However, there are already stronger legislative protections in place than the ones that the amendment would provide. The Conservation of Habitat and Species Regulations 2010 require a developer to undertake a habitat regulations assessment whenever a proposed project, either alone or in combination with other plans or projects, is likely to have a significant impact on a special conservation

[Amber Rudd]

area or a special protection area. If the assessment cannot conclude that there will be no adverse impact on the integrity of the site to a high degree of scientific certainty, the project cannot normally be consented to.

Those protections derive from European law and set a high bar for securing development. The regulations are supported by the national planning policy framework and associated planning guidance, which recognise that there are areas designated for their nature conservation and biodiversity value which should be given a higher—

11.25 am

The Chair adjourned the Committee without Question put (Standing Order No. 88).

Adjourned till this day at Two o'clock.