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INTRODUCTION

1. The British Chambers of Commerce (BCC) is the national body for a powerful and influential network of Accredited Chambers of Commerce across the UK; a network that directly serves not only its member businesses but the wider business community. Representing over 100,000 businesses that together employ more than five million employees, every Chamber sits at the heart of its local community.

SUMMARY

2. We welcome the opportunity to submit evidence to the Public Bill Committee on the Energy Bill. Our comments relate to Part One, Electricity Market Reform, and to Part Five, Consumer Redress.

3. We support the main objectives of the Bill and hope that it will complete its passage through Parliament without unnecessary delays. The sooner the Bill receives Royal Assent the better for the future energy security of the UK.

Part One: Electricity Market Reform

4. The Bill must ensure that the energy market delivers affordability, certainty and security for business. This is what we found were the key business requirements when we conducted a major survey of Chamber members during July/August 2012.

5. Almost 3,500 businesses responded to the survey. The survey received responses from businesses of all sizes and across the manufacturing and services sectors.

6. Respondents were generally supportive of the major reform of the electricity market that the Government is currently undertaking. Almost half (47%) believe that it should help UK competitiveness. Only 10% thought it would have a negative impact.

7. However, one element of the reform, the Carbon Floor Price, is a cause of concern. Over a quarter (27%) think it will negatively impact on competitiveness. While the Carbon Floor Price is not part of the Energy Bill, we believe that its potential cost to business should be borne in mind by Committee members when scrutinising the Bill.

8. Elsewhere the survey found that businesses believe that energy security issues will become a major concern in the future, with 59% of large businesses, 44% of medium-sized businesses, and 38% of small businesses already worried about their future energy supply; disruption to supply is currently a reality for some businesses, with 10% experiencing a cut in their energy supply on five or more occasions in the past three years.

9. With nearly 40% of businesses feeling that rising costs have adversely affected their growth and 90% believing that the UK requires a diverse energy mix to avoid future supply problems, it is clear that action is needed now. Therefore we support the main objective of the Bill. We believe that the Bill as it currently stands should deliver the required certainty for investors and help guarantee future energy security.

10. The announcement that energy intensive firms will be protected from some of the additional cost was welcome and goes some way to addressing our affordability concerns. However, we still feel the Government could explore the possibility of widening the list of electro intensive industries that should be protected.

11. We support the Government preferred choice of the Contracts for difference (CFD) Feed-in Tariff for attracting investment in low carbon forms of energy. The CFD has a number of advantages over other Feed-in Tariff designs that were being considered. As it is a long-term contract it will provide greater revenue certainty; it is less complex than other designs; it provides greater security from price volatility, and thereby reduces the commercial risks faced by investors in low carbon projects. Lower commercial risks should in turn lower the cost of raising finance, and, this should lead to the least additional cost to consumers.

12. Prior to the publication of the Bill a key concern that we heard from our members was over the issues of the counterparty. Therefore we welcome the creation of a Government-owned company to act as a single counterparty. This should further add to investor certainty.

13. However, as the Bill only sets out the powers to be given to the Government to introduce the various market mechanisms, we will have to wait for the regulation to fully understand the details of how the counterparty will work in practice. Investors would be keen to see the detail as soon as possible.

14. The main certainty that the Government must now provide is the strike price for different technologies. We would hope this is revealed as soon as possible and after Government has consulted widely with the nuclear and renewable industry. Eventually we would like to a move towards a situation where the price is set by the market.
Part One: Capacity Mechanism

15. As our survey found energy security is a major concern for business. Therefore we have always been mindful to support policies, such as the capacity mechanism, that will help ensure a reliable electricity supply for business consumers. We can see the benefit of moving from the current arrangement, whereby generators are only paid for the electricity they produce, to an arrangement whereby generators receive a payment to ensure they have sufficient capacity to meet future peak electricity demand and protect consumers against the risk of supply shortages.

16. While we support having the first capacity auctions in 2014, industry will need further certainty around the design of the Capacity Mechanism and it is clear from the lack of detail in the Bill that work on the Capacity Mechanism is less advanced that on other parts of the electricity market reform. Full details won’t be known until we see the regulations and we would encourage the Government to ensure the final detailed design proposals are published no later than May 2013.

Part One: Possible Amendments

17. We do not support amending the Bill to include a decarbonisation target. The decision to wait until 2016 we feel is a sensible one. We hope the debate on a target does not cause unnecessary delays to the Bill reaching the Statute books.

18. We feel that there are currently enough targets in place to ensure the UK adequately reduces it greenhouse gas emissions and to allow the UK to play a leading role in achieving a global and comprehensive legally-binding climate change agreement.

Part Five: Miscellaneous: Consumer Redress

19. We welcome the Government commitment in their response to the consultation on a proposed new power for Ofgem to compel regulated energy businesses to provide redress to consumers that smaller businesses would be within scope for redress. We would like see the Minister reaffirm this commitment during the committee proceedings and to clarify what is meant as a smaller business.

20. The level of protection for businesses in the energy market has long been a concern for our members. In comparison to the domestic sector the safeguards in place for businesses are relatively weak, even though smaller business customers, in particular, engage in the energy market in a similar way to households. We believe that unless it can be demonstrated otherwise, all micro and small businesses should receive the same level of protection as domestic consumers. Clearly smaller businesses must have access to redress if they suffer loss, damage or inconvenience as a result of the breach of conditions by energy companies.

Conclusion

21. As with all enabling legislation, the Bill only sets out the powers to be given to the Government to introduce the various market mechanisms. It is difficult to fully understand the impact of the Bill until all the details are revealed through regulations.

22. It is our view that this Bill will be one of the most important pieces of legislation during the lifetime of the current Parliament. Much needed investment is dependent on the Bill receiving Royal Assent so it is important that there are no severe delays during its passage through both Houses of Parliament.

January 2013

Memorandum submitted by Opus Energy (EN 03)

FEED-IN TARIFF WITH CONTRACTS FOR DIFFERENCE DRAFT OPERATIONAL FRAMEWORK:
SUPPLIER OBLIGATION

1. ABOUT OPU S ENERGY

1.1 Opus Energy is an independent supplier of electricity and gas to the UK business sector. Founded in 2002, the company supplies just over 150,000 business sites with energy and purchases renewable power from around 500 small UK generators. From its offices in Northampton and Oxford, Opus Energy employs 450 people. The company’s turnover to FYE March 12 was £272 million.

1.2 Our customers choose us because we provide a real alternative to the “Big 6”. We are known for offering competitively priced fixed term power products, innovative services, a high standard of customer care, and renewable energy.

2. EXECUTIVE SUMMARY

2.1 Concerns about the proposed format of Supplier Obligations

2.1.1 We feel strongly that the credit provisions and the funding methodology (“variable rate obligation”) which are proposed in the draft operational framework would be damaging to competition in the UK electricity
supply sector. In the form proposed, the supplier obligation would harm (perhaps irretrievably) the independent supply sector.

2.1.2 We consider that the proposed approach promotes the interests of investors in renewable technology over and above those of the consumer and UK businesses. It is essential that (i) the payment terms, (ii) the credit terms and (iii) the methodology for managing the variability in payment amounts are amended with a view to addressing this failing. We would support the alternative funding method (“fixed rate obligation”) mooted in the consultation document.

2.2 Payment Terms and Credit Terms

2.2.1 To support the proposed payment and credit terms of the CFD FIT scheme (as support transitions from RO to CFD FITs), suppliers will need to increase their capital requirements to such an extent that many independent suppliers could fail or exit the market.

2.2.2 The CDF FIT payment method creates a financial burden on the supplier totalling 18 months of CDF FIT charges. For Opus Energy (turnover £272 million) this would equate to an increase in working capital requirement of around £50 million. We believe that this financial burden is so extensive it will damage competition.

2.3 Variable Rate Obligation

2.3.1 The Draft Operational Framework also suggests that the supplier should “manage the variability in payment amounts”.

2.3.2 The “Big 6” electricity suppliers are multinational organisations many of whom are owned by non-UK Governments. In contrast, many of the independent suppliers who bring much needed competitive pressure to this sector are small and medium sized businesses. Many are privately funded and have a much higher cost of capital compared with the “Big 6”.

2.3.3 The suggestion that suppliers will “manage the variability in payment amounts” is one which has been written purely with the Big 6 players in mind. Independent suppliers do not have the financial capability to act as the party which protects investors of renewable plant from wholesale volatility. Our modelling (which we have shared with DECC) has found that over the last 10 years there have been two periods where volatility in wholesale prices would have led to supplier failures if the RO scheme had been based on the proposed payment method of the new CFD FIT scheme.

2.3.4 We feel strongly that the “variable rate obligation” proposal should be discarded and replaced with the suggested alternative of a “fixed rate obligation”. The fixed rate should provide stability across a minimum of 12 months.

2.3.5 A fixed rate obligation would give a consistent, predictable set of charges for the entire industry and would ensure that:

— independent suppliers can plan for future working capital requirements in a timely fashion and raise funding in advance as needed; and
— customers will have forward clarity and stability in their bills.

3. Further Details

3.1 Payment and Credit Terms

Capital Burden

3.1.2 Currently suppliers are able to purchase ROCs to meet their Renewable Obligation up to the end of August following the RO supply year (which runs April to March). In contrast, the draft operational framework proposes that suppliers will pay the CFD FITs throughout the year, one month in arrears.

3.1.3 As the source of the subsidy changes from RO to CFD FIT, a capital burden is place on suppliers which at its peak in the yearly cycle has a value of 16 months of charges.

3.1.4 In addition, if the supplier is required to post 100% cash/LoC collateral they are, in effect, prepaying all CFD FIT charges. This increases working capital requirements by a further two months.

Impact of Capital Burden

3.1.5 Taking the revised payment terms and credit terms together, a capital burden is placed on suppliers which, at its peak in the yearly cycle, has a value of 18 months’ of charges.

3.1.6 To quantify this: Opus Energy (turnover £272 million) supplies around 3TWhs of electricity a year. This capital burden would create an increase in working capital requirement of around £50 million for Opus Energy.1

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1 Based on the total charges paid for the subsidy of renewable investment for the RO scheme for 2011_12 (on the assumption that the CFD FIT scheme will over time replace the RO scheme).
3.1.7 This change in working capital is a direct transfer from renewable investors to suppliers and would have the following consequences:

— costs associated with this funding would be passed onto customers as higher bills;
— independent suppliers who are not financially strong enough to raise this capital would fail or by some other means exit the market place; and
— competition would reduce as only companies of investment grade who have low costs of capital (ie the “Big 6”) will remain in the market.

3.1.8 Consequently we consider that the proposed transfer of capital from the independent supply sector to renewable investors will damage the independent supply sector, raise significant barriers to entry, and will damage competition.

3.1.9 We consider that this promotes the interests of investors in renewable technology over and above those of consumers and UK businesses.

3.2 Methodology for managing the variability in payment amounts

Risk Burden

3.2.1 As well as the proposed changes to payment terms and credit terms, the proposal suggests that CFD FIT payments will be collected from suppliers as a monthly variable rate. Depending upon wholesale prices, these payments would be unpredictable and would be volatile. The Draft Operational Framework suggests that the supplier should “manage the variability in payment amounts”, hence transferring all risk relating to a volatile wholesale market from renewable investors to suppliers.

Impact of Risk Burden

3.2.2 To manage this risk a supplier would need to:

(i) pass the volatile payments directly through to the user on a monthly basis;
(ii) attempt to hedge the volatility; or
(iii) smear the highs and lows of costs for the customer to produce an average over time.

3.2.3 It is unlikely a customer will be happy to receive volatile energy bills. Other than those designed for very large energy users, all products in the market place are designed to protect the user from fluctuations in the costs underlying their supply of energy. Consequently option (i) would not be viable other than for large intensive energy users.

3.2.4 Option (ii) is also problematic. It will be difficult for an independent supplier to hedge this risk, since it would have to forecast the output of wind generation for which it may have no skills and certainly has no information, since it has no contractual relationship with the generators creating the risk.

3.2.5 The third option (to smear costs) would only be open to those with strong balance sheets (ie again the “Big 6”). Hence the proposed methodology of “variable rate obligation” strongly favours the “big 6” suppliers and is likely to drive independent suppliers out of the marketplace.

Conclusion

3.2.6 If the intention is that the supplier should “manage the variability in payment amounts” then this is more appropriately done in a regulated and controlled fashion using a “fixed rate obligation”. The fixed rate should provide stability across a minimum of 12 months.

3.2.7 Under a fixed rate obligation, an estimate of the next year’s charges could be set in advanced and collected throughout the year. Any under or overpayment could then be smeared as an additional collection or refund on the following year.

3.2.8 The under or overpayment charge can also include any recovery element for mutualisation of bad debt.

3.2.9 A fixed rate obligation set in this way would give a consistent, predictable set of charges for the entire industry. This would ensure that:

— Independent suppliers can plan for future working capital requirements in a timely fashion and raise funding in advance as needed; and
— Customers will have forward clarity and stability in bills.

3.3 Mutualisation of Credit

3.3.1 The framework document proposes that the CFD counterparty holds 100% of all prospective default funds. This will lead to overcollateralisation by the industry. Given a choice, we are certain that most suppliers would favour a mechanism similar to that used under the DCUSA\(^2\) for recovery of network charges. Under this

\(^2\) Distribution Charges Use of System Agreement.
agreement, credit is given to creditworthy parties and cash/LoC is only required where the CFD Counterparty can evidence a demonstrable default risk.

3.3.2 Any losses that subsequently arise are recovered through mutualisation of risk in future network charges. This ensures 100% cover for the network operator, but without the excessive costs of industry-wide overcollateralisation. There should be a consultation to discover the most cost effective way of achieving credit protection by suppliers since the burden of these costs will be supported by consumers.

January 2013

Memorandum submitted by ESB International (EN 04)

1. ESB International welcomes the Publication of the Energy Bill 2012 which seeks to implement the Electricity Market Reform and the opportunity to provide views in response to the House of Commons Public Bill Committee call for evidence.

2. The Energy Bill is a crucial step in providing market participants with a stable framework which is needed to make investment decisions and therefore help ensure that the Government’s objective of delivering low carbon, secure, and affordable energy is met.

3. It is crucial for investor confidence that momentum for reform is maintained and timely progress continues on developing the details of the Bill’s main policies, in particular the Contracts for Difference and the Capacity Mechanism in order that clarity is provided to investors at the earliest opportunity.

4. The reform will fundamentally transform the markets in which we operate. These issues are therefore critical to our business and the customers we serve. Our response provides a brief overview of ESB International and highlights what we believe are the key issues in the Energy Bill.

ESB International

5. ESB International (ESBI) brings together our worldwide generation, engineering and related services businesses.

6. ESBI continues to grow our position in the UK wind market. Our operational and development portfolio is around 165MW, comprising of: the 24MW West Durham Wind Farm in Northern England; the 20MW Hunters Hill; and 15MW Crockagarron projects in Northern Ireland. Additionally, we recently completed commissioning of England’s largest onshore wind farm, at 66MW, at Fullabrook in Devon and we have recently started construction of our 38MW Mynydd y Betws Wind Farm in South Wales. We are also active in the ocean energy sector.

7. In addition to increasing our renewable portfolio, we have been a developer and operator of independent Combined Cycle Gas Turbine (CCGT) generation projects in the GB market for 20 years. We own, operate and trade Corby power station and developed the 850MW plant at Marchwood, which was commissioned late in 2009.

8. Last September we reached financial close on our 860MW CCGT plant in Carrington, construction began later that month and the plant is intended to become operational in 2016. Additionally, we own and operate the 406MW Coolkeeragh plant in Northern Ireland. We are also developing further large-scale CCGT projects at other locations across GB, including our 1500MW project at Knottingley in West Yorkshire of which we intend to submit our planning application later this year.

9. With increases in physical interconnection, in particular the commissioning of the East-West interconnector between the UK and Ireland last year, coupled with the further development of the regional market, our operations in Ireland will become increasingly linked with the GB market.

SUMMARY

10. ESBI welcomes the publication of the Energy Bill to legislate for the introduction of Electricity Market Reform.

11. The timing of the introduction of the Capacity Market is critical and the impact of the mechanism on the market will need to be managed. We do not therefore support automatic implementation of the Capacity Market and recommend that clear criteria/triggers for when the Capacity Market would be introduced are defined. The mechanism should only be introduced when and if needed.

12. Liquidity in the forward market remains a fundamental problem. We welcome efforts made by Ofgem to address the problem. The enabling powers for the Secretary of State to take action should the problem persist is a pivotal milestone and will act as a useful regulatory backstop providing much needed confidence for independent players in the market.

13. We support the approach taken by Government to grandfather the Emission Performance Standard level of 450g/KWh until 2045 and strongly believe this is vital if investment in conventional plant is to be maintained through the rest of this decade and into the 2020s.
14. Whilst we understand and support the Government’s motivations for including enabling powers for the introduction of a target for electricity carbon intensity we believe that a specific target in the Energy Bill (as some have suggested) should be undertaken in a flexible way in order to take account of available technology and should not curtail grandfathering of existing plant as this would cause a total investment hiatus.

ESBI VIEWS

Capacity Market

15. ESBI remain sceptical about the need for a Capacity Mechanism in the GB market. We have long been on record that the necessary investment signals could be delivered by taking steps to improve both the liquidity and efficiency of the wholesale market. We believe that purpose for the introduction of a Capacity Market and its remit need to be more clearly defined to give proper effect to the proposals without unintended consequences. Care needs to be taken to ensure that it does not give the wrong signals and keeps older more polluting plant inefficiently on the system rather than encouraging the necessary investment in new build.

16. Timing of the introduction of the Capacity Market is critical and the impact that its introduction could have on the electricity market will need to be managed. We do not, therefore, support automatic implementation of the mechanism and recommend that clear criteria/triggers for when the Capacity Market would be introduced are defined. Greater transparency is crucial to engender confidence in investors.

ACCESS TO MARKETS

17. Along with other independent generators, suppliers and trading parties, ESBI believes there is currently a fundamental lack of forward liquidity in the market. Whilst there have been some recent developments that have provided a stimulus for greater liquidity in the day-ahead market, liquidity further along the delivery curve remains a problem.

18. We welcome Government’s recognition that liquidity in the market will be important to establish robust market reference prices for all technologies under the Contract of Difference mechanism.

19. We note the continued efforts by Ofgem to help address problems around wholesale market liquidity. However, there is a need for consistency of objectives and of timing on the implementation of the EMR and Ofgem’s work on market liquidity.

20. We therefore welcome the enduring enabling powers in the Energy Bill that would allow the Secretary of State to take actions to improve market liquidity should efforts made by the industry and Ofgem be inadequate. These powers should not be subject to a time limit but act as a regulatory backstop and provide much needed confidence for independent players in the market.

21. We would suggest that any interventions be governed by clear criteria and objectives. The presence of clear criteria for when such powers can be used will help with investor confidence.

EMISSIONS PERFORMANCE STANDARD

22. The EPS level of 450g/KWh will be grandfathered until 2045. We support the approach taken by Government on the EPS. In particular we welcome the key provisions in the Energy Bill, which will enshrine grandfathering measures for new generation plant, in primary legislation. This is imperative to providing investors with long term certainty given the long pay back periods that energy infrastructure requires.

CARBON INTENSITY TARGET

23. Whilst we understand and support the Government’s motivations for including enabling powers for the introduction of a target for electricity carbon intensity we believe that setting a target in the Energy Bill (as some have suggested) should be undertaken in a flexible way in order to take account of available technology and should not curtail grandfathering of existing plant as this is likely to cause an investment hiatus. Thermal Plant will continue to be needed to ensure security of supply and mitigate the impacts of significantly more intermittent generation on system security.

24. Whilst we understand that the inclusion of a carbon intensity target could provide further confidence in the Government’s commitment to decarbonisation, we believe the enabling powers along with clear criteria and details of a trigger in the Energy Bill provide sufficient clarity at this stage.

25. We would like to reiterate that it would be critical to investors that the principal of grandfathering be adhered to if a target is introduced and that changes are not made retrospectively and hence do not impact existing plant.

January 2013

Memorandum submitted by IPPR (EN 07)

This submission is from IPPR (the Institute for Public Policy Research). We are the UK’s leading progressive thinktank and produce rigorous research and innovative policy ideas for a fair, democratic and sustainable world. This submission has been written by Will Straw, associate director for globalisation and climate change.
Energy Bill

SUMMARY

1. IPPR is concerned that the Energy Bill reduces the Government’s ambition on carbon emissions reduction by the power sector.

2. To address this, we believe that a target to reduce the carbon intensity of the grid to 50gCO2/kWh by 2030 should be on the face of the Bill.

3. The Energy Bill misses an opportunity to improve Britain’s unilateral carbon price floor (CPF) which we believe will increase fuel poverty, harm the competitiveness of domestic energy intensive industries, and fail to reduce global emissions.

4. The Energy Bill should do more to improve energy efficiency for homes and businesses which is by far the most effective way of bringing down consumers’ energy bills and stimulating the economy. Greater ambition is also required to protect consumers from unnecessarily high bills.

PRINCIPLES

5. IPPR’s submission examining the Energy Bill is based on three principles. First, the carbon budgets set out in the Climate Change Act 2008 are sacrosanct. That act requires the UK to achieve a reduction in greenhouse gas (GHG) emissions of at least 80% by 2050 and 34% by 2020, against a 1990 baseline. Achieving these commitments should be done at the lowest cost to consumers while ensuring security of supply.

6. Second, in delivering its goals, the Government should be neutral towards low carbon technologies and ensure that different technologies have the opportunity to flourish. But Britain should be mindful of where its present and future comparative advantages lie and look to benefit from growing global markets in clean technologies. Recent research from Pew shows that the market for clean energy has expanded 600% since 2004 (Pew Charitable Trusts 2012).

7. Third, it is vital that Government policy provides long term certainty to investors and industry, and is insulated as far as possible from the political cycle. Achieving as much consensus as possible is therefore critical.

MEETING THE CARBON BUDGETS

8. The level of ambition in the Bill does not appear to be commensurate with the advice laid out by the Committee on Climate Change (CCC) for achieving the carbon budgets. The CCC has stated that meeting the 2050 emissions reduction target “will only be achievable if electricity generation is almost completely decarbonised by 2030” (CCC 2008: 197). More specifically, the CCC has stated that “the carbon intensity of power will need to fall from around 500g/kWh today to 50g/kWh in 2030” (CCC 2010: 293).

9. DECC has announced that the Government will take powers to set a decarbonisation range for the power sector for 2030 but that a decision to exercise this power will be taken once the Climate Change Committee has provided advice in 2016 on the fifth Carbon Budget (DECC 2012a).

10. Worryingly, DECC have indicated that the scale of ambition for an eventual power sector decarbonisation target could be far higher than that recommended by the CCC. The Summary Impact Assessment (DECC 2012b: 12) states that “the Impact Assessment will be updated early in the New Year to include analysis of decarbonising the power sector to an average emissions level of 200gCO2/kWh in 2030”.

11. A lack of certainty relating to the level of ambition in the 2020s for the power sector could have a destabilising impact on the development of the domestic supply chain for low carbon energy sources as well as for efforts to electrify the transport sector, which is predicated on decarbonised power.

12. Uncertainty for investors would ultimately feed through as higher energy prices for consumers and businesses due to the increased risk profile of investments. Forthcoming research by IPPR will examine the implications for the economy and households of different power sector decarbonisation trajectories. This will show a higher cost burden for a target of 200gCO2/kWh by 2030 as opposed to a target of 50gCO2/kWh by 2030.

13. A target to reduce the carbon intensity of the grid to 50gCO2/kWh by 2030 should be on the face of the Bill. This is the most important step the Government can take to provide certainty to industry about the direction for the energy market. This would mean placing a legal requirement on Government to demonstrate at specific intervals, for example every five years, that the implemented revenue support mechanism would result in a scale and mix of new generation that is consistent with a pathway to 50g CO2/kWh carbon intensity in 2030. The CCC should have a statutory role in supporting the Government to determine potential decarbonisation pathways, based on criteria such as cost effectiveness and risk, and holding Government to account for meeting the target.

EMISSIONS PERFORMANCE STANDARD WITH GRANDFATHERING

14. As set out above, meeting the carbon budgets in line with the CCC’s recommendations requires an “almost completely decarbonised” power sector by 2030. The Government has stated that it wants to introduce emissions performance standard (EPS) grandfathering for new power stations at 450g CO2/kWh until 2045. The effect of this policy will be to allow new gas plants to operate unabated throughout this period. The only way IPPR can conceive that unabated gas could play a role beyond 2030 is if it runs at very low load factors and provides capacity only at times of low renewable generation or peaking demand.
15. A better approach would be an EPS with a level of 300g CO₂/kWh by 2030. But if the Government does continue with EPS grandfathering to 2045 it must retain the power to change the emissions level and time period without recourse to primary legislation.

FEED-IN TARIFFS WITH CONTRACTS FOR DIFFERENCE

16. IPPR believes that a welldesigned mechanism of feedin tariffs with contracts for difference (CFD) are a viable option for bringing forward investment in a range of lowcarbon generation technologies.

17. Many of the problems with the Government’s original proposal, particularly relating to the counterparty arrangements, have now been resolved. One outstanding issue is the importance of absolute transparency, which must be provided on the agreed strike price and the interim “letters for comfort”. It is important that these arrangements retain the principle of technology neutrality and ensure that intermittent sources are not unduly penalised.

CARBON PRICE FLOOR

18. The carbon price floor (CPF) has already been enacted but the Energy Bill presents an opportunity to amend this flawed scheme. IPPR’s report Hot Air (Maxwell 2011) details how unilaterally introducing a CPF in Britain will undermine the economic efficiency of the EU emissions trading scheme (ETS) and could waste up to £1 billion. Because the market is EUwide, a higher price in the UK due to the CPF will lead to a lower price elsewhere and to the same amount of carbon being emitted.

19. The Government’s own data shows that the CPF will push up to 60,000 more UK households into fuel poverty as energy companies pass on the additional costs of paying the tax to consumers. By 2020, the number of households in fuel poverty is likely to rise by 50,000 to 90,000 per year as a result of the CPF.

20. IPPR’s report Europe’s next economy (Straw et al 2012) outlines how a superior approach to meeting the concerns of lowcarbon businesses for a higher and less volatile carbon price, without disadvantaging British business, can be delivered through the creation of a European central carbon bank to regulate the price of carbon in a symmetrical fashion. If prices were seen as too low to achieve EUwide emissions reduction targets, the carbon bank could hold back allowances. By contrast, it could issue allowances if prices rose too high.

ENERGY EFFICIENCY

21. The Government is consulting on measures to reduce demand for electricity and indicated that it may bring amendments to the Bill. With emissions from buildings accounting for over a third of UK carbon emissions, improved energy efficiency and increased deployment of renewable heat is vital if the UK to meet its legally binding commitments for 2020 and 2050 as well as improving security of supply and the affordability of energy bills.

22. Investment in improved energy efficiency of the UK housing stock has been shown to be one of the best investments possible in terms of boosting shortterm employment and economic activity. It also improves medium to longterm economic efficiency by reducing the economy’s dependency on imported gas (Consumer Focus 2012).

23. There are concerns about whether the Government’s green deal initiative, the energy company obligation (ECO)—which replaces two energy efficiency policies: the carbon emissions reduction target (CERT) and community energy savings programme (CESP)—and the “Warm Front” fuel poverty programme, will be sufficient to meet statutory carbon and fuel poverty targets.

24. For example, research by IPPR (Platt et al 2012) shows that the ECO will exclude over two million fuel poor households. Poor design means that the ECO could put up to £116 on the average bill. The report says the Energy Company Obligation, combined with the Green Deal, will achieve just 26% of the emissions reductions achieved by current obligations on suppliers and only 40% of the savings that could be achieved through low cost measures like loft insulation top-ups and cavity wall insulation (Ibid).

25. Given the poor state of the economy and persistent unemployment, particularly youth unemployment, any additional Government stimulus or “switch spending” should make energy efficiency one of its priorities. The Government should also give consideration to funding energy efficiency through the Green Investment Bank.

26. A targeted green deal should also be introduced for manufacturers. At present, there are few positive incentives for conventional manufacturers to reduce process emissions or to retrofit their plants and premises. Those that have done so tend to be large multinational firms with strong balance sheets and the ability to raise capital. The secretary of state, Ed Davey, has expressed a desire to expand the green deal to businesses but few details are currently available. He should do so initially by targeting small and mediumsised manufacturing businesses with the highest energy costs relative to total costs, with a view to rolling out the scheme on a wider basis if it is successful. In addition, 100% capital allowances for two years should be made available to manufacturers looking to invest in a broader array of clean energy supply technologies and more energy efficient production equipment and processes.

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3 Since the upfront costs of any green deal measure would be paid by the finance sector and paid back by the recipient over time through the savings on their energy bills, the scheme would not require public funding. However, the Government may wish to introduce limited, timebound incentives to encourage take-up. One option would be to set aside funds for early adopter incentives, perhaps offered in the form of a temporary cut to business rates for firms that sign up during an initial introductory period. This approach would mirror proposals for the current green deal scheme for homeowners, for which the Treasury has set aside £200 million for early-adopter incentives.
CONSUMER PROTECTION

27. The Energy Bill is largely silent on consumer protection which is a growing concern. It is positive that the Government have announced that they will limit the number of tariffs that each supplier can make available—an idea that was suggested by IPPR in February 2012 (Platt 2012). Nonetheless, further reform is needed to enhance transparency in the energy market, particularly in the vertically integrated companies.

28. The Government should also ensure that tariffs are reflective of suppliers’ costs since Ofgem’s actions have so far proven ineffective in tackling so-called “loss-leading” tariffs. This is a major problem since these tariffs are subsidised by higher charges for loyal customers, including vulnerable groups such as the elderly and those on low incomes who are less likely to switch energy supplier.

REFERENCES


January 2013

Memorandum submitted by E.ON (EN 10)

EXECUTIVE SUMMARY

The Energy Bill is a critical piece of legislation for both energy companies and their customers. We will want to ensure that the Bill meets two key objectives:

— Will our customers get value from this change?
— Will the proposals provide a robust basis for investment?

Electricity Market Reform (EMR) is needed to ensure we have a long term solution to delivering low carbon energy at an affordable price to customers, whilst ensuring we maintain secure supplies. This is why we want to see:

— A framework of policies which will incentivise investment in low carbon generation and energy efficiency measures to meet our climate change target; and in existing and new flexible fossil plant to maintain security of supply.
— Urgent implementation of this framework, while allowing time to ensure it is designed effectively. The existing timetable for the Bill and the associated secondary legislation should allow for this but should not be allowed to slip.
— Policy stability—to avoid unnecessary risks and cost to customers, while allowing for some lessons to be learnt as we gain experience with the new system. Political consensus on the key EMR policies would be very helpful.
No unnecessary complexity—we are concerned that the Government is in some areas, particularly with the capacity mechanism, developing overly complex proposals.

Affordability—we support the overall direction but would caution that some elements of policy design may not represent best value for our customers. We must focus on the lowest cost means of achieving these goals to ensure prices remain as affordable as possible for customers.

Overall we believe EMR is moving toward these goals. However, we have a number of outstanding concerns which we expand on below.

We also believe there needs to be frankness and transparency about the impacts on customers’ prices. It is also important to note the need for clearance of some policies, particularly the contract for difference mechanism, under EU state aid rules and more information about DECC’s approach here would be welcome. This is a potential source of significant delay and uncertainty given the possibility of legal challenge to decisions taken.

Specific Policies

Capacity Mechanism (Clauses 17–28)

1. The capacity mechanism is about ensuring we have secure energy in the UK at the lowest cost to customers. It should not be designed specifically to reward new plant over existing plant—it should be about delivering capacity at the least cost. The most likely type of new investment will be gas-fired plant. However, this does not mean a second dash for gas as some new gas plant is still needed in a low carbon energy system, particularly to maintain secure supplies when there is limited generation from intermittent plant, such as wind. The role of gas-fired generation in the UK electricity market is likely to change significantly as the electricity system decarbonises. We see our electricity system balanced by gas, not based on gas.

2. Gas-fired CHP plant such as our plant at Grain should have an important role to play in the UK gas strategy to ensure gas plant continues to deliver significant reductions in carbon emissions and the Government should continue to incentivise this in future, ensuring any future support also applies to existing CHP sites that have seen significant cuts to support in recent years (e.g. removal of Climate Change Levy Exemption announced in Budget 2012).

Our view on the proposals

3. We support the introduction of a capacity mechanism and believe it will mean customers benefit from a secure electricity system at lowest cost. However, although it may be “implemented” in 2014 this will not incentivise any new or existing generation until 2018–19 under current proposals. In our view, the capacity mechanism should be in place at the earliest opportunity to avoid premature plant closures which could put security of supply at risk.

4. The Bill does not contain enough detail on the capacity mechanism (Clauses 18 and 19) and provides the Secretary of State with some very broad powers of implementation through secondary legislation. Consideration should be given to making these powers more focussed on delivering specific objectives. Investors need certainty of the policy design so that they can trust that it will not change frequently as a result, for example, of changes in view from successive Ministers.

5. The design of the capacity mechanism should also not introduce unnecessary levels of risk or complexity for generators or suppliers—unnecessary risk should be avoided to ensure costs to customers are minimised. For example, as currently proposed the penalty mechanism assesses plant performance (electricity generated or demand reduced) retrospectively; this means a generator whose plant was not operational at a particular point in time (for example, if it was not needed because wind generation output was high) could face a penalty for an event the plant could not anticipate, could not respond to (it takes time to begin generating from a plant that is not operational—response time depends on the generation technology) and of which it had no warning. As currently proposed this is likely to increase the cost of capacity unnecessarily. We believe a better approach would to ensure generators are given sufficient notice and time to prepare to generate.

Contract for Difference (CFD) (Clauses 2–16)

6. Contracts for Difference are needed to incentivise investment in a mix of low carbon energy in the UK, including wind, biomass, new nuclear and CCS delivered at the lowest cost to customers.

Our view on the proposals

7. We welcome the progress the Government has made since the Bill was published in draft. In particular we were pleased to see confirmation of a single counterparty (Clause 3) which will ensure the contract is of a more normal commercial form and with a clearly identified entity. This will be a Government owned limited liability company with powers to impose a levy on all licensed suppliers through a new Supplier Obligation. We also welcome the proposed approach for allocating CFDs. However, there are still some outstanding concerns that we hope will be addressed as the Bill progresses.

8. We are concerned that the counterparty may seek to recover costs from suppliers on a variable, back to back basis. Suppliers will find it difficult to estimate these costs in advance as they change with short term variations in the volume of generation (for example when it is windy) and the difference between the strike and reference
price. We believe this uncertainty should be managed by the party able to do so at lowest cost to consumers. In our view the CFD counterparty is likely to be able to access cheaper finance than suppliers through its ability to charge costs to all consumers in the UK and could therefore better manage the volatility on behalf of suppliers. DECC is consulting on this issue and there appears to be provision in the Bill for the counterparty to accumulate a reserve which would enable it to manage uncertainties itself rather than pass these on to suppliers. The Government has issued a call for evidence on this issue which will be inputting.

9. While the greater revenue certainty that CFDs provide may reduce risks and thus the cost of capital for investors, Ministers still need to look at the remaining risks for developers (eg political risk, volatile wholesale prices once the CFD has ended, narrow definition of change of law which will impact risk).

10. The market reference price for baseload CFDs (for example, for biomass or nuclear) is unclear and could be based on a basket of forward prices which creates concern. For developers, it will be difficult to achieve the reference price, whilst suppliers will find it more difficult to purchase energy at the reference price to manage their CFD exposure.

Access to market (Clauses 34–36)

11. We understand the perceived difficulties for some renewable generators in securing access to the market and firmly believe the CFD proposals will improve the availability of contractual arrangements with suppliers or other companies to facilitate this access. Some wind generators are also concerned that they may not be able to pass on to suppliers the costs arising from the need to balance generation and demand in the balancing market.

12. We are actively engaged with DECC and discussing means of resolving these issues. However, we are concerned that the powers included in the Bill to ensure access to market are excessively wide-ranging, giving the Secretary of State very wide powers of intervention in the market. This “Sword of Damocles” will create uncertainty for energy suppliers, and risks increasing costs to customers unnecessarily. These powers need to be much more closely defined and time-limited.

Emissions Performance Standard (EPS) (Clauses 38–42)

13. We do not see the need for an EPS as set out in the Bill. Decarbonisation of the power market will be driven by the system of CFDs and by the carbon price through the EU Emissions Trading Scheme, not by the EPS.

14. Nevertheless, we recognise that this was a commitment in the coalition agreement and that the Government has drafted the legislation in a way which is designed to provide greater certainty for potential investors. It is helpful that the level of the EPS is set out on the face of the Bill and the circumstances in which it would be applied to refurbishment of existing plant have been clarified.

15. However, the Bill needs to make it clear that the 450g/kWh standard applied to plants consented after Royal Assent will not then be subject to change during the life of these plants. Clarity on full grandfathering will help generating plant already in operation and also reduce the risk of stranded assets. In addition it would give a positive signal for developers looking to invest.

Consumer redress (Clause 117 and Schedule 14)

16. We support the Government’s desire to ensure that customers receive the right compensation when energy companies get things wrong and seeing the redress go directly to customers rather than into the Treasury pot is welcome. However, it is important that total payments by companies through consumer redress and fines as a result of a breach of a licence or other obligation are proportionate and the licensed companies do not face double jeopardy, through both fine and redress.

Energy Strategy and Policy Statement (Clauses 109—116)

17. We welcome a clear set of strategic priorities from the Government including the respective roles of Government and other public bodies. We also welcome the intention to set these at a high level ensuring the statement is capable of enduring for the life of a Parliament.

18. We are concerned about the potential effect on the role of Ofgem and its relationship with Government. In general the proposed approach would appear to move away still further from Ofgem’s role as an independent economic regulator and increase the level of political influence over its functions. This could lead to the regulator acting less predictably or factoring in considerations which we would not normally expect.

19. It will be important to ensure there is agreement at the beginning that the outcomes the Government wants to achieve are in the interests of customers, and that companies understand how these policy outcomes will be reflected in how Ofgem regulates the market.

OTHER MEASURES NOT YET INCLUDED IN THE BILL

2030 decarbonisation target

20. The UK needs to move to a decarbonised electricity system—this should not be up for debate. The focus must be on agreement at the EU level—we would not want each member state doing their own thing and instead
the EU Emissions Trading Scheme should remain a key driver in decarbonising the European economies.

21. The proposal to provide in secondary legislation for a carbon intensity target for electricity generation in 2030 to be set in 2016 as part of consideration of the 5th carbon budget seems a sensible compromise. Setting a target now on the face of the Bill would have risked setting an objective which could have imposed excessive costs on customers. Any decarbonisation target needs to be flexible so that it can reflect the cost of delivering it. Although we have no objection to such a target and entirely support the need to have largely decarbonised the power sector by 2030, we believe the policies set out in the Bill will be key to driving low carbon investment.

CHEAPEST TARIFF PROPOSALS

22. We note the intention to introduce legislation to require suppliers to offer customers the lowest tariff for the payment method they are on. We believe this can be made to work to benefit customers as a whole, as it will mean that suppliers can no longer offer deeply discounted tariffs to new customers at the expense of existing customers, a practice we ended early in 2012. DECC is currently consulting on this and also looking at legislating to implement aspects of Ofgem’s retail market review proposals.

23. It is important that action taken by DECC and by Ofgem is consistent and coherent. Whilst we recognise the decision to legislate as promised by the Prime Minister, we would caution against regulating the retail market in detail though primary legislation. This may prove too inflexible and create confusion as to the respective roles of Government and of Ofgem.

ELECTRICITY DEMAND REDUCTION

24. The Government is currently consulting on demand reduction proposals and we expect something to be brought forward as part of the Bill at a later stage in the legislative process. The proposals are clearly aligned with the Government’s overall energy efficiency strategy which we fully support. However, it is extremely difficult to properly assess the proposals due to a lack of detail at present.

25. We are concerned that there seems to be an urgency to move towards further financial incentives without an appropriate cost benefit analysis for each of the proposed policy measures. We strongly believe that there are more obvious cost effective efficiency measures available to Government which should be the priority for implementation, including:

— A more robust approach to compliance for circumstances where standards already exist (eg building regulations).
— Improved targeting of existing policies, expansion of Enhanced Capital Allowances (ECAs) for instance could promote efficiency investment without the need for new untested policy approaches which risk confusing the already busy policy landscape further.
— Enhanced education and promotion. In this regard the information hub and the buyers commitment proposals in the consultation appear to be sensible.

26. We agree that barriers exist to delivering a greater level of demand reduction, but would urge a greater initial focus on the non-financial solutions to the challenge and on simplicity not complexity. Financial incentives may be required but these should not be prescribed without first looking at how we can maximise existing efficiency policies and carrying out a detailed Impact Assessment. For instance if current policies are failing to deliver the desired outcome the Government should be assessing if this is due to a lack of awareness, ineffective or poorly targeted support, or simply a lack of interest.

27. We are fully supportive of the non-fiscal measures included in the consultation and would prioritise these. Optimising the existing policy landscape is a sensible and essential first move.

January 2013

Memorandum submitted by Energy UK (EN11)

1. INTRODUCTION

1.1 Energy UK is the trade association for the energy industry. We have over 70 companies as members that together cover the broad range of energy providers and supplies and include companies of all sizes working in all forms of gas and electricity supply and energy networks. Energy UK members generate more than 90% of UK electricity, provide light and heat to some 26 million homes and last year invested £10 billion in the British economy.4

4 Powering the UK report, Ernst and Young, 2012.
1.2 The energy sector faces significant challenges to move to a low carbon economy, modernise energy infrastructure, replace ageing plant coming offline, maintain secure supplies and all at a cost that is affordable to consumers.

1.3 Government estimates that over £110 billion of investment will be needed by 2020. The energy sector already makes a significant contribution to the UK economy—£20.6 billion in 2011. This presents unique growth opportunities for developing supply chains, new skills and expertise, and jobs.

1.4 The purpose of the Energy Bill is to provide a stable framework to bring forward the investment needed to build a new generation fleet that is fit for the future including, renewables, nuclear, gas and carbon capture and storage. The scale of transformation will be huge and it is vital that the package of reforms is durable over political terms.

1.5 Political risk is a concern for international and domestic investors, in terms of stability and complexity of the proposals in the Bill, and also the interactions with wider policies, particularly at the EU level. Cross-party support extended across political terms is essential to provide investors with confidence on the UK market.

1.6 It is vital that throughout this transition the focus remains on the customer. The policy proposals must be affordable for householders, as well as businesses so as to maintain UK industrial competitiveness.

1.7 We have structured our written evidence to follow the Chapter order of the Bill, with a short summary of our key points below. We would be pleased to attend a Committee session to discuss our evidence in more detail, if helpful.

2. SUMMARY OF KEY POINTS

2.1 Timely progress needs to be maintained as the Bill makes its way through Parliament.

2.2 A key focus throughout the Bill must be the affordability of the proposals to customers and the competitiveness of UK industry. The proposals will involve significant costs which will affect electricity prices and it is important that these costs are considered and accepted by Government and the public. The Levy Control Framework provides a mechanism for doing this.

2.3 The legislation proposes a single counterparty for the contracts for difference (CFDs) which is welcomed. Arrangements for the CFD counterparty must be robust with the levy owed as a statutory debt from electricity suppliers to the counterparty body, so that the body can take action immediately to recover sums owed without needing to engage Ofgem’s enforcement process.

2.4 Electricity suppliers should have sufficient foresight on the costs which they will be liable to pay the CFD counterparty.

2.5 Generators and investors should have confidence that when entering into a CFD the financial basis of the contract remains economic for its 15 or 20 year duration. Given the evident difficulty of forecasting with any accuracy any changes in law or regulation over such a long period, the CFD contract terms may need to be adjusted to reflect these. Stronger change of law protections are therefore required. There will also need to be provisions dealing with other events that might otherwise frustrate the contract, for example if the chosen reference price index ceases to exist.

2.6 The UK is respected for its grandfathering arrangements thereby avoiding retrospective changes which can undermine investments based on previous policy. It is very important that the principles of grandfathering are maintained with the transition from the Renewables Obligation (RO) to Contracts for Difference (CFD) as well as the Emissions Performance Standard.

2.7 The Bill proposes that in the early stages of investment considerations and before the CFD mechanisms come into force that there will be Investment Instruments which will be awarded by Government. The same requirements for CFDs set out in the Bill should apply to these Investment Instruments.

2.8 The capacity market proposals are intended to ensure that there is always sufficient supply of electricity to meet UK needs. The Capacity Market mechanisms should be open to existing as well as new generators on an impartial basis and be available for any reliable technology.

2.9 The Bill gives the Secretary of State wide-ranging powers to bring the capacity market into effect. These powers could be used for purposes other than a capacity market. Clarity on the purpose, use of clauses and the design details for a capacity market are needed to ensure powers are used appropriately and/or refined.

2.10 The GB System Operator (National Grid) manages the GB transmission system. The System Operator has been chosen to act as the EMR Delivery body. A consultation is underway on synergies between the Delivery Body and System Operator and potential conflicts of interest. It is very important that any conflicts are properly managed, where possible by constructing the functions of the Delivery Body and the System Operator in such a way so as to eliminate the problem at source.

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5 The UK has also committed to reduce its carbon emissions set out in the Climate Change Act—80% reduction in greenhouse gas emission against a 1990 baseline—and source a larger proportion of energy from renewable and low carbon sources—15% of UK energy from renewable sources by 2020. This equates to approximately 30% of electricity being generated by renewables.

6 The majority of coal plants, which currently provide on average 40% of our electricity will close between now and 2020 due to new EU environmental and emissions standards. Existing nuclear plants will reach the end of their life between now and mid/late 2020s.

7 Powering the UK report, Ernst and Young, 2012.
2.11 All market participants need to be able to access and compete effectively in the market. The Bill looks to address the issues of market access and liquidity—liquidity is a measure of the ability of suppliers and generators to buy and sell in the market. We are working with all parts of the industry to develop proposals which look to address concerns in these areas. We will advise stakeholders in due course.

2.12 Operators of projects supported under the Renewable Obligation (predominantly wind, hydro, solar and biomass) need assurance that investment committed in good faith at a defined ROC price will be fully grandfathered under a fixed-price regime. Generators should not be penalised for bringing forward projects ahead of the introduction of the CFD regime.

2.13 Urgent progress is needed to invest in and develop carbon capture and storage (CCS) demonstration projects. We therefore believe that CCS demonstration projects should be exempt from the EPS while a project is fully commissioned and operability proven within a defined window (potentially three years).

2.14 We agree with the proposal to review the progress in achieving objectives on electricity market reform set out in Part 1 of the Energy Bill (Clause 46). This review should include a consultation that draws upon experience from industry and other stakeholders and includes affordability.

2.15. We note the proposals to clarify the roles and responsibility of Ofgem, the requirement for it to make an annual strategy presentation and to have its functions reviewed in five years. Care will need to be taken to ensure that the principle of independent regulation is not compromised.

2.16 The Bill proposes to introduce new powers for Ofgem to enable it to impose financial fines and issue compensation if a licence condition is breached. It is welcome to ensure that consumers benefit in enforcement cases. The level of any fine should take account of compensation paid so that the total is at the appropriate level. A framework will be required to bring structure to enforcement decision-making which draws on best practice from other areas. To ensure consumers benefit from good decisions a referral mechanism for independent assessment based on the merits of the case is needed.

2.17 Alongside large-scale generation, consideration is also needed on the role of small-scaled, embedded generation and demand side measures. An extension to the small-scale feed-in-tariff might enable smaller scale generation to compete in the market under a mechanism suitable for their scale. However, further consideration should be given to other variable cost incentives to can help larger-scale (industrial) CHP plants. This would help encourage new investment in CHP which has been undermined through the retrospective removal of levy exemption certificates. This is of particular importance to some industries where heat is required for their processes.

2.18 In implementing EMR, consideration must be given to other market arrangements and changes to the wider policy framework to take us to 2020 and beyond, including: the planning regime, network upgrade, smart meters installation, energy efficiency improvements and technological innovation.

3. Chapter 1—General Considerations

3.1 This Chapter sets out the objectives of EMR which the Secretary of State (SoS) should have regard to when developing and implementing proposals under Part 1 of the Energy Bill.

3.2 Clause 1 (1) sets out the parts of the Bill to which the objectives should apply. It only lists certain provisions in the Bill, for example it excludes investment instruments and route to market. We believe the objectives should apply to all of Part 1.

3.3 Clause 2 sets out the objectives the SoS should have regard to. These are: carbon reduction targets and budgets set in the Climate Change Act 2008; ensuring security of supply; consideration of the likely costs to consumers; and the EU renewable energy target to source 15% of energy demand from renewable sources.

3.4 It is important that the affordability of the EMR package to UK consumers is carefully considered and we welcome the inclusion of “likely costs to consumers of electricity” in the list of objectives. Clarity on how affordability will be assessed or measured would be helpful. Greater transparency is needed on the costs to consumers of Government policy and the subsequent impacts on consumers’ energy bills.

3.5 A reference to generators being able to finance their activities should be added as an additional criterion. Without this balance the SoS has a statutory duty to consumers but no duty to generators to consider whether the regulations are financeable.

4. Chapter 2—Contracts for Difference

4.1 This Chapter provides detail on Contracts for Difference. A CFD is a long-term contract designed to provide low carbon electricity generators a stable revenue stream in order for them to bring forward or secure finance. The CFD will include a Government set “strike price” and a “reference price” which acts as proxy for the wholesale market price over a specified period of time. When the reference price is below strike price, the difference between the two is paid to the generator (the “difference payment”). When the reference price is above the strike price, the generator pays the difference to the CFD counterparty. There will be CFDs for intermittent generation (eg wind, solar) and baseload (eg nuclear).

4.2 The SoS is granted powers under Clause 3 to designate a company or a public authority to act as the CFD counterparty. We strongly support changes made since the draft publication of the Bill to incorporate a single CFD counterparty to ensure contracts are private law. However, current drafting of Clause 3 still allows for the
designation of multiple CFD counterparties, potentially implying that different counterparties could be attached to different CFDs. Clarity on this would be welcomed.

4.3 It is our understanding that the CFD counterparty body will be created and owned by Government. The Delivery Body for EMR will be responsible for allocating CFDs to eligible generators. It will be instructed by the Delivery Body to enter into a CFD contract with generators who have been awarded a CFD and will be responsible for paying generators difference payments owed to them. The CFD counterparty will collect funds to make these payments from electricity supply companies via a supplier obligation.

4.4 Clause 5 sets out a requirement for the SoS to oblige electricity supply companies to make payments to the CFD counterparty for the purpose of paying the CFD contracts. These payments will in turn be collected from consumer electricity bills. It is important that the process for collecting CFD payments is straightforward and transparent to consumers.

4.5 The sum required by the CFD counterparty from electricity supply companies will depend on the type of generation and the volume of generation attached to a CFD. This means that CFD payments will vary and this potential volatility needs to be managed to minimise impacts on consumer bills.

4.6 DECC is considering two options for the design of the supplier obligation. The first is a variable-rate supplier obligation which would require the CFD counterparty to collect difference payments over a specified period from electricity supply companies as soon as possible in order to pay generators. It would require a supplier to be able to forecast their exposure to CFD payments over a given period.

4.7 Forecasting exposure is complex as it requires information on a number of factors: the generation mix eligible for CFDs, the volume of generation that is attached to a CFD, a supplier’s share of the market, strike prices and any indexation of strike prices. Forecasting risk could be reduced by requiring the System Operator/Delivery Body to provide regular forecasts to help suppliers calculate their CFD liability and collateral requirements.

4.8 The second option is a fixed-rate supplier obligation. Under this option the CFD counterparty would forecast the total amount required from electricity suppliers over a given period and set the levy in advance. It has been suggested that this could be simpler to administer and more transparent to consumers. The CFD counterparty would manage under or over-collection with reconciliations to balance positions. It is possible that a fixed levy could result in significant cash call at point of reconciliation, but more frequent reconciliations could help minimise this.

4.9 Clause 5 (2) (b) is a helpful clause as it enables the CFD counterparty to hold sums in reserve for the purpose of making CFD payments. The ability to hold sums in reserve could help smooth the impact on consumer bills and would be necessary if Government were to pursue a fixed-rate supplier obligation.

4.10 Clause 5 (3) requires electricity supply companies to post collateral in respect of their liability for CFD payments. A requirement to hold what could be excessive sums for collateral will affect a supplier’s cash-flow position and the ability to secure new finance at an appropriate cost. Collateral requirements for CFD payments should be proportionate to the liability and aim to lessen the burden on all parties.

4.11 The draft Heads of Terms states that the CFD counterparty would “pay when paid”. A “pay when paid” principle introduces a significant risk that generators would not get paid if the consumer levy was potentially repealed. This undermines the stability a CFD is designed to offer. There is also no power provided in primary legislation that would enable or incentivise the CFD counterparty to recover funds direct from electricity suppliers. The levy payments should be owed by suppliers to the Counterparty Body as a debt actionable at the party’s suit, as well as any regulatory requirements to pay. This would enable any non-payment to be addressed without waiting for the Ofgem process. A duty on the counterparty to pursue debt would be helpful; for example, if a supplier defaults, the counterparty may be more inclined to socialise costs across all suppliers, increasing the amount they need to collect, rather than pursuing the debt from the supplier that has defaulted.

4.12 Investors and generators need confidence that they will receive regular CFD payments which can be best achieved by ensuring the CFD counterparty can enforce debt collection. We believe Clause 5 (6) should specify a statutory power for the CFD counterparty to recover CFD payments from electricity suppliers. This is, however, a relatively low probability outcome, except for isolated short periods.

4.13 The CFD is two-way. This means that while generators receive difference payments when the market reference price is below the strike price, the reverse is true in that when the market reference price is above the strike price, the generator pays the difference back to the CFD counterparty. Provisions for this are set out in Clause 7, but there is little detail on how the payment flows would work. Further detail is therefore needed on how payments back from generators would be distributed to consumers. It is vital for the integrity of the proposal that it clearly shown how consumers benefit when the reference price is above the strike price.

4.14 Clause 8 (4) allows for surplus funds collected by the CFD counterparty to be transferred to an HM Treasury consolidated fund. Clarity would be welcomed from Government to understand how surplus funds transferred to HMT will be used. Our preference would be that if there are surplus funds due to over-collection, these are used to lower future payments collected.

4.15 The affordability of policies is paramount. HM Treasury has set a cap on the total cost of CFDs to consumers through the Levy Control Framework. We support appropriate budgetary control, however, a balance
is needed to manage costs to consumers and ensure generators can confidently secure CFDs. Clarification is needed on how Clause 13, which enables the SoS to limit CFD allocation if a maximum cost is incurred, would work in practice. It is important to understand what the trigger would be for this, particularly the process that will be used and whether decisions would impact on CFD provision pre or post-allocation. It is essential that industry has sufficient warning of potential budget constraints and when they might occur.

4.16 Given that deliverability of CFD proposals set out in Chapter 2 relies on significant investment coming forward from generators, it is surprising that generators are not listed as a statutory consultee in Clause 14. Generators, both embedded and licensed, should be included as statutory consultees.

4.17 It is not possible to predict future market conditions or changes in law over the contact duration that CFDs are designed for. A sensible level of flexibility is needed to ensure that projects financed under these instruments remain viable over the contract duration and are protected from changes that could not have been reliably predicted. Change of law provisions are included in the draft contract Heads of Terms, but these do not go far enough. In addition to changes in law that may have a material impact on a project or generator, consideration should also be given in the contract to other changes to the electricity market, for example: changes to connection charges, network charges and balancing costs.

4.18 Combined Heat and Power (CHP) projects have been adversely affected by the retrospective removal of levy exemption certificates (LECs). Removal of LECs moves CHP down the merit order and penalises developers that have already invested in CHP in good faith. An extension to the small-scale feed-in-tariff would enable small-scale, embedded generation projects to compete in the market under a mechanism suitable for their scale. However, further consideration should be given to other variable cost incentives to help larger scale (industrial) CHP plants, such as a premium feed-in tariff. This will enable CHP maintain its place in the merit order and thus maximise carbon savings.

4.19 Under the EMR proposals, only exported generation will be covered under a CFD. This is a change for the RO, where Renewable Obligation Certificates (ROCs) are issued for total generation. It has been suggested that this will harm plant where there is on-site usage.

5. Chapter 3—Capacity Market

5.1 Chapter 3 introduces proposals allowing the SoS to make provisions for a capacity market to ensure there is sufficient electricity capacity available to cover consumer demand, acting as an insurance policy against the possibility of black-outs. Government has stated that it is minded to introduce the first capacity auction in 2014.

5.2 The provisions set out for a Capacity Market in the Bill are very broad. Clause 17 could include a more specific explanation of the purpose for introducing a capacity market. Clause 22 could potentially be used for purposes other than a capacity market and the wording should give more assurance that provisions could not be invoked for other purposes.

5.3 It is important that the design of any capacity market considers the potential impact of and on, existing initiatives, including Ofgem’s Significant Code Review,9 Cash-out9 and short-term operating reserve (STOR).10

5.4 If implemented, the capacity market should provide a level playing field for providers of firm and flexible capacity and both new and existing plant should be able to participate on an impartial basis. Clause 24 sets out provision for enforcement and dispute resolution. This is welcome and consideration should be given to whether an independent body might be created for this purpose.

6. Chapter 4—Conflicts of Interest

6.1 National Grid in its role as GB System Operator, operates the Electricity Transmission system. The GB System Operator has been chosen to act as the EMR delivery body. There are concerns that as well as synergies between the conferred EMR delivery body functions and the System Operator’s current role, there are also potential conflicts of interest that could arise.

6.2 It is very important that the consultation on conflicts of interest takes full account of the information provided from the industry and employs an EMR Governance structure that appropriately manages the potential for conflict of interest.

6.3 Clause 32, extends insolvency protections offered under energy administration orders to the Systems Operator to include its EMR functions. If the System Operator were also the CFD counterparty, energy administration orders would also protect the CFD counterparty. However, this is only case if the System Operator

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8 Significant Code Review (SCR)—led by Ofgem the SCR assesses whether changes to gas market arrangements are needed to enhance security of supply.
9 Cash-out Review—Ofgem is leading a review of electricity cash-out prices. “Cash-out” is the price paid by a market participant that has either consumed or generated more or less electricity than it was contracted to.
10 Short Term Operating Reserve (STOR) provides electricity at very short notice to ensure that the GB system is balanced throughout the day. The System Operator runs the STOR service.
was the CFD counterparty. Clarification is needed on what protections would be offered to the CFD counterparty which may be in financial distress, if it is not the System Operator.

7. Chapter 5—Investment Instruments (Schedule 3)

7.1. Chapter 5 provides details on Investment Instruments, designed to bring forward investment that is needed before CFDs become operational. Provisions for CFDs should also apply to Investment Instruments. It is important that the process by which strike prices for Investment Instruments is set is transparent and open to scrutiny.

8. Chapter 6—Access to Market etc

8.1. This Chapter addresses concerns regarding access to market, particularly for independent generators, including routes to market and liquidity.

8.2. Some independent generators that need to secure external finance to develop their projects enter into Power Purchase Agreements (PPA) to assure investors that there is a guaranteed purchaser. Investors often also look at the balancing and trading risk of the project and whether this can be removed or managed effectively. Concerns have been raised regarding declining terms for PPAs. It has been suggested that fewer suppliers are offering PPAs; contract terms are shorter (10 years or less); PPAs are less likely to include a floor price; higher discount rates are offered; and there is less willingness to accept long-term balancing risk.

8.3. The reasons that PPA terms have been declining include: reforms to move to CFDs introduces market uncertainty; a change in accountancy treatment means that a PPA with a floor price appears in a supplier’s balance sheet, potentially affecting their credit rating; and banks are more cautious following the financial crisis, resulting in greater scrutiny of change of law arrangements and increasing demand for floor prices in PPAs.

8.4. In principle, once the design of the CFD has been finalised, this should make it easier for independent renewable generators to secure PPAs as the strike price gives greater price certainty and removes the need for a floor price. However, there is a perception that balancing risk is likely to increase due to an increase in renewables and new Ofgem initiatives.

8.5. With regards to liquidity, Ofgem has undertaken work and is currently consulting on how to enhance liquidity in the power market. Some independent generators believe that not enough progress has been made by Ofgem to date, especially in the forward markets where the level of liquidity is viewed as low. It is suggested that low liquidity as resulted in weak price signals.

8.6. Energy UK is working with industry to develop viable solutions to route to market and liquidity issues. Current provisions in the Bill are wide-ranging. Clarity is needed on when, how and under what circumstances powers would be used. Steps to intervene in the market, if demonstrated as necessary, must be appropriate targeted and well-defined.

8.7. We note, in particular that Clause 34 (3) (a) (i) could allow price regulation. Industry is in agreement that price regulation would not be beneficial and we believe that Clause 34 (3) (a) (i) and Clause 35 (3) (a) should be amended to insert “excluding as to price” after “terms”.

9. Chapter 7—Renewable Obligation: Transitional Arrangements

9.1. The Renewables Obligation (RO) is the current system that supports investment in renewable energy generation. Chapter 7 sets out the transitional arrangements from an RO regime to that of a fixed-price regime from 2027 onwards.

9.2. It is intended that projects that are brought forward under the RO will be provided with appropriate grandfathering arrangements. Current drafting is unclear, however, as to whether arrangements will result in a fully grandfathered transition to a fixed-price regime.

9.3. To protect existing investments and avoid deterring future investment under the RO, we propose an amendment to make it clear that a generator’s eligibility for the RO Certificates will create an equivalent entitlement to receive the replacement instrument, be it a fixed price certificate or a Fixed Price ROC, in line with the grandfathering principle.

10. Chapter 8—Emissions Performance Standard

10.1. We welcome Government’s intention to grandfather the statutory rate of emissions (450 g/kWh) under the Emissions Performance Standard (EPS) out to 2044. However, the Bill should make it clear that the 450 g/kWh standard applied to plants consented after enactment of the primary legislation will not be subject to change during the life of those installations, even if the statutory rate of emissions is subsequently amended. Clarity of full grandfathering helps plant already in operation and lessens the risk of stranded assets. It also provides a

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11. Floor price—this is the minimum price in the PPA for power generated.

12. A liquid market is one where it is possible to buy or sell commodity quickly without significant changes in the commodity price of large transaction costs. A liquid market would characteristically have a large number of buyers and sellers willing to transact.
positive signal for investment in the flexible-plant to ensure security of electricity supply during the transition to a low-carbon generating portfolio.

10.2 We are concerned that the Bill in its current form does not provide an exemption from the EPS for Carbon Capture and Storage (CCS) demonstration projects. Experience of trying to bring forward such projects has shown that they are highly complex. We would support an exemption for CCS demonstration projects is reinstated in the Bill, recognising an appropriate time limit (potentially three years).

11. CHAPTER 9—MISCELLANEOUS

11.1 We welcome the intention to review the success of reforms in achieving objectives. The policy objectives are set out in Clause 1 and thus, it would be fitting to link Clause 46 to Clause 1. A review after five years would be consistent with Delivery Plan timescales.

11.2 The review should draw on the experiences of industry and other stakeholders. We would recommend that an additional clause is set out for the review to include timely and transparent dialogue, including a consultation with industry and other relevant stakeholders. Consideration should be given to establishing an independent body to provide advice to Government on the format, timetable and scope of the review.

12. PART 4—STRATEGY AND POLICY STATEMENT

12.1 Part 4 sets out governing guidelines for Ofgem. The statement should link to the objectives set out in Clause 1. It may be helpful to include a framework for ensuring coordination between DECC and Ofgem to avoid situations where they undertake parallel processes.

12.2 Clause 113 (4) sets out a list of consultees that DECC should engage with when consulting on the strategy and policy statement. The current list does not include industry as a named consultee. In developing the statement, it will be important to use practical experience, which industry representatives can offer. Clause 113 (4) should be amended to include industry as a statutory consultee.

13. CONSUMER REDRESS (SCHEDULE 14)

13.1 Consumers must be confident that they will be treated fairly when things go wrong. We welcome the inclusion of new powers in the Bill enabling Ofgem to require companies to compensate consumers who have suffered harm as result of a regulatory breach, in the Bill, with some additional measures.

13.2 Consistency in how decisions are reached and how compensation and penalties are assessed is needed to ensure good decisions are reached that benefit consumers. This also enhances investor confidence and the UK’s competitiveness. We believe subsection 30M should be amended to allow Ofgem’s enforcement decisions to be challenged on the merits of the case, as well as judicial review. This would bring the sector in line with best practice elsewhere. Merits-based appeals already apply to some Ofgem decisions as well as to those of the Civil Aviation Authority (current Civil Aviation Bill is before Parliament). This change was recommended by the Select Committee on the Constitution in the House of Lords.

13.3 Subsection 30O sets out provisions on the maximum penalty or amount of compensation Ofgem can order a company to pay. We support powers for Ofgem to impose penalties and require companies to compensate, however, Ofgem should consider the total amount when setting either a financial penalty or compensation amount, to avoid “double recovery”.

European Union Issues

13.4 The UK Government will need to ensure that EMR proposals for CFDs and the capacity market meet state aid requirements. There are no fixed timescales for the EU state aid process, which thus has the potential to introduce significant delay into the implementation of the EMR proposals. It is important that DECC continues to engage effectively with the European Commission with a view to ensuring that state aid clearance is expedited and that the final package provides a stable long-term framework for investment in the UK.

13.5 The European Union is continuing to develop a single European market in electricity and gas, a policy which Energy UK supports. If energy is to be more readily traded across Europe, wholesale market and network access arrangements in the 27 Member States have to be compatible. The EU has therefore developed a “target model” for electricity markets, ie a standard market design, which is to be implemented across Europe by 2014. There are, however, some questions as to how well the EMR proposals fit with the European target model.

13.6 In particular, the European Commission has indicated that it has some concerns about the impact of capacity mechanisms on cross-border trade. Given the different types of mechanism being considered in different Member States, the Commission has suggested that it may issue some form of proposal on capacity mechanisms, with a view to avoiding barriers to trade. Energy UK would emphasise the need for a clear agreement between HM Government and the Commission on the design of the GB capacity mechanism, to ensure that arrangements do not subsequently have to be unwound, which would be damaging to investor confidence.
14. PROPOSED GOVERNMENT AMENDMENTS

14.1 Carbon intensity target: We are aware that there are calls for the Bill to include a Carbon Intensity Target in 2030 for the power sector. It is possible that a carbon intensity target may provide investors with a clear signal as to the direction of Government policy. However, introduction of such a target would only be of benefit if it is:

— Assessed to be technically feasible and affordable to consumers, taking into account impacts on UK industrial competitiveness;
— Flexible within a range and to allow adjustments to be made in light of new evidence/revised assumptions; and
— Considered holistically with existing UK and EU targets and policies designed to promote decarbonisation of the power sector.

If a carbon intensity target is introduced, it should be on Government, who would need to assess the costs of achieving it and ensure adequate resources are budgeted through the levy control framework.

14.2 Tariff proposals: Industry has been working proactively with Government and other interested stakeholders to simplify retail tariffs and make energy bills easier to understand. We continue to make improvements to equip consumers with information so that they are able to make the right choice for them. A time limit on provisions might be helpful, as consistent with the commitment in the Coalition Agreement to introduce sunset clauses to ensure regulation is regularly reviewed.

14.3 Electricity Demand Reduction: There are various policy mechanisms that are designed to improve energy efficiency and reduce consumption. It will be important that any proposal implemented complements existing measures and does not duplicate. Furthermore, as seen with existing energy efficiency initiatives, it is vital that non-financial barriers are addressed to encourage take-up of measures. Energy UK will be responding to DECC’s current consultation on electricity demand reduction.

January 2013

Memorandum submitted by Vattenfall (EN 12)

1. Vattenfall is a European energy company with significant heat, power and gas businesses serving millions of customers across North Western Europe. We generate energy from six sources: coal, gas, nuclear, hydro, wind and biomass. Our strategy is to move to greater levels of low carbon generation and consequently, by 2020, reduce carbon emissions from our operations to 65 million tonnes of CO\(_2\) whilst ensuring the delivery of reliable and affordable supplies of energy. To aid our drive for carbon emissions reductions Vattenfall’s growth rate of new renewables capacity should be above that of the markets we operate in.

2. We are a major investor in wind power in the UK. Since late 2008 we have invested £2 billion. This includes the construction of five on and offshore wind farms and the support of over 2,000 jobs. We also have a significant portfolio of onshore and offshore wind farms across the UK in development. This includes a joint venture partnership to develop and operate an up to 7.2GW offshore wind project as part of the so called Round Three development process with first power expected to be generated by 2018.

3. Therefore the proposals included in Electricity Market Reform (EMR) and the Energy Bill are central to our continued investment in the UK’s renewable energy resource and the British economy. Vattenfall will invest in low carbon energy at a significant level across Europe but those investments will be made according to three principles:

— That there exists a clear route to market (eg energy trading; network infrastructure).
— That there is sufficient resource (eg sufficiently high mean wind speeds).
— That there is a smooth and predictable permitting procedure.

4. Vattenfall believes in principle that energy policy in the UK continues to move in the right direction and, notwithstanding current regulatory uncertainty, it remains one of the best prospects for investment in low carbon generation anywhere in the world up to 2020.

5. To retain this pole position, promote investor confidence and thus enable the £110 billion in new investment the switch to a new support mechanism for low carbon generation must be framed by legislation that is clear, stable, predictable, long term and based on clear evidence. In addition, as power and carbon markets across Europe become increasingly integrated it is important that energy policy is consistent with, and supportive of, wider European measures such as the EU Emissions Trading Scheme and the interconnection of electricity markets.

6. Given that background, Vattenfall would like to highlight a number of issues that the:

— Transitional arrangements—Fixed ROCs Committee may find useful as it scrutinises the Energy Bill. These include:
— Clarifying the definition of “low carbon electricity generation”.
— Strengthening long term investor confidence.
— The Levy Control Framework and the CfD allocation process.

**TRANSITIONAL ARRANGEMENTS—FIXED ROCs (CHAPTER 7 OF ENERGY BILL)**

7. The principle of grandfathering the value of support to low carbon generation underpins investor confidence in the industry. Our reading of Chapter 7\(^1\) is that any future Secretary of State, if they were so minded, would have the power to erode that value after 2027 when the Renewables Obligation moves to a fixed ROC system. This could have a detrimental effect on investor confidence and we would ask that the Committee takes this opportunity to support investor confidence in the industry by confirming the grandfathering principle in the Bill. By way of a solution, Vattenfall would ask the Committee to consider the amendments proposed by RenewableUK.

**CLARIFYING THE DEFINITION OF “LOW CARBON ELECTRICITY GENERATION”—(CHAPTER 2 OF THE ENERGY BILL)**

8. On the basis of instilling investor confidence in the proposed CfD regime, it is important that there is a clear definition of “low carbon electricity generation”. As the Bill currently stands, this fundamental definition is left to the discretion of the Secretary of State (SoS). Our reading of this clause\(^2\) is that any current or future technology deemed by the SoS to “contribute to a reduction in emissions of greenhouse gases” could be eligible to receive support from the CfD regime. A clear definition of “low carbon electricity generation” contained within primary legislation, would, we believe, afford eligible generators and investors additional certainty to invest in the UK.

**LONG TERM INVESTOR CONFIDENCE**

9. There is a degree of certainty about support for low carbon generation to 2020 in the UK due to the EU Renewable Energy Directive, Climate Change Act obligations and Coalition Government support for the industry. However, there is less certainty as we look into the 2020s. Vattenfall recognises that both the EU and the UK Government have still to conclude a policy discussion on whether there should be a statutory obligation on the electricity sector to decarbonise by 2030. Whilst we do not ask that the UK moves beyond that which is agreed by the EU we do believe that a strong signal towards effective decarbonisation by 2030 is necessary to provide long term certainty to investors in the electricity sector across Europe. This issue is a particularly acute one for the supply chain in offshore wind. If the UK economy is to capture the benefits associated with inward supply chain investment, regulation and obligations need to provide a strong signal that there will be a market beyond 2020. Currently those signals are not as strong as they could be.

** Levy Control Framework and Allocation of CfDs**

10. Vattenfall supports the flexibility of agreeing a CfD between planning consent and grid agreement to the point of final investment decision (FID). Post consent development/pre FID expenditure can be significant, especially in offshore wind, and so having the option of an “early” CfD allocation will encourage continued expenditure, all other things remaining equal.

11. Current policy is unclear whether the Levy Control Framework (LCF) budget will be restricted to low carbon generation or extended to additional measures designed to promote sustainability in the energy sector. If restricted to the generation of low carbon electricity the LCF budget to 2020 should be, according to RenewableUK, sufficient to meet the needs of low carbon generators. If, however, there is a real risk of it being spread too thinly, one possible outcome is that new schemes seeking a CfD contract will fail to do so. If there is a real risk of this there will be a detrimental effect on investor confidence.

**SUMMARY**

12. Vattenfall remains supportive of the Energy Bill and the principles encapsulated within it. We are cautiously optimistic about the long term prospects for low carbon generation in the UK despite current levels of regulatory uncertainty. If legislation delivers a clear, predictable and stable market framework on time Vattenfall believes that the UK will remain one of the best low carbon generation investment prospects anywhere in the world.

13. Vattenfall hopes that our submission is helpful to the Committee.

January 2013

Memorandum submitted by Prof Catherine Mitchell (EN 13)

**INTRODUCTION**

The Electricity Market Reform (EMR) process, which has culminated in the Energy Bill, provided an opportunity to establish an energy system fit for the purpose of enabling Britain to move to a secure, efficient and affordable sustainable energy economy. At the moment, the Energy Bill does not do this. If it goes through

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\(^1\) Section 32o, Clause 2a, 2f; Section 32p, Clause 3; Section 32p, Clause 11; Section 32u, Clause 1a; Section 32v, Clauses 4 and 8a.

\(^2\) Chapter 2, Section 2, Clause 3.
as it is without substantial amendments it will represent a wasted opportunity which will have to be revisited reasonably soon.

The original aim of the EMR was to encourage investment for a sustainable energy future. Investors require clear long term sector specific signals in order for them to have confidence. Non-specific mechanisms like a carbon price do not provide the type of investor confidence that is necessary.

The Energy Bill is still very high level and many details are yet to be worked out. I conclude that this is because the process has been overly rushed. The powers that the Bill give to the Secretary of State are extraordinary and I imagine this is because the Government does not know yet what will be needed to be done so they are granting the Secretary of State extensive powers so that whatever is needed can be fitted in later. This is of course sensible in some ways but it does not give investor confidence that this is an Energy Bill which has been carefully constructed to enable the much discussed policy intent.

The amendments recommended in this submission are listed below:

1. A decarbonisation target consistent with the Committee on Climate Change’s 4th Carbon Budget of 50gCO2/kWh by 2030 is essential to ensure an appropriate long term investment signal in low carbon technology. Industry itself has said that it needs long term sector specific certainty for it to feel comfortable to invest. Without such a target, there is no signal for the necessary rate of change within the sector. It is the essential requirement from which everything else flows. In parallel to this, it is vital that the Levy Control Framework works to complement the Energy Bill by clarifying expenditure up until 2030. As it stands at the moment, there is clarity until 2020 and then a cliff. Similarly, the Emissions Performance Standard must be set in line with the decarbonisation target.

2. The Government has said that it will include a chapter to enable improved energy demand reduction. This is welcome and vital. Reducing our energy demand and making our use of energy as efficient as possible should be the centre of our energy policy. The Bill should include enabling powers for energy efficiency—such as energy efficient FITs—as well as market rules for demand side response.

3. The Bill must include transitional arrangements which enable the continuation of the RO so that there is not a hiatus in renewable deployment, as the new CfD’s contracts come into being and bed down (Chapter 7). The ECC Select Committee has recommended the RO and CfDs run concurrently for three years but this should be flexible. It is to be remembered that the CfD FITs of the Energy Bill have been created specifically to enable support of nuclear power, with only secondary thought for renewable energy. This reality must not be allowed to undermine renewable energy development in Britain. The small scale FIT has proved to be very successful and an extension upwards from its current 5MW would be very helpful.

4. The Bill must include greater detail about the process for setting the strike price for nuclear power (Chapter 5). This must be transparent. The EMR process started before a whole series of global energy policy occurrences: the raid fall in prices of renewable energy, particularly photovoltaics; the falling prices of various materials, which should enable a whole series of new photovoltaic building materials; the tsunami and subsequent human errors at the Fukushima nuclear power plant in Japan; the development of Shale Gas around the world; the policy decisions to implement the EnergieWende in Germany and the Danish Energy Plan in Denmark which is illuminating the design and operation of energy systems along with their integration with waste, water and food systems which we can expect to spread throughout Europe. The Energy Bill as it stands does not situate itself in this reality. Only with transparency are we as a country able to know how much large scale nuclear power will be costing us and what alternative there might be to it.

5. The Bill must take notice of independent generator concerns, including small community and local authority energy service companies (ESCOs). These ESCOs have enormous potential, especially untapped in Britain. This Bill must enable new entrants, whatever their scale, in reality, not just give platitudes of support (Chapter 6).

6. The transition to a sustainable energy future is one of great change and the energy system needs to remain resilient and robust whilst this transition is being undertaken. Clear strategic, long term sector specific investment signals need to be given—hence the need for a decarbonisation target. However, it is also necessary to ensure sufficient capacity at the right time and place. The Bill needs to walk that line between ensuring encouragement of the move to a low carbon energy system while at the same time providing suitable signals for investment. The capacity mechanism is at the nub of this debate, hence its contentiousness (Chapter 3). Without care the Bill will give too much support for capacity simply to be there—and this will provide too much support for gas—on the other hand too little encouragement will lead to security concerns. A decarbonisation target in line with the CCC’s 4th Budget and an Emission Performance Standard in line with this means that a more “general” capacity mechanism could be put in place—meaning that a payment could be given for capacity—whether demand side response, storage, interconnectors etc—that is there. Without the decarbonisation target and low level EPS, then a much more “targeted” capacity mechanism would be required through system operator auctions. At the moment, the Bill is neither one thing nor the other and risks too much gas, which would also bring different security concerns including that of price.

7. There are numerous technical issues related to the details of the CfDs which are as yet unknown (Chapter 2). Moreover, because of the high level nature of the Energy Bill many of the details which caused so many problems during the Consultation but which were finally agreed remain absent from the Bill—for example, the Single CfD Counterparty. The concerns of investors need to be addressed so that the agreed policy intent is reflected in the Bill.

January 2013
Memorandum submitted by WWF (EN 14)

SUMMARY

1. WWF-UK is strongly of the view that an increased deployment of renewable energy technologies coupled with a greater focus on improving energy efficiency and increasing the UK’s interconnection with European grids are the most viable options to deliver a successful and cost-effective decarbonisation of the UK’s power sector by 2030. The Energy Bill represents a unique opportunity to put the UK on such a path.

2. This response focuses as much as possible on the drafting of the Energy Bill. However, we are still awaiting important provisions from the Government (for example on the issues of a decarbonisation target and energy efficiency enabling powers) and a significant amount of the detail that will determine future investments in the UK’s power sector will be provided in secondary legislation. Given this, our response also refers to wider issues which in our view will require the same degree of parliamentary scrutiny as the drafting of the Bill itself.

3. WWF-UK’s key comments on the Energy Bill and accompanying secondary regulations/technical documents are as follows:

— A “decarbonisation target” is key to provide long-term investment certainty and ensure the successful delivery of the UK’s commitments under the Climate Change Act: a long-term target to reduce the UK power sector’s carbon emissions should be set out on the face of Bill to ensure investment certainty in the renewable energy supply chain for the period after 2020 and send a clear signal showing that the UK intends to fully implement the requirements of its Climate Change Act. Such a target should be consistent with the Committee on Climate Change’s recommendation for the power sector to have a carbon intensity in the region of 50gCO₂/kWh by 2030;¹⁵

— Greater clarity is needed on how the Levy Control Framework will operate to improve investment certainty out to 2020: to ensure greater clarity for renewable energy investors in the run up to 2020 as well as to help develop a UK-based supply chain for new renewable energy technologies like offshore wind, more detail needs to be provided as soon as possible as to how the funds under the Levy Control Framework will grow out to 2020 and how those funds will be used;

— Remaining concerns on the ability of independent renewable energy generators to access the electricity market should not be underestimated (Chapter 6, Sections 34 and 35): the Bill Committee should carefully consider the concerns and proposals put forward by independent generators regarding the risk of their access to the electricity market deteriorating even further in the years to come, which would be of great detriment to the Government’s ambitions in terms of decarbonisation, security of supply and increased competition in the electricity market;

— An enabling power to support energy efficiency measures should be introduced now: the UK could avoid significant expenditure on electricity infrastructure if more ambitious energy efficiency measures were implemented (many of which require an enabling power in primary legislation). WWF-UK therefore recommends that the Bill should provide an enabling power for energy efficiency measures now to avoid any delays in implementing the conclusions of DECC’s consultation process on electricity demand reduction;

— The capacity market rules should be carefully designed so as to avoid another dash for gas (Chapter 3): the Energy Bill must avoid the construction of an unnecessarily high number of new fossil fuel power stations and must ensure that the capacity market operates in a way that is consistent with the objective of decarbonising the power sector over the next two decades. As such, and with a view in particular to upcoming secondary legislation to be implemented pursuant to Chapter 1 Part 3 of the Bill, WWF-UK recommends that the capacity market rules should give priority to non-generation forms of flexibility such as demand-side response and electricity storage ahead of new electricity generation options;

— The drafting of the Energy Bill should provide clearer requirements as to how the terms of new nuclear contracts to be awarded under the Investment Contract provisions will be negotiated (Chapter 5 and Schedule 3): this should include requirements for the publication of all material terms of the relevant contracts before they are agreed and the setting out of a clear procedure for an expert panel to review the appropriateness of the key terms of the contract before they are agreed.

INTRODUCTION

4. Several reports published at the end of 2012 from major organisations such as the International Energy Agency (IEA),¹⁶ the World Bank,¹⁷ the United Nations Environment Programme¹⁸ and Price Waterhouse Coopers¹⁹ have highlighted the urgency with which substantial investment in low-carbon infrastructure needs

¹⁵ In particular see the CCC’s Fourth Carbon Budget report, December 2010: http://www.theccc.org.uk/reports/fourth-carbon-budget
to be made if the world is serious about preventing the worst impacts of climate change. In its World Energy Outlook 2011, the IEA made it very clear that in the absence of rapid investment in zero carbon technologies such as renewables, the infrastructure we will have in place by 2017 will produce all the greenhouse gases that we can afford to emit if the world is to limit global average temperature rises to within 2°C:

“If stringent new action is not forthcoming by 2017, the energy-related infrastructure then in place will generate all the CO₂ emissions allowed in the 450 Scenario up to 2035, leaving no room for additional power plants, factories and other infrastructure unless they are zero-carbon, which would be extremely costly. Delaying action is a false economy: for every $1 of investment avoided in the power sector before 2020 an additional $4.3 would need to be spent after 2020 to compensate for the increased emissions.”

5. The Energy Bill is therefore a major opportunity to put the UK firmly on track to a near-decarbonisation of the power sector by 2030, as recommended on several occasions by the Committee on Climate Change. WWF-UK therefore welcomes the Government’s decision to intervene in the market to provide greater investment certainty for low-carbon technologies.

6. WWF-UK is strongly of the view that an increased deployment of renewable energy technologies coupled with a greater focus on improving energy efficiency and increasing the UK’s interconnection with European grids are the most viable options to deliver a successful and cost-effective decarbonisation of the UK’s power sector by 2030. This is becoming increasingly clear following recent developments in the nuclear market—referred to in more detail below—and the repeated delays to the UK’s Carbon Capture and Storage (CCS) programme, which make it unlikely that either technology will be able to provide significant amounts of new low-carbon capacity by 2030.

7. WWF-UK’s Positive Energy report, based on analysis by energy consultants Garrad Hassan, shows that if the UK’s renewable energy sector is allowed to grow at a steady rate over the next two decades, renewables could provide well over 60% (and potentially up to 85%) of the UK’s electricity demand by 2030 and be the key technological driver for delivering a near-decarbonised power sector for the UK. Garrad Hassan’s analysis also showed that energy efficiency measures could reduce the required capital investment in renewables, gas power stations, CCS and interconnection infrastructure by up to £40 billion by 2030.

8. Two recent reports commissioned by WWF-UK show that using the Energy Bill to help the UK move towards an energy efficient and renewable energy based power system would provide important economic benefits for the UK:

— Creating a market for electricity savings, written by WWF-UK and Green Alliance, looks at ways in which electricity efficiency can be incentivised through the Energy Bill. It assessed three potential options for the UK electricity market—drawing on experience from the USA and other countries—and found the Electricity Efficiency Feed-in Tariff (EE FiT) to be the most effective solution to promote energy efficiency, with the potential for £10 billion a year in savings in power sector costs by 2030.

— A study into the Economics of Gas and Offshore Wind, written by Cambridge Econometrics and funded by Greenpeace and WWF-UK, compares two illustrative scenarios for the electricity generation mix in 2030—one with steady growth in offshore wind capacity to 2030 and the second with no new offshore wind after 2020 and significantly more gas. The report shows UK GDP is £20 billion higher (0.8%) in the wind scenario with 70,000 more jobs than the gas scenario by 2030, with only marginal impacts on electricity prices. By investing more in offshore wind, the UK would also save £8 billion a year on gas imports by 2030, with the conclusions being robust to assumptions on lower than expected gas prices in the future.

Recommendations

9. Where appropriate, this response focuses on specific amendments that WWF-UK would like to see made to the Bill in order to ensure a secure, affordable and sustainable power supply. However, given that much of the detail will be in secondary legislation and accompanying technical documents, our response also includes recommendations on how these other policies can best be shaped so as to avoid undesirable outcomes. Where the relevant details are not in primary legislation, WWF urges the Committee to seek reassurances from the Government on the details of further policies and secondary legislation as the Bill moves through Parliament.

21 See in particular the CCC’s Fourth Carbon Budget report: http://www.theCCC.org.uk/reports/fourth-carbon-budget
22 WWF-UK, Positive Energy: How renewable electricity could transform the UK by 2030, October 2011: www.wwf.org.uk/positiveenergy. The underlying technical analysis carried out by Garrad Hassan is also available on the same page.
10. This submission follows the recent joint Parliamentary statement published by WWF, the RSPB, the Association for the Conservation of Energy, Greenpeace and Friends of the Earth.\textsuperscript{25}

Long-term investment certainty and ensuring the successful delivery of the UK’s commitments under the Climate Change Act: establishing a target for a virtually carbon-free power sector by 2030 on the face of the Bill

11. WWF-UK recommends that a binding target to reduce the UK’s power sector carbon emissions should be included on the face of the Bill to provide both investment certainty in the low-carbon sector for the post-2020 period as well as send a clear and much needed signal that the UK is committed to meeting its long-term emission reduction obligations under the Climate Change Act. Such a target should be consistent with the Committee on Climate Change’s (CCC) recommendation for the power sector to have a carbon intensity in the region of 50gCO\textsubscript{2}/kWh by 2030.\textsuperscript{26}

12. The CCC has repeatedly recommended that emissions from the power sector should have fallen to around 50gCO\textsubscript{2}/kWh by 2030 in order to put the UK on a path to meet its commitments under the Climate Change Act of a cut in greenhouse gas emissions by at least 80\% below 1990 levels by 2050 at the lowest cost.\textsuperscript{27} However, despite the CCC’s recommendations and those of the Energy and Climate Change Select Committee in its recent report on the draft Energy Bill, the Government has decided not to introduce a decarbonisation target until 2016 following the publication of the 5th Carbon Budget. An amendment to the Energy Bill setting out this timetable is currently awaited from Government.

13. As noted in a recent letter to Secretary of State Ed Davey from Siemens, Alstom UK, Mitsubishi Power Systems, Areva, Doosan, Gamesa and Vestas “a binding 2030 target for power sector decarbonisation would help reduce the political risk currently associated with long term industrial investment”\textsuperscript{28} such as offshore wind turbines factories, which take several years to build and often require a period of up to 10 years to allow a return on investment to be made. These investments, which could make a significant contribution to GDP growth and job creation in the UK and help reduce the UK’s trade deficit\textsuperscript{29} (see section on capacity market below), will not be made unless investors in the supply chain have a minimum of foreseeability on market conditions well beyond 2020.

14. Renewable energy investors’ perception of risk for the period post-2020 should not be underestimated, given the considerable deterioration in the investment climate in the UK’s energy sector following months of Government infighting in the run up to the publication of the Bill, public disagreements around the recent reviews of the Renewables Obligation banding regime for onshore wind, and mixed messages being sent around the future review of the 4th carbon budget in 2014. The risk of a potential drop in investment in renewable energy in the UK post-2020 came out very clearly in the renewable energy new build figures provided by the Department of Energy and Climate Change in its recent Energy and Emissions Update,\textsuperscript{30} which have been reproduced in the graph below.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Projected_Annual_Renewables_New_Build_(GW)}
\caption{Projected Annual Renewables New Build (GW)}
\end{figure}

\begin{itemize}
\item Joint Parliamentary Statement on the Energy Bill, December 2012: tinyurl.com/bmeunvw
\item See the CCC’s Fourth Carbon Budget report: http://www.theccc.org.uk/reports/fourth-carbon-budget
\item Ibid.
\item See in particular the CBI’s Colour of Growth Report (July 2011), showing that the UK’s green sector could halve the UK’s trade deficit by 2014/15: http://www.cbi.org.uk/media/1552876/energy_climatechangerpt_web.pdf
\end{itemize}
15. To this end, WWF-UK recommends that:

— A long-term target (covering the post 2020 period) to reduce the power sector’s carbon intensity be set out on the face of the Energy Bill in 2013.

— If the expected publication of the 5th carbon budget prevents the setting of a target for 2030, then a decarbonisation target could be set for 2027, which is the last year covered by the 4th carbon budget period (2023–27), or even 2025 which is the mid-point year for the 4th carbon budget. WWF-UK does not consider the exact year to be the material issue for a sector-specific target but believes that 2030 would be preferable for its longer-term perspective and consistency with the relevant investment cycles.

— Setting a decarbonisation target on the face of the Bill would provide early investment certainty to the low-carbon sector prior to secondary legislation being finalised and ensure consistency with the level of detail provided in other parts of the Bill. For instance, Section 38 of the Bill introduces an emissions performance standard (EPS) set at 450gCO₂/kWh, which is above the carbon intensity of even the most inefficient gas plant and provides an assurance that this limit will remain in place for new and existing plants until the end of 2044. The effect of Section 38 is therefore to provide certainty to investors in new gas plants that their plants will not be impacted by the EPS until 2045. Providing such a level of clarity to investors in new gas plants in primary legislation, whilst setting a decarbonisation target in secondary legislation, would therefore not be coherent.

— If the view is taken that a decarbonisation target should be set out in secondary legislation, then it would be important that at the very least, a new Section be introduced on the face of the Bill to require that a decarbonisation target be introduced in secondary legislation and that such a target be in line with the requirements of the Climate Change Act and the CCC’s advice in the carbon budgets. Without such parameters, it is unlikely that investors would gain much comfort from the announced introduction of a decarbonisation target.

Long term investment certainty: providing greater clarity on the functioning of the Levy Control Framework

16. Whilst this is not an issue directly connected to the drafting of the Energy Bill, WWF-UK recommends that the Government should provide further clarity about how the funds under the Levy Control Framework (LCF) will grow out to 2020 and how they will be used.

17. WWF-UK welcomes the announcement made by Government on the size of the LCF up to 2020. The size of the LCF should put the UK in a good position to meet its renewable energy target for 2020. However, several aspects of the LCF remain undefined. In order to provide greater clarity as to how the LCF will function, which is an issue of particular importance to help with the development of a UK-based supply chain in new renewable technologies like offshore wind, WWF-UK recommends that further clarity be provided as soon as possible in terms of:

— how the available funds under the LCF will grow in the run up to 2020;

— the minimum amounts of capacity that the LCF is planning to support for different technologies. A clear link to the projections made by DECC in the latest Renewables Roadmap would help in this regard; and

— what policies will be covered under the LCF.

18. When combined with a post-2020 decarbonisation target, greater clarity on how the LCF will be operating would send a clear signal to the renewable energy supply chain as to the volume of orders that can be expected in the years leading up to 2020.

Access to market for independent renewable energy generators (Chapter 6)

19. WWF-UK urges the Bill Committee to carefully review the evidence put forward by independent renewable generators regarding the risks of these generators being unable to sell their electricity onto the new electricity market and therefore being deterred from making much needed investments in the first place.

20. As part of its package of reforms, the Government has introduced new powers in the Energy Bill giving it the possibility of intervening to improve liquidity in the electricity market (Section 34) and to purchase electricity from independent generators (Section 35). Whilst DECC states that these powers and the new arrangements being introduced as part of the Energy Bill will help improve the ability of independent renewable energy generators to sell their electricity on the market (referred to as “access to market”), this assessment appears to contrast sharply with that of independent renewable energy generators. Recent evidence put forward by these generators suggests that it will be increasingly difficult for them to obtain power purchase agreements on viable terms, without which these generators will not be able to finance new renewable energy projects.

21. The scale of the access to market issue should not be underestimated, given that around 74% of the current pipeline of onshore wind projects35 is expected to come from independent generators and that these generators are also expected to make important investments in offshore wind. WWF-UK would therefore urge the Bill Committee to consider the recent analysis and proposals for amendments to the Energy Bill put together by a group of independent generators to help address the access to market issue.

35 Figures from DECC PowerPoint presentation on Route to Market for Independent Generators.
Establishing enabling powers for energy efficiency in the Bill

22. WWF-UK recommends that an enabling power allowing the introduction of energy efficiency support measures should be introduced now in primary legislation.

23. Saving energy will significantly reduce the cost of decarbonising the UK’s power sector. For example, a recent report by Green Alliance and WWF-UK32 found that energy efficiency measures could reduce power sector costs in the UK by up to £10 billion/year by 2030. Recent research by McKinsey for DECC also suggests that electricity demand could be nearly 40% lower in the UK by 2030 compared to what is being forecasted if ambitious efficiency measures were implemented.33

24. Unfortunately, the long title of the Energy Bill makes no reference to energy efficiency or the need to reduce electricity demand. WWF-UK appreciates that the Government has acknowledged the Bill’s weakness in this area and is taking steps to remedy it by consulting on measures to reduce electricity demand and providing further information on its demand reduction strategy later in the year. WWF-UK is preparing evidence to submit to that consultation.

25. However, WWF-UK believes that the best approaches to demand reduction (such as an electricity efficiency Feed-in Tariff) will require enabling powers in primary legislation. We see no reason why the Bill should not be amended now to include an enabling power for an energy efficiency incentive mechanism (to be defined by DECC in due course). This would ensure that once concrete proposals have been decided on, they can be swiftly implemented in secondary legislation rather than risking delays in further primary legislation.

The Capacity Market: Avoiding a renewed dash for gas (Part 1, Chapter 3)

26. WWF-UK recognises the need for both increased flexibility on the electricity system to help integrate a rising amount of renewable energy capacity as well as the need to avoid getting locked in to an unnecessarily large number of new fossil fuel plants which would jeopardise the UK’s decarbonisation ambitions. We therefore recommend that the capacity mechanism should be designed so as to give priority to system security solutions such as demand-side response and electricity storage ahead of new fossil fuel plants.

27. A renewed dash for unabated gas in the UK remains a distinct possibility in the EMR package as it is currently proposed. The loopholes in the Energy Bill process include: the lack of a decarbonisation target in the Energy Bill, an EPS too high to incentivise the development of carbon capture and storage for new gas plant, the lack of clarity on the design of the capacity market and the Government’s Gas Generation Strategy released in December 2012, which includes a scenario where the UK power sector reaches a carbon intensity of 200g CO₂/kWh in 2030, some four times the level recommended by the CCC in its 4th Carbon Budget report.34

28. Whilst WWF-UK recognises that some limited investment in new unabated gas plant capacity will be required in the period up to 2030 to help balance the electricity system, we are strongly of the view that the amount of new gas-fired plants in the UK needs to be carefully monitored from an environmental, cost and system security perspective:

— Environmental: The CCC recently made clear that “the role for unabated gas fired power stations should be limited to balancing the system in 2030, by which time the share of unabated gas generation in the total should be no more than 10% compared to 40% today. A second dash for gas, resulting in a higher share of unabated gas in 2030, would neither be economically sensible nor compatible with our legislated carbon budgets.”35

— Cost to consumers: The cost of heat and electricity has been rising for a number of years with much of this being caused by increasing gas prices. For example, between 2004 and 2010, the average UK consumer energy bill rose from £605 to £1,060. Of this £455 rise, £290 was due to the rise in the wholesale price of gas (with only £30 linked to supporting low-carbon energy generation).36

— System Security: The UK is already over-dependent on gas. In 2011, 41% of the UK’s electricity37 was generated from gas-fired power stations and 80% of our 26.2 million homes used gas for heating,38 with

35 Statement by David Kennedy on Unabated Gas Fired Generation, Committee on Climate Change (24 May 2012).
36 Household energy bills—impacts of meeting carbon budgets, Committee on Climate Change (2011) [check].
both DECC\(^\text{39}\) and the IEA\(^\text{40}\) forecasting continued increases in both the price of gas in the EU and the amount of gas being imported into the EU over the next 20 years.

29. As shown in a recent report from Cambridge Econometrics on the economics of gas and offshore wind in the UK, funded by WWF-UK and Greenpeace, a disproportionate focus on gas generation could also be detrimental to UK economic growth. The report found that compared to a gas-heavy scenario, a strong deployment of offshore wind would add £20 billion to UK GDP each year by 2030, would increase net employment by 70,000, reduce annual imports of gas in the UK by some £8 billion/year by 2030 and would mean that carbon emissions in the UK’s power sector would be three times smaller by 2030. Importantly, all of this could be achieved with only marginal impacts on electricity prices and the conclusions of the report are robust to assumptions on lower gas prices and do not include the additional economic benefits that could arise from the UK becoming a potential exporter of offshore wind technology.\(^\text{41}\)

30. With a view in particular to upcoming secondary legislation to be implemented pursuant to Chapter 1 Part 3 of the Bill, WWF-UK therefore recommends that the capacity market rules should give priority to non-generation forms of flexibility such as demand-side response and electricity storage ahead of electricity generation options, in order to avoid the construction of an unnecessarily high number of new fossil fuel power stations and to ensure the capacity market operates in a way that is consistent with the objective of decarbonising the power sector.

31. Alongside the capacity mechanism, WWF urges the Government to establish a clear strategy to increase the UK’s interconnection routes with European grids, given the potential of interconnection in helping reduce the costs of maintaining system security in the UK.\(^\text{42}\) As made clear in recent reports,\(^\text{43}\) a greater degree of interconnection between the UK grid and European grids could, in the medium term, also put the UK in a position to export surplus renewable electricity.

Transparency is needed regarding the measures supporting nuclear power (Chapter 5 and Schedule 3: Investment Contracts)

32. WWF-UK recommends that the wording of Chapter 5 and Schedule 3 of the Bill be amended to provide more transparency on the way the investment contracts for new nuclear power will be negotiated and the appropriateness of their terms reviewed.

33. Putting aside WWF’s environmental concerns on nuclear power, recent developments in the UK’s nuclear market suggests that it is unlikely that much nuclear capacity will be built in the UK over the next 20 years. Whilst several renewable energy technologies are either going down in costs or offer a significant potential for cost reduction in the near future,\(^\text{44}\) the economic viability of new nuclear projects is becoming an increasing concern (as reported in a special issue on nuclear power published by The Economist\(^\text{45}\)) and there are now serious doubts as to whether new nuclear power is indeed the least cost low-carbon options as suggested by DECC. This has been well exemplified of late by the withdrawal of many utilities such as RWE and E.ON from the UK’s nuclear market, the EPR reactors currently being built in France and Finland being four to five years late and now around three times over budget\(^\text{46}\) and by recent reports that the costs of building new nuclear plants in the UK could now be in the region of £7 billion.\(^\text{47}\)

34. It is essential that UK energy policy is determined in a transparent, evidence-based process that maximises investor and public confidence with respect to all low-carbon technologies. To this end, WWF-UK believes it is essential that the Government is fully transparent about the way new nuclear projects are negotiated. If the appearance is that a great deal of the LCF finance announced for the period up to 2020 is to be earmarked for the first new nuclear projects in the UK, renewable energy investors could be deterred from coming to the UK. This would be particularly damaging at a time where the UK is seeking to grow its supply chain for new renewable energy technologies like offshore wind.

\(^{38}\) DECC, Fossil Fuel Price Projections, October 2011: http://www.decc.gov.uk/en/content/cms/about/ec_social_res/analytic_projs/fi
\(^{41}\) Cambridge Econometrics, A Study into the Economics of Gas and Offshore Wind, November 2012: http://assets.wwf.org.uk/downloads/a_stud
\(^{42}\) Energy and Climate Change Committee, Enquiry on a European Supergird, September 2011: http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenergy/1040/104003.htm, see Summary.
\(^{43}\) See the Roadmap 2050 report from the European Climate Foundation (http://www.roadmap2050.eu/) and the UK Offshore Valuation Report, July 2010 (www.offshorevaluation.org)
\(^{44}\) WWF-UK would urge the Bill Committee to take into account the conclusions of the Crown Estate’s Offshore Wind Cost Reduction Pathway Study, June 2012: http://www.thecrownestate.co.uk/media/305094/Offshore%20wind%20cost%20reduction%20pathways%20study.pdf
\(^{47}\) “UK nuclear build requires taxpayer rescue”, Reuters (8 May 2012): http://www.reuters.com/article/2012/05/08/nuclear-britain-edf
35. To address the concerns on costs and ensure the transparency of the negotiations for new nuclear power projects, WWF-UK recommends that Chapter 5 and Schedule 3 (Investment Contracts) of the Bill be amended to require that:

- Evidence for the proposed prices for new nuclear project be published in the public domain, in advance of the contracts being agreed.
- All material terms and conditions of the contracts for new nuclear power be published in the public domain before they are agreed (with the same applying to renewables and other low carbon generation technologies).
- There be an expert review panel meeting in public for prices, terms and conditions of nuclear contracts.
- There be a transparent cap on public liability for insurance and radioactive waste disposal.
- Any variations agreed in the terms of an Investment Contract by the Secretary of State, which involves more costs and/or risks becoming public, be laid before Parliament in advance of such variations being agreed.

January 2013

Memorandum submitted by Dalestone Energy (EN 19)

INTRODUCTION

The renewables industry has great potential to contribute to UK infrastructure. Dalestone Energy is enabling inward investment by supporting wind energy projects across the UK. We are working with farmers and charities on small scale individual wind turbines sited on farm land. These investments support jobs and contribute to the UK’s low carbon future while providing a financial lifeline to many farmers and charities. However, ongoing issues with Ministry of Defence (MoD) objections to wind farm applications have become an increasing hurdle to the flow of investment, affecting the entire wind industry.

THE ISSUE

Until recently, there had been progress in addressing MoD objections to wind farm applications. Issues around turbine interference on radar, previously a major impediment to development, were being resolved through effective pre-planning dialogue between wind developers and the MOD, allowing developers to ascertain whether there are likely to be objections prior to submitting a formal and costly planning application.

Recent experience is that this process has broken down and the pre-planning dialogue has effectively ceased. In some cases, applications for small scale individual wind turbines which had previously been cleared by the MOD (ie, received MOD assurances that there were no grounds for rejection) have since been blocked by the MOD. There is currently a large backlog of small wind energy planning applications held up by Ministry of Defence objections. This threatens the success of the Government’s energy policy goals, as well as the ambitions set out for UK infrastructure.

SOLUTIONS

Simple and short-term solutions are available. Re-establishing a clear process for pre-planning dialogue would immediately remove some of the costly delays. In addition, it is clear that, in many cases, single turbines need not impact on air traffic control or air defence radars. Developers would like to work with the MOD to ensure that any concerns they have are based on evidence and mitigated objectively wherever feasible. An agreement by the MoD to reintroduce the pre-planning process and reengage with the renewables industry would be a significant step towards resolving the issue and preventing further delays.

BACKGROUND INFORMATION

The MoD operates two main types of radar, Air Traffic Control (ATC) and Air Defence (AD).

MoD Air Traffic Control

Currently it is the MoD’s stated position that they will almost by default object to any turbine proposals that are in radar line of sight of an airfield ATC radar. Civil guidance (laid down in CAP 764) is that airfields will need to be consulted about radar impacts out to 30 km. In the case of MoD airfields this limitation does not apply and whilst they previously considered whether a site was likely to have an operational impact, current experience is that objections are lodged against turbines that are likely to show on any radar at any distance. Whilst mitigations are being developed, most are unrealistic or unaffordable for single turbine sites.

MoD Air Defence

These radars are causing even greater problems and at present hundreds of single turbine proposals and wind farms are being held up due to air defence radar objections. The MoD are by default objecting to any and all turbines that are likely to be in line of sight of the air defence radars. This particularly affects most of the East Coast but also some distance inland including large areas of Norfolk, Yorkshire, Northumberland and Aberdeenshire. There is also an air defence radar in Cornwall which is in effect making Cornwall a no go area...
for turbine development. Air defence radars are powerful radars capable of being affected by turbines “over the hill” in some circumstances. Technical advisers suggest that it may not be necessary for the MoD to object to single turbines at all. The issues are different to ATC radars and the MoD’s current highly precautionary approach is almost certainly far in excess of that required to protect their capability.

**Overall Impact**

While a lot of work has been undertaken, funded by the wind farm industry, in procuring new radars which are highly resistant to the impacts of wind turbines, this has actually led to a hardening of MoD attitudes to other developers who have not funded the replacement radars. The MoD will not share how they model the impact, which makes it virtually impossible to be able to predict with any certainty what their response to a planning application will be.

Given the number of radars involved, the *de facto* exclusion zone covers a significant percentage of England, Wales and Scotland. In effect, the MoD is applying a virtual moratorium on single-turbine wind farms across large swathes of the country.

*January 2013*

Memorandum submitted by UK Youth Climate Coalition (EN 20)

**Summary**

The UK Youth Climate Coalition believes that the Energy Bill is a key opportunity to generate thousands of green jobs. These green jobs will come about if the Government chooses to use the Bill to truly decarbonise the UK’s power sector and provide security and investment for renewable technologies. As an entirely youth-led organisation, we strongly feel that the growth of green and clean technology industries can help the UK to grow in the face of the current economic uncertainty facing the country—tackling youth unemployment and generating a competitive edge our research and manufacturing industries.

In 2013, the Government can choose a trajectory towards a low-carbon future which provides thousands of green jobs and honours our existing climate change commitments. Or it can take decisions to undermine those commitments and doom us to failing to mitigate emissions. We are calling for:

1. A decarbonisation target on the face of the Bill
   
   In accordance with the CCC’s advice, the Energy Bill should include a decarbonisation target which puts the UK’s electricity sector on a path to reducing emissions to 50gCO₂/kWh by 2030. This would be consistent with the carbon target in the Climate Change Act to which this Government is are legally bound.

   Inclusion of this target would mean that the Energy Bill would provide policy certainty by setting this target and stimulate industries which again could provide thousands of Green Job opportunities for young people.

   Across Europe it is estimated that solar PV creates 7–11 jobs per kilowatt hour compared with 0.95 jobs/kWh from gas, and 1 jobs/kWh from coal. Industries such as solar PV require new skills, which could result in levelling the playing field in the Green Jobs market for young people out of work, and not in education or training.

   We need 1.2 million people to be put to work on the green economy by 2020 in order to meet the demands of the Climate Change Act. The Institute for Public Policy Research has stated that if the UK “pushed ahead with strong policies to limit carbon emissions and invest in low-carbon energy, they would see very significant job creation and experience the social and economic benefits that go with it”.

   Without a decarbonisation target, the Energy Bill does not present the “strong policy” that has been called for by business and investors. Therefore, the Energy Bill must be used to provide investor certainty so that there is
Energy Bill

enough surplus capital for renewables industries to bridge the skills gap and create opportunities for current and future generations.

With 945,000 young people out of work such decisions are not political bargaining chips for our generation. They represent fundamental elements of the clean, fair future young people deserve and have a right to, which can also create growth and employment for the benefit of the country as a whole.

Failing to make the right choice on either of these issues would both undermine the legal integrity of the Climate Change Act and jeopardise and irresponsibly waste opportunities for thousands of green jobs for young people in the UK, whilst putting the future of our climate at grave risk.

2. A Feed-in-Tariff for energy efficiency

The Energy and Climate Change Committee has pointed out that the Bill fails to address demand-side emissions reductions and energy efficiency. The Committee has called for a Feed-in-Tariff for energy efficiency in order to encourage greater demand reduction. According to the Committee, “demand side measures were potentially the cheapest way to decarbonise” Investment in this area would create additional green jobs in the area of insulation, retrofitting and home energy efficiency improvements.

3. The Energy Bill could make or break our wider climate change commitments

The Government’s gas strategy and tax breaks announced by the Chancellor’s 2012 Autumn Budget Statement provide investment certainty for new gas-fired power stations. The Government has also lifted the moratorium on exploratory drilling for shale gas. A decarbonisation target is needed in order to shape the energy sector and to rule out high-carbon technologies which will lock us into emissions that would breach our emissions reductions commitments.

The Government’s independent advisory body, the Committee on Climate Change, has warned that this new gas strategy is “completely incompatible” with its legally-binding commitments under the Climate Change Act to reduce emissions.

Annex 1

ABOUT UKYCC

The UK Youth Climate Coalition is a youth-led organisation which works to inspire, empower, unite and mobilise young people around the issues of climate change. We’re currently made up of 26 volunteers all under the age of 30.

Founded in 2009, we have and continue to achieve this through events such as Power Shift 2009, our Youth for Green Jobs campaign and projects like our annual youth delegation to the UN Climate Talks.

We are made up of 30 coalition partners who work in the areas of faith, social inclusion, youth empowerment and the environment—these are NGOs ranging from RSPB and Oxfam to Student Hubs and Social Breakfast.

January 2013

Memorandum submitted by RWE npower (EN 21)

RWE welcomes the opportunity to submit evidence to Public Bill Committee on the Energy Bill. We are responding on behalf of RWE companies operating in the UK:

— RWE npower, the UK energy retail business, supplies gas, electricity and energy services to around 6.5 million households and businesses across the UK.

— RWE Generation SE, which pools the generation entities and engineering expertise of RWE Power in Germany, RWE Essent in the Netherlands and RWE npower in the UK. In the UK, the power generation fleet generates over 10% of the UK’s total electricity supply from its eleven gas, coal, oil and biomass-fired power stations, and manages a portfolio of combined heat and power plants across the country.

— RWE npower renewables, the UK subsidiary of RWE Innogy, is one of the UK’s leading renewable energy developers with an operational portfolio in the UK of 500MW and a potential UK development portfolio of over 7,700MW, including wind farms, hydro plant and biomass generation to produce sustainable electricity.

— RWE Supply & Trading is one of the leading companies in European energy trading and is responsible for all of RWE’s activities on the international procurement and wholesale markets for energy.

The EMR is a major reform to the way in which the electricity market will work, with wide-reaching implications for the energy industry and consumers alike. While we are keen to see the Bill progress through Parliament in a timely manner, it is crucial that there is sufficient opportunity for effective debate and scrutiny of the Bill.

To facilitate this, we have in our submission set out our major concerns with the Bill on a chapter by chapter basis and summarised these at a high level below.
Clause 1(1) sets out the parts of the Bill to which the overarching objectives, to which the Secretary of State should have regard when developing and implementing EMR proposals, should apply. These should be extended to all of the Secretary of State’s functions in Part 1, including those in Chapter 5 (Investment Contracts) and Chapter 6 (Access to Markets).

The powers in the Bill remain very broadly drafted, particularly in Chapters 3 (Capacity Market) and 6 (Access to Markets), which is inconsistent with providing necessary certainty and investor confidence. In particular, there is a need for clearly defined criteria for the Secretary of State to exercise powers to hold the first capacity auction, to intervene to improve liquidity and to intervene to facilitate improvements in the power purchase market. Without this, these powers will continue to overhang the market, stifling investment, innovation and product development.

To protect existing investments and avoid deterring future investment under the Renewables Obligation essential to the delivery of the UK’s renewables target, we propose an amendment to make it clear that a generator’s eligibility for Renewables Obligation Certificates will create an equivalent entitlement to receive the replacement instrument, a Fixed Price Certificate, in line with the grandfathering principle.

The Secretary of State’s powers to fund investment contracts under Schedule 3, Clause 20 are very broad and do not relate exclusively to difference payments under the contract, as is the case with the CfD. This requires close scrutiny in Parliament and review in the context of State Aid.

The CfD and capacity mechanism levies must apply to all licensed suppliers regardless of the number of customers they serve. There are increasing obligations on vertically integrated companies, the biggest cost being from CERT and CESP and its successor ECO, while small energy suppliers are either exempt or tapered from these obligations. This is increasingly providing small players with a regulatory induced advantage, as the economies of scale received by large suppliers are outweighed by the level of these cumulative exemptions. Clauses 5(7) and 18(3) need to be amended to clarify that all licensed suppliers will face the obligation.

We are concerned about the likely increased cost to the consumer resulting from the potential liabilities on suppliers from Government’s currently preferred model of a variable levy to fund the CfD. Payments required by suppliers under the variable rate levy model are likely to be very volatile and difficult to forecast and therefore will carry a risk premium that will be passed on to consumers ultimately. We welcome the provisions in the Bill (Clause 5(2)(b)) which would allow Government to move towards an alternative fixed rate levy model based on a central forecast by the counterparty body as this will create greater transparency and certainty to suppliers and hence consumers. This would require the counterparty body to hold sums in reserve, but we do not believe this is insurmountable as it has been previously resolved under the Non-Fossil Fuel Obligation (NFFO) arrangements.

We support Government’s objectives to increase competition in the market. However, we note that a variable levy runs counter to this because of the significant cash flow and balance sheet risks for energy suppliers; and could perversely lead to a small supplier exemption which we strongly believe is ultimately unsustainable given the competitive disadvantage it will create for larger suppliers and the relatively greater cost to their customers as the scale of generation under the CfD increases. By contrast, a fixed rate levy is more likely to bring new entrants into the market and ensures CfD costs are shared fairly across all consumers.

While we do not see the case for a redress power for Ofgem, we welcome the inclusion of provisions for a merit based appeals process, comparable with what has been implemented in other sectors (such as the telecoms industry), given the sweeping scope and nature of these redress powers. Indeed, we believe there is a compelling case that a similar appeals process should be extended to regulatory decisions on breach. Although comparable with existing, the period for representations or objections to a consumer redress order (set at 21 days) is too short and insufficient to engage the necessary legal expertise. The total cost to a company, taking account of consumer redress and any fines for a licence breach, needs to be proportionate.

RWE questions the objectives of setting an unilateral 2030 decarbonisation target range for the UK electricity sector given it will deliver neither the legally binding carbon budgets without simultaneous strengthening of the EU-wide target, nor will it deliver further investment. However, if a carbon intensity target is introduced, it must be a target on Government rather than on industry and be matched with a framework which gives sufficient certainty and confidence to investors and sufficient resources to deliver it.

RWE agrees that there needs to be some reduction in the complexity of the market and supports simplifying tariff structures to aid comparability. However, we are concerned that current proposals to restrict to four tariff offerings may go too far in unduly restricting customer choice and constraining ability of companies to innovate, as well as undermining Government policies such as smart meters which will require new tariffs to allow customers to capture the full benefits. While we have not yet had sight of Government’s proposed “tariff amendment” we would urge that this should not prejudice the outcome of the Ofgem Retail Market Review.
Detailed Comments

Chapter 1: General Considerations

This Chapter sets out the objectives of the EMR which the Secretary of State should have regard to when developing and implementing proposals under Part 1 of the Energy Bill, but does not extend to all Chapters in Part 1.

Clause 1(1) sets out the parts of the Bill to which the objectives should apply, but does not extend to investment contracts and routes to market. We cannot find any logical explanation for the exclusion of these provisions and believe that the objectives should apply to all of Part 1, including the Secretary of State’s functions outlined under Sections 34 and 35 (Chapter 6) and Chapter 5.

Clause 1(2) sets out a selective list of matters to consider when exercising functions. To be comparable with other legislation, such as S31 of the Electricity Act 1989, and to ensure that due regard is given to the sustainability of the EMR mechanisms, the Secretary of State should also have due regard to “the need to secure that licence holders are able to finance the activities”.

Chapter 2: Contracts for Difference

Clause 2: Regulations to encourage low carbon generation

Clause 2(1) gives the Secretary of State powers to make regulations about contracts for difference between a CfD counterparty and an eligible generator, but a Contract for Difference (CfD) is currently not defined anywhere in the Chapter. An amendment is required to the Bill to clearly define what a CfD is, bringing it in line with the definition in Schedule 3, Part 1, Clause 1(1) which defines the meaning of an investment contract. That is, a CfD is a contract with a generator that is entered into to promote low carbon generation and includes an obligation for parties to make payments under the contract based on the difference between a strike price and a reference price in relation to electricity generated.

Clause 5: Supplier Obligation

Government is currently consulting on the CfD supplier obligation. We are concerned that the Government’s preferred CfD variable levy payment model will increase the volatility of suppliers’ monthly costs, which will inevitably impact on consumer bills. We believe that greater transparency and certainty of costs for consumers is key and would be better achieved via an alternative model of a central forecast by the counterparty body, coupled with an ex ante fixed-rate obligation and followed by an ex post reconciliation and payments process. A fixed-rate levy will is more likely to encourage new entrants into the market, consistent with Government’s policy to encourage competition and ensures CfD costs are fairly shared across consumers.

RWE are concerned about the increased cost to the consumer resulting from the potential liabilities on suppliers from Government’s currently preferred variable levy model for funding of the CfD ie an actual “true up” of CfD costs incurred over a pre-defined time period (of a month or less) recovered from suppliers according to their market share. Payments required by suppliers under this model will be dependent on the amount of low carbon plant generating over this period and are likely to be highly volatile and difficult to forecast, therefore carrying a risk premium which will ultimately be passed on to consumers.

We welcome the provisions in Clause 5(2)b which would enable the CfD counterparty to hold sums in reserve for the purpose of making CfD payments. The ability to hold sums in reserve would allow Government to move toward an alternative model of a central forecast by the counterparty body and a more transparent ex ante fixed rate obligation, followed by an ex post reconciliation and payments process. The counterparty body is better placed to manage the forecasting risk due to its visibility of all the key parameters, smoothing the volatility in payments required under the levy and creating greater transparency and certainty to consumers and increased predictability to suppliers on pass through.

Clause 5(2)(a) sets out that in addition to recovering the costs to fund the CfD payments to generators, “regulations may make provision for electricity suppliers to pay a CfD counterparty for the purpose of enabling the counterparty to meet such other descriptions of costs as the Secretary of State considers appropriate”. This is very loosely defined and would appear to create substantive liabilities for suppliers as a result. An amendment is required to clarify the purpose and impact of the Clause, limiting costs to those properly incurred in the discharge of obligations under the CfD.

Clause 5(7): The definition of supplier is subject to the regulations and could result in certain categories of suppliers being exempted. The CfD levy must apply to all licensed suppliers regardless of the number of customers they serve. There are increasing obligations on vertically integrated companies, the biggest cost being from CERT and CESP and its successor ECO, while small energy suppliers are either exempt or tapered from these obligations. This is increasingly providing small players with a regulation induced advantage, as the economies of scale received by large suppliers are outweighed by the level of these cumulative exemptions. The Bill needs to be amended to clarify that all licensed suppliers will face the obligation—as is Government’s stated intent.
Clause 6: Direction to offer a contract

An amendment is required to Clause 6 to introduce a restriction in relation to the ability of the Secretary of State to offer contracts to anybody for anything. This should only allow the Secretary of State to exercise this power in defined circumstances such as a failure by the CFD counterparty body to offer a contract in sufficient time. As it stands the power is too broad.

Clause 8: Application of sums held by a CFD counterparty

Clause 8(4) allows for surplus funds collected by the CFD counterparty to either be transferred to, or not to be transferred to, an HM Treasury Consolidated Fund. We seek clarification of this Clause, but welcome the explicit option not to pay any surplus monies into the Consolidated Fund—we believe this option is necessary if the Government does decide in future to use these funds to smooth out the costs to the consumer.

Chapter 3: Capacity Market (Clauses 17 to 28)

The provisions in Chapter 3 are very broad. For example, Clause 17(4) states that the provision that may be made in electricity capacity regulations includes, but is not limited to, the provision described in this Chapter. This would appear to give the Secretary of State considerable discretion in establishing secondary legislation. Furthermore, Clause 22 imposes very broad requirements outside of the capacity agreement, including Clause 22(3) which could determine the future operation of generation plant without compensation. In addition, Clause 26(d) gives the Secretary of State powers to amend, repeal or revoke any other enactment as he considers appropriate in consequence of the provisions made under this Chapter. Such open-ended powers are not consistent with providing investor confidence and need to be much more clearly defined.

Clause 17: Power to make capacity regulations

While the broad drafting undoubtedly reflects the current lack of clarity on the design of the capacity mechanism, this raises the question of how Government plans to provide certainty for investors to deliver the necessary security of supply? There are a number of key aspects required to achieve this:

- The need for clear criteria setting out how and when the powers to hold a capacity auction will be exercised. Given that Chapter 3 aims to address an identified problem in the GB electricity market (ie risks to the security of supply), the exercise of powers to solve such a problem should only arise once the problem has been evidentially verified. The Bill should set out in Clause 17 the practical, economic or capacity parameters that must be considered and achieved prior to a capacity auction being triggered.

- Powers of the Secretary of State to implement the mechanism should be time limited (for example, in Clause 17 (Power to make electricity capacity regulations)) to reduce the scope for recurring change and reduce regulatory risk and uncertainty facing investors. There is precedent in other market reform programmes for these powers to be time limited. For example, the powers of the Secretary of State in the Electricity Act 1989 are time limited in s15A (Licence modification relating to new electricity arrangements), which gave the Secretary of State powers to modify licence conditions “where he considers it necessary or expedient to do so for the purpose of implementing, or facilitating the operation of, new arrangements relating to the trading of electricity”. These powers had to be exercised within two years of the Utility Act 2000 being passed.

- The drafting of Chapter 3 may be amended to include provision to give affected parties time to prepare for capacity market regulations. Apart from the first electricity capacity regulations, which are subject to affirmative resolution procedure, subsequent regulations will be made via negative resolution procedure. The reduced scrutiny and ability to pass such regulations at a faster rate should be balanced by a delay in implementation of 18 to 24 months, which would allow affected parties to prepare.

Clause 18(3)

The meaning of electricity supplier in relation to Capacity Agreements should be uniform, but at present it could be defined by regulations. We have not seen any evidential basis for an objective justification on cost or other grounds for the inclusion in Clause 18(3) of a provision for the Secretary of State to limit the scope of the meaning of “electricity supplier” to enable certain suppliers (such as small suppliers) to be excluded from the obligations in relation to the capacity market. We believe that there will clearly be greater distortion of the market if only some suppliers are expected to fund capacity and that Clause 18(3) should be amended to include all licensed suppliers.

Clause 22(3)

Clause 22 imposes very broad requirements outside of the capacity agreement, including Clause 22(3), which could determine the future operation of generating plant without compensation, stating “requirements which may be imposed by virtue of subsection (1) include, in particular, requirements—(b) relating to restrictions on the use of generating plant.” This is fundamentally an unacceptable intrusion in the market and undermines the value of assets.

It is unclear why such requirements would be required once the capacity market has been designated and Clause 22 should be removed.
Clause 26: Amendment of enactments

There is a lack of specified powers in this subsection in particular and Clause 26(d) provides the Secretary of State with significant powers to amend existing primary legislation through secondary legislation. The subsection needs either to be clarified by reference to specific purposes or removed.

Chapter 4: Conflicts Of Interest (Clauses 29–32)

Government proposes that the System Operator will take on the role of the EMR delivery body. We have concerns with regard to the potential conflicts of interest and confidentiality issues with National Grid acting in this dual capacity. A consultation is currently being undertaken on the potential conflicts of interest and means to address them.

To avoid conflicts of interest, we believe it is necessary to ring-fence the EMR activities from the System Operator functions of National Grid and in this regard we welcome the inclusion in the Energy Bill of powers to enforce separation of the System Operator and Transmission Owner businesses (Clause 29(2)).

Chapter 5: Investment Contracts (Clause 33 and Schedule 3)

The Energy Bill sets out a parallel process for agreeing Investment Contracts/early CfDs for those projects which need to come to a final investment decision before the CfD framework is in place. It is essential that investment contracts provide value for money for consumers and DECC have, in their response to the Energy and Climate Change Select Committee, set out a process for ensuring this. This includes laying in Parliament the details of the contract agreed; commissioning expert external technical and financial advisers to undertake open book scrutiny of the developer's internal project documentation, financial model, cost of capital and risk premium; and publishing a summary of this report and their value for money assessment and fairness opinion. However, this process is not set out in the Bill.

It is crucial that the Government ensures value for money for consumers in early negotiated investment contracts and we believe that an open book process is the best way to deliver necessary price transparency for Government. We welcome the recognition by Government of the need for a transparent, evidence-based process for setting strike prices and transparency around contract terms, including the sharing of risk between the developer and Government and its implications for the strike price.

The process for ensuring value for money for consumers and transparency to Parliament, as outlined in the DECC response to the Select Committee, should be set out on the face of the Bill.

Schedule 3, Clause 20

We note that with regard to Investment Contracts, that the Secretary of State has wide powers to fund investment contracts under Schedule 3, Clause 20. We are concerned that these powers are very broad and do not relate exclusively to “difference” payments under the contract, but rather relate to “the Secretary of State’s obligations under an investment contract, whether entered into before or after this Schedule comes into force” and that “financial assistance” under this clause “means grants, loans, guarantees or indemnities, or any other kind of financial assistance”.

This clause requires scrutiny in Parliament and review in the context of State Aid.

Chapter 6: Access to Markets (Clauses 34 and 35)

Chapter 6 grants the Secretary of State powers to modify licence conditions and codes to “facilitate” participation and “promote” liquidity. While DECC have made it clear that they do not wish to intervene at this stage and, in particular, that they believe the power purchase agreement arrangements will develop under the CfD model, there are no clear criteria in the Bill defining under what circumstances and in what manner such powers will be exercised. These backstop powers therefore overhang the market.

While the Government accepts that the Authority process being undertaken by Ofgem is the “primary vehicle” to deal with market liquidity issues, it has previously stated that it wishes to include backstop powers in the Bill to provide it with the flexibility to act if industry and Ofgem cannot deliver sufficient improvements to meet the objectives and timelines of the EMR programme. However, the Bill does not seek to limit such intervention in the market by the Secretary of State only to be utilised as a “last resort” if the Authority process fails.

Furthermore, the Bill’s drafting creates a low threshold for intervention by referring to anything that “facilitates” or “promotes”, rather than seeking to deal with a significant liquidity or participation issue identified, but unable to be dealt with by Ofgem.

The Bill should be made clearer by including circumstances where the Secretary of State may exercise his powers. Without such clarification there is a risk that the Bill will undermine confidence in the arrangements being discussed with Ofgem, thereby affecting the orderly functioning of the market as market participants may not have confidence of how/when the power conferred by this section of the Bill will be used.

The powers in Clauses 34 and 35 are very broad and could be exercised in a way that could be disproportionate to the ends to be achieved generally across all utilities or specifically in its impact on one utility. We note in particular that the economic impacts on participants of having to buy power at specified prices and on specified
terms is not addressed and that Clause 34 (3) (a) (i) could allow price regulation. We are in agreement with the wider industry that price regulation would not be beneficial and we believe that Clause 34 (3) (a) (i) and Clause 35 (3) (a) should be amended to “excluding as to price”.

Robust, evidence-based criteria for intervention are required and intervention itself must be non-discriminatory between generators (that is, between the integrated energy companies and independents).

Chapter 7: The Renewables Obligation Transitional Arrangements (Clause 37)

Currently renewables are funded by Renewables Obligation Certificates (ROCs). Government intend to replace the ROCs with a fixed price purchasing system. The Bill creates powers to set out the price of the certificates, to provide for their issue and to ensure their purchase, but does not guarantee value equivalence between the ROC and the new replacement Fixed Price Certificates, undermining the long-held principle of grandfathering and creating uncertainty for renewables investors.

Investments have been and continue to be made under the Renewables Obligation (RO). However, the current uncertainty around the future value of the RO based support when the ROC is replaced by a fixed price purchasing system is undermining investor confidence.

The Government states in its EMR Policy Overview that “we have set out in detail in the EMR White Paper and EMR Technical Update how the transition from the Renewables Obligation (RO) to the CID will work for renewable generators”. This detail, however, is not included in the Bill itself and will not be available until secondary legislation is developed, in approximately two years time.

While DECC has set out the policy intent, the White Paper and Technical Update are not documents that can be legally relied upon. They do not create firm commitments that can be referenced later as to how the powers must be exercised.

In terms of the drafting of the Energy Bill itself, paragraph 165 of the DECC memorandum to the Delegated Powers and Regulatory Reform Select Committee notes that the existing powers to make a Renewables Obligation Order in section 32 to 32M of the Electricity Act 1989 “are used as a model for the powers to make a certificate purchase Order, but with changes and additional powers to reflect the different characteristics of a certificate purchase scheme”. There is a key difference between a dynamic and live RO arrangement where new projects could be added to the scheme from time to time, and a frozen Fixed Price Certificate scheme where a much simpler certificate issue and settlement arrangement for the remaining accreditation period would seem to be the core of the scheme, with minimal rights of other intervention needed. The rules for remaining eligible, and the requirements to be complied with to secure value from the ROCs/Fixed Price Certificates, should not change post 2017.

To protect existing investments and avoid deterring future investment under the RO essential to the delivery of the UK’s renewables target, we propose an amendment to make it clear that a generators’ eligibility for ROCs will create an equivalent entitlement to receive the replacement instrument, a Fixed Price Certificate, in line with the grandfathering principle which has underpinned renewable energy support in the UK to date.

Chapter 8: Emissions Performance Standard (Clause 38)

We welcome Government’s stated intention to grandfather the statutory rate of emissions (450gCO₂/kWh) under the Emissions Performance Standard (EPS) out to 2044.

However, Clause 38(5), which states that the duty not to exceed the annual carbon dioxide limit is subject to any provision made by or under regulations made under subsection (6), which in turn allows the Secretary of State by regulations to make provision about the interpretation of the emissions limit duty and to make any provision for the application of emissions limit duty to additional cases or subject to modifications. This would seem to introduce some flexibility for Government to retrospectively change the emissions limit and clarification is required as to how grandfathering would function under this sector.

To match the policy intent and to give investors the necessary confidence, the principle of grandfathering should be placed more firmly on the face of the Energy Bill. The Bill needs to make it clear that the 450gCO₂/kWh standard applied to plants consented after enactment of the primary legislation will not be subject to change during the life of those installations, even if the statutory rate of emissions is subsequently amended.

Part 4: Strategy and Policy Statement

Part 4 sets out governing guidelines for Ofgem. The statement should link to the objectives set out in Clause 1. It may be helpful to include a framework for ensuring co-ordination between DECC and Ofgem to avoid situations where they undertake parallel processes.

Clause 113 (4) sets out a list of consultees that DECC should engage with when consulting on the strategy and policy statement. The current list does not include the energy industry as a named consultee. In developing the strategy and policy statement, it will be important to use practical experience, which industry representatives can offer. We believe Clause 113 (4) should be amended to include the energy industry as a statutory consultee.
**Consumer Redress (Schedule 14)**

We do not see the case for a redress power for Ofgem. However, as Government plans to introduce such a power, we welcome the inclusion of provisions for a merit based appeals process given the sweeping scope and nature of these redress powers. This is an important complement to these powers given the regulator will be operating as the law-making body, the investigating body, the prosecutor, judge and jury, and such a merits based appeal process is comparable with what has been implemented in other sectors such as the telecoms industry. Indeed, we believe there is a compelling case that a similar appeals process should be extended to regulatory decisions on breach.

However, the period for representations or objections to a consumer redress order is set at 21 days, which while consistent with the time limit for existing appeals with regard to fines, we firmly believe is very short—hardly sufficient to engage the necessary legal expertise.

The total cost to a company, taking account of consumer redress and any fines for a licence breach need to be proportionate.

**Proposed Government Amendments**

**Carbon Intensity Target**

Government will introduce via amendment a power to set a decarbonisation target range for the electricity sector for 2030. It is proposed that this power will be exercised at the time of setting the 5th Carbon Budget in 2016, but we are aware that there are calls for the target to be set in the Bill itself.

RWE UK supports decarbonisation of the electricity sector and has substantially reduced the carbon intensity of its own portfolio over the last decade, with major investments in high efficiency CCGTs at Pembroke and Staythorpe, and as the largest investor in renewables in the UK.

A carbon intensity target will deliver neither the legally binding carbon budgets without simultaneous strengthening of the EU-wide target (given UK power sector emissions are capped by the EU ETS and any over-achievement would simply result in a transfer of allowances from the UK to Europe), nor will it deliver further investment.

Rather than more targets, a clear link in the Energy Bill between the Levy Control Framework (LCF) and delivering investment in low carbon generation is required. In this regard, we welcome the Coalition agreement on the overall cap for the LCF out to 2020 (of £7.6 billion), but the focus now needs to be on developing and getting clarity on investable low carbon support mechanism and on the allocation process under the LCF.

If a carbon intensity target is introduced, it must be a target on Government rather than on industry and be matched with a framework which gives sufficient certainty and confidence to investors and sufficient resources to deliver it. A target on industry would be extremely difficult to implement and could lead to inefficient and perverse outcomes undermining long term security of supply.

**Tariff proposals**

Government has signalled its intention to include measures in the Energy Bill to ensure consumers get the cheapest tariffs.

RWE agrees that there needs to be some reduction in the complexity of the market and supports simplifying tariff structures to aid comparability. However, we believe a balance needs to be struck between simplicity on the one hand and retaining the scope both for effective customer choice and innovation on the other.

Our concern is that Ofgem’s proposals to restrict to four tariff offerings may go too far in unduly restricting customer choice and constraining ability of companies to innovate, as well as undermining Government policies such as smart meters which will require new tariffs to allow customers to capture the full benefits.

There are also issues around a requirement to promote “cheapest tariff” and even more so to put customers on a “cheapest tariff”. A major concern about the proposal to promote or put customers on a cheapest tariff is that the snapshot forward-looking view may well, in hindsight, turn out not to be the cheapest. “Cheapest” statements could be misleading and, therefore, customers will need to receive clear caveats to accompany messages to eliminate the potential for misunderstandings. Furthermore, everyone is an individual and the apparently cheapest tariff isn’t right for all. Many customers are concerned with dimensions other than price eg certainty or greenness.

We would caution Government against being too specific in the framing of this amendment, which should not preclude the outcome of the Ofgem Retail Market Review. In line with the Coalition Agreement commitment to introduce sunset clauses to ensure regulation is regularly reviewed, a sunset clause which falls away if the regulator delivers the Government’s objectives should be considered.

**Electricity Demand Reduction**

Government is currently consulting on a range of market-wide and targeted financial incentives to encourage permanent electricity demand reduction. The market-wide incentives include proposals for a premium feed-in tariff for energy efficiency, an obligation on energy suppliers to deliver a specific target of electricity demand
reduction in the non-domestic sector and inclusion of permanent demand reduction in the proposed capacity market. Subject to the outcome of the consultation, Government may include powers to implement any market-wide measures via amendment to the Bill.

RWE is responding to the DECC Electricity Demand Reduction consultation. Our initial concerns with regard to the market-wide financial incentive proposals outlined in the consultation (such as a supplier obligation, premium payments or inclusion with the proposed capacity market) is that these options will complicate an already complex and bureaucratic policy landscape for non-domestic customers.

RWE supports the use of specific and time-limited financial incentives focused on improving the efficiency of non-domestic customers’ buildings. This approach could both support a wider growth agenda and also help to create customer demand for further energy efficiency measures (potentially via increasing interest and uptake of the Green Deal) and other Government policies. Funding for such measures should come from either general taxation or revenues raised through the carbon floor price.

RWE believes that tightening and enforcement of existing policy should remain a focus, such as bringing forward the introduction of Minimum Energy Efficiency standards from the current date of 2018. Building regulations, landlord requirements, appliance standards, improved labelling and consumer advice should be major policy tools for delivery.

PROPOSED AMENDMENTS

Chapter 1: General Considerations

Section 1(1) sets out the parts of the Bill to which the objectives should apply, but does not extend to investment contracts and routes to market. We cannot find any logical explanation for the exclusion of these provisions and believe that the objectives should apply to all of Part 1, including the Secretary of State’s functions outlined under Sections 34 and 35 (Chapter 6) and Chapter 5.

Section 1(2) sets out a selective list of matters to consider when exercising functions. To be comparable with other legislation, such as the Electricity Act 1989, other matters to include are:

— The need to secure that licence holders are able to finance the activities.

Proposed amendments

Section 1, subsection (1), page 1, line 6, after “making” delete everything up to “regard” inline 14 and insert—

“regulations, orders, or licence modifications under any of the provisions of this Part, or of designating or reviewing any strategy and policy statement under Part 4, the Secretary of State must have particular”

Section 1, subsection (2), page 2, after line 7 insert—

“(e) the need to secure that licence holders are able to finance the activities.”

Amendments in context

“(1) In exercising the function of making regulations, orders, or licence modifications under any of the provisions of this Part, or of designating or reviewing any strategy and policy statement under Part 4, the Secretary of State must have particular regard to the matters mentioned in subsection (2).

(2) Those matters are—

(a) the duties of the Secretary of State under sections 1 and 4(1)(b) of the Climate Change Act 2008 (carbon targets and budgets);
(b) ensuring the security of supply to consumers of electricity;
(c) the likely cost to consumers of electricity;
(d) the target set out in Article 3(1) of, and Annex 1 to, the renewables directive (use of energy from renewable sources).”

(e) the need to secure that licence holders are able to finance the activities.

Chapter 2: Contract for Difference

Section 5—Supplier Obligation

This sets out enabling legislation for the costs of Contracts for Difference to be recovered by the CfD counterparty from licensed electricity suppliers (in Great Britain and Northern Ireland). There are two potential payment models: a variable obligation (where suppliers pay whatever is owed to generators over a given period as soon as possible afterwards) or a fixed levy (set by the CfD counterparty body in advance). For the latter the CfD counterparty would need to hold sums in reserves. Current drafting allows for the counterparty to hold reserves, which is helpful, but the purpose for doing this in terms of managing volatility could usefully be specified, as in the draft amendment.
Proposed amendments:

Section 5, subsection (2), page 4, line 10, after “reserve” insert—

‘for the purpose (in particular) of mitigating any volatility arising in the charges payable to electricity suppliers by consumers of electricity as a result of provision made by the regulations”

Section 5, subsection (4), page 4, after line 16 insert—

“(aa) a CFD counterparty to maintain and make available to electricity suppliers a rolling monthly forecast of the amounts likely to be payable by them for the purpose of enabling the counterparty to make payments under CFDs for a period of at least twelve months from the date of each such forecast”

Section 5(7)—Definition of supplier

The definition of supplier is subject to the regulations and could result in certain categories of suppliers being exempted. The CfD levy must apply to all licensed suppliers regardless of the number of customers they serve. There are increasing obligations on vertically integrated companies, the biggest cost being from CERT and CESP and its successor ECO, while small energy suppliers are either exempt or tapered from these obligations. This is increasingly providing small players with a regulation induced advantage, as the economies of scale received by large suppliers are outweighed by the level of these cumulative exemptions.

Proposed amendments:

Section 5, subsection (7), page 4, line 34, after “supplier” delete “subject to any provision made by regulations”.

Amendments in context

(7) In this section “electricity supplier”, subject to any provision made by regulations, means a person who is a holder of a licence to supply electricity under—

(a) section 6(1)d or EA 1989, or

(b) Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I 1992/231 (N.I.1).

Chapter 3: Capacity Market (Clauses 17 To 28)

Section 17: Power to make electricity capacity regulations

While the broad drafting undoubtedly reflects the current lack of clarity on the design of the capacity mechanism, this raises the question of how Government plans to provide certainty for investors to deliver the necessary security of supply? There are a number of key aspects required to achieve this:

— The need for clear criteria setting out how and when the powers to hold a capacity auction will be exercised. Given that Chapter 3 aims to address an identified problem in the GB electricity market (ie risks to the security of supply), the exercise of powers to solve such a problem should only arise once the problem has been evidentially verified. The Bill should set out in Clause 17 the practical, economic or capacity parameters that must be considered and achieved prior to a capacity auction being triggered.

— Powers of the Secretary of State to implement the mechanism should be time limited (for example, in Section 17 (Power to make electricity capacity regulations)) to reduce the scope for recurring change and reduce regulatory risk and uncertainty facing investors. There is precedent in other market reform programmes for these powers to be time limited. For example, the powers of the Secretary of State in the Electricity Act 1989 are time limited in s15A (Licence modification relating to new electricity arrangements), which gave the Secretary of State powers to modify licence conditions “where he considers it necessary or expedient to do so for the purpose of implementing, or facilitating the operation of, new arrangements relating to the trading of electricity”. These powers had to be exercised within two years of the Utility Act 2000 being passed.

— The drafting of Chapter 3 may be amended to include provision to give affected parties time to prepare for capacity market regulations. Apart from the first electricity capacity regulations, which are subject to affirmative resolution procedure, subsequent regulations will be made via negative resolution procedure. The reduced scrutiny and ability to pass such regulations at a faster rate should be balanced by a delay in implementation of 18 to 24 months, which would allow affected parties to prepare.

Proposed amendments

It is suggested that new paragraphs (6), (7) and (8) be added to s 17 in order to scope the powers under Chapter 3. These amendments are to ensure that the Secretary of State would not have enduring discretionary powers, or that the powers could be used for purposes other than those currently intended:

s. 17 Power to make electricity capacity regulations

(6) The power conferred by subsection (1) may not be exercised after the end of the period of five years beginning with the day on which that subsection comes into force.

(7) The power conferred by subsection (1) may only be exercised where the Secretary of State is satisfied that:
(a) he has received a statement of capacity shortfall from the national system operator that demonstrates a significant likelihood of a capacity shortfall that will disrupt security of electricity supplies;
(b) it is necessary to do so to meet the capacity objectives at least cost to consumers of electricity;
(c) no mechanism is available to any authority to achieve some or all of the capacity objectives;
(d) the effect would be proportionate to the policy objective intended to be secured; and
(e) [other relevant considerations].

(8) The electricity capacity regulations made under subsection (1) shall not come into force earlier than [x] years from the date on which such electricity capacity regulations are made.

Section 18: Capacity Agreements

The meaning of electricity supplier in relation to Capacity Agreements should be uniform, but at present it could be defined by regulations. We have not seen any evidential basis for an objective justification on cost or other grounds for the inclusion in Section 18(3) of a provision for the Secretary of State to limit the scope of the meaning of “electricity supplier” to enable certain suppliers (such as small suppliers) to be excluded from the obligations in relation to the capacity market. We believe that there will clearly be greater distortion of the market if only some suppliers are expected to fund capacity and that Section 18(3) should be either removed or amended to include all licensed suppliers.

Proposed amendment

Section 18, page 10, after line 21, omit everything in subsection (3) from “Provision” to “supplier”.

Amendment in context

This amendment has the effect of deleting, in its entirety, subsection (3) of Clause 18, which (if it were allowed to stand) would enable electricity capacity regulations made under Clause17 to make provision about the meaning of “electricity supplier”.

Section 22: Other requirements

Section 22 imposes very broad requirements outside of the capacity agreement, including Section 22(3), which could determine the future operation of generating plant without compensation, stating “requirements which may be imposed by virtue of subsection (1) include, in particular, requirements— (b) relating to restrictions on the use of generating plant.” This is fundamentally an unacceptable intrusion in the market and undermines the value of assets.

Proposed amendment

It is unclear why such requirements would be required once the capacity market has been designated and Section 22 should be deleted.

Section 28—Regulations under Chapter 3

This section lists statutory consultees for Chapter 3. Generators are not currently included on the list, so an amendment is proposed to add them.

Proposed amendment

Section 28, subsection (2), page 14, after line 37 insert—

“(aa) any person who is a holder of a licence to generate electricity under section 6(1)(a) of EA 1989, and”

The amendment in context:

“(1) Before making any regulations under this Chapter, the Secretary of State must consult—

(a) the Authority,

(aa) any person who is a holder of a licence to generate electricity under section6(1)(a) of EA 1989,

(b) any person who is a holder of a licence to supply electricity under section6(1)(d) of EA 1989, and

(c) such other persons as the Secretary of State considers it appropriate to consult.”

Chapter 6: Access to Markets

Chapter 6 grants the Secretary of State powers to modify licence conditions and codes to “facilitate” participation and “promote” liquidity. While DECC have made it clear that they do not wish to intervene at this stage and, in particular, that they believe the power purchase agreement arrangements will develop under the CfD model, there are no clear criteria in the Bill defining under what circumstances and in what manner such powers will be exercised. These backstop powers therefore overhang the market.

While the Government accepts that the Authority process being undertaken by Ofgem is the “primary vehicle” to deal with market liquidity issues, it has previously stated that it wishes to include backstop powers in the Bill to provide it with the flexibility to act if industry and Ofgem cannot deliver sufficient improvements to meet the
objectives and timelines of the EMR programme. However, the Bill does not seek to limit such intervention in the market by the Secretary of State only to be utilised as a “last resort” if the Authority process fails.

Furthermore, the Bill’s drafting creates a low threshold for intervention by referring to anything that “facilitates” or “promotes”; rather than seeking to deal with a significant liquidity or participation issue identified, but unable to be dealt with by Ofgem.

The powers contained in Chapter 6 of the Energy Bill are “backstop powers” and intended to be used only in circumstances where Ofgem is unable to deliver on its liquidity objectives through Ofgem’s process. It would therefore seem appropriate that the scope of the provision should be to provide powers that are the minimum required. To give certainty, they must deal with known or foreseeable issue (ie liquidity issues in the wholesale market identified in Ofgem’s consultations and updates) rather than all open-ended future possibilities.

Section 34: Power to modify licence conditions etc: market participation and liquidity

The Secretary of State is granted powers to modify licence conditions and codes to “facilitate” participation and “promote” liquidity. The Bill: (a) does not limit the intervention in the market by the Secretary of State to be only as a “last resort” if the Authority process fails; (b) creates a low threshold for intervention, ie anything that facilitates or promotes, rather than seeking to deal with a significant liquidity or participation issue identified, but unable to be dealt with, by Ofgem.

Proposed amendments

Amendments are suggested to paragraphs (1) and (2) of s. 34 to make clear the fact that powers for the Secretary of State under this section are to be “backstop powers” and that these powers are intended to be a “last resort” if the Authority process fails:

* s. 34 Power to modify licence conditions etc: market participation and liquidity
  
  (1) Where the Authority notifies the Secretary of State that:
    (i) significant liquidity issues have been identified in the wholesale electricity market for electricity; and
    (ii) the Authority considers its powers to be inadequate to address the issues identified, the Secretary of State may modify—
      (a) a condition of a particular licence under section 6(1)(a) or (d) of EA 1989 (generation and supply licences);
      (b) the standard conditions incorporated in licences under those provisions by virtue of section 8A of that Act;
      (c) a document maintained in accordance with the conditions of licences under section 6(1)(a) or (d) of that Act, or an agreement that gives effect to a document so maintained.

  (2) The Secretary of State may exercise the power in subsection (1) only where hedging products for traded electricity are not generally available, and such unavailability is a barrier to for the following purposes—
      (a) facilitating participation in the wholesale electricity market in Great Britain, by holders of licences granted under section 6(1)(a) of EA 1989 and in a manner that is proportionate to the purposes to be achieved, and which do not unduly detrimentally impact a participant or class of participants in that market whether by licence holders or others;
      (b) promoting liquidity in that market.

Section 35: Power to modify licence conditions etc to facilitate investment in electricity generation

The scope of modifications that can require changes to the terms on, or way in, which power is bought/sold, restrict intra-group trading, and require information disclosure. The powers could be exercised in a way that could be disproportionate to the ends to be achieved either generally across eg utilities or specifically in its impact on specific companies.

Proposed amendments

Amendments are suggested to paragraphs (1) and (2) to ensure that power in this section 35 are limited so that they may only be exercised proportionately to the purposes to be achieved:

* s. 35 Power to modify licence conditions etc to facilitate investment in electricity generation
  
  (1) Where the Authority notifies the Secretary of State that:
    (i) significant liquidity issues have been identified in the wholesale electricity market for electricity; and
    (ii) the Authority considers its powers to be inadequate to address the issues identified, the Secretary of State may modify—

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(a) a condition of a particular licence under section 6(1)(d) of EA 1989 (supply licences);
(b) the standard conditions incorporated in licences under that provision by virtue of section 8A of that Act;
(c) a document maintained in accordance with the conditions of licences under section 6(1)(d) of that Act, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may exercise the power in subsection (1) only for the purpose of facilitating investment in electricity generation by promoting availability of arrangements for the sale of electricity generated and in a manner that is proportionate to the purposes to be achieved, and which do not unduly detrimentally impact a participant or class of participants in that market and in a manner that secures that affected licence holders are able to finance the activities which are the subject of obligations imposed by or under this section.

Section 36: Licence modifications under sections 34 and 35: further provisions

The powers could be exercised in a way that could be disproportionate to the ends to be achieved either generally across eg utilities or specifically in its impact on specific company. Further, the economic impacts on participants of having to buy power at specified prices and on specified terms is not addressed.

Proposed amendments

Amendment is suggested to paragraph (2) (a) in order to ensure that the requirement for consultation extends to those affected by potential licence modifications (the current position being the licence holder, the Authority and “such other persons” at the discretion of the Secretary of State):

s. 36 Licence modifications under sections 34 and 35: further provisions

(1) A modification of a licence under section 34(1) or 35(1) may in particular include a modification—
(a) to provide for a new document to be required to be prepared and maintained in accordance with the conditions of such a licence;
(b) to provide for an agreement to give effect to a document so maintained.

(2) Before making modifications under section 34(1) or 35(1), the Secretary of State must consult—
(a) the holder of any licence being modified who may be affected by such modifications,
(b) the Authority, and
(c) such other persons as the Secretary of State considers it appropriate to consult.

Chapter 7: RO Transitional Arrangements

Chapter 7 of the Energy Bill grants the Secretary of state powers related to the transitional arrangements for the renewables obligation. The Government states in its EMR Policy Overview that “we have set out in detail in the EMR White Paper and EMR Technical Update how the transition from the Renewables Obligation (RO) to the CfD will work for renewable generators”. This detail, however, is not all included in the Bill itself and will not be available until secondary legislation is developed, in approximately two years time.

While DECC has set out the policy intent, the White Paper and Technical Update are not documents that can be legally relied upon. They do not create firm commitments that can be referenced later as to how the powers must be exercised.

In terms of the drafting of the Energy Bill itself, paragraph 165 of the DECC memorandum to the Delegated Powers and Regulatory Reform Select Committee notes that the existing powers to make a Renewables Obligation Order in section 32 to 32M of the ElectricityAct 1989 “are used as a model for the powers to make a certificate purchase Order, but with changes and additional powers to reflect the different characteristics of a certificate purchase scheme”. There is a key difference between a dynamic and live RO arrangement where new projects could be added to the scheme from time to time, and a frozen fixed price certificate scheme where a much simpler certificate issue and settlement arrangement for the remaining accreditation period would seem to be the core of the scheme, with minimal rights of other intervention needed. The rules for remaining eligible, and the requirements to be complied with to secure value from the ROCs/fixed price certificates, should not change post 2017.

“Guarantee” for RO accredited plant to remain eligible

The following statements suggest an intention of “guaranteeing” of continued support to existing RO accredited generation.

— In its White Paper on EMR in 2011, the Government stated that part of the arrangements for the RO transition was “to ensure ongoing RO stability, existing accredited generation will continue to be supported under the RO and will not be permitted to transfer to the new scheme”.
— Annex D of the White Paper states that “the arrangements for transition are based on the principles of transparency, longevity and certainty”.
— Paragraph 32 of the explanatory notes to the Energy Bill states that “the RO would continue to operate for the generating capacity which accredited under it before it closed to new generating capacity”.
— The EMR Policy Overview, paragraph 106, states that “all generation accredited under the RO will receive its full 20 years of support (subject to the 2037 end date of the RO).”

Chapter 7 of the Energy Bill does not contain explicit provisions replicating the above. It does not clearly guarantee ongoing support for existing accredited generation, either: (i) under the vintaged RO or (ii) as under the new fixed price certificates. Nor does it “guarantee” the level of support.

Proposed amendments

On entitlement, insert Clause–

s. 37A Continuation of accreditation for ROC accredited generating stations

A new s. 37A is proposed in order to ensure that there is a provision in primary legislation for a guaranteeing of continued support to existing RO accredited generation:

s. 37A Continuation of accreditation for ROC accredited generating stations

(1) A certificate purchase order made pursuant to section 37 shall specify that all generating stations accredited to receive renewables obligation certificates on the date of implementation of the certificate purchase order shall be eligible to be issued with certificates until the 20th anniversary of the date on which accredited under a renewables obligation order or 31st March 2037 (whichever is earlier) unless s. 37A (2) applies.

(2) Section 37A (1) shall only apply to existing generating stations in respect of any additional capacity (with “existing generating station” and “additional capacity” having the meaning given to the terms in the Renewables Obligation Order 2009 as amended).

On value—amendment to Section 32O(2a)

s. 32O Further provision about the certificate purchase obligation

Amendments are suggested to paragraphs (2) in order to ensure that the primary legislation sets out the basis of or includes the principles for calculation of the certificate purchase obligation:

s. 32O Further provision about the certificate purchase obligation

(1) A certificate purchase order may shall make provision generally in relation to the certificate purchase obligation.

(2) A certificate purchase order shall, in particular:

(a) specify that the redemption value of each certificate shall be an amount equal to 1.1 x (£37.19 + (£37.19 x Y)). Y shall be, for each period of 12 months from 1 April 2010, the percentage increase or decrease in the retail prices index over the period from 1st January 2009 and ending on the 31st December in the year immediately preceding the start of the relevant period of 12 months (the resulting figure in each year being rounded to the nearest penny, with any half of a penny being rounded upward) or provide for how the redemption value;

As with the RO the costs should be paid equally across all customers—amend32P(4) Certificate purchase levy to ensure consistency with current regulations

s. 32P Certificate purchase levy

It is suggested that paragraph (4) be amended so that costs under the certificate purchase scheme be paid as per the existing RO regime (ie no power to make additional carve outs).

s. 32P Certificate purchase levy

(1) A certificate purchase order may provide for a certificate purchase levy to be charged in connection with the provision of payments to the relevant purchasing body.

(2) A certificate purchase levy is a levy:

(a) charged in respect of supplies of electricity that have been, or are expected to be, made in each specified period, and

(b) payable in respect of each such period by persons who make, or are expected to make, the supplies.

(3) The order may (without limiting the generality of section 32Y(1)(d)) provide for different rates or different amounts of levy to be charged:

(a) in different cases or circumstances;

(b) in relation to different specified periods.

(4) The order may secure that the levy is not to be charged in respect of particular descriptions of supplies of electricity provided that such supplies were previously exempted from the renewables obligation.

On banding, amendments to s.32W

s. 32W Section 32V: transitional provision and savings

It is suggested that paragraphs (2) and (3) are amended in order to ensure that there are provisions in primary legislation for a guaranteeing of continued support to existing RO accredited generation (see 4.1 above):
s. 32W Section 32V: transitional provision and savings

(1) This section applies where a certificate purchase order contains banding provision.

(2) The order shall provide for the effect of any banding provision made in an earlier such order, or in a renewables obligation order where immediately preceding the order, to continue, in such circumstances as may be specified, in relation to:
   (a) the electricity generated by generating stations of such descriptions as may be specified in such previous order, or
   (b) so much of the electricity as may be determined in accordance with the such previous order.

(3) The order shall provide for:
   (a) the effect of any banding provision made in a renewables obligation order by virtue of section 32D(1) to apply, in such circumstances as may be specified, in relation to GB certificates as it applied in relation to renewables obligation certificates;
   (b) the effect of any banding provision made in an order under Article 52 of the Energy (Northern Ireland) Order 2003, by virtue of Article 54B(1) of the Order, to apply, in such circumstances as may be specified, in relation to NI certificates as it applied in relation to Northern Ireland RO certificates...

Chapter 8: Emissions Performance Standards

We welcome Government’s stated intention to grandfather the statutory rate of emissions (450gCO₂/kWh) under the Emissions Performance Standard (EPS) out to 2044.

However, Clause 38(5), which states that the duty not to exceed the annual carbon dioxide limit is subject to any provision made by or under regulations made under subsection (6), which in turn allows the Secretary of State by regulations to make provision about the interpretation of the emissions limit duty and to make any provision for the application of emissions limit duty to additional cases or subject to modifications. This would seem to introduce some flexibility for Government to retrospectively change the emissions limit and clarification is required as to how grandfathering would function under this sector.

To match the policy intent and to give investors the necessary confidence, the principle of grandfathering should be placed more firmly on the face of the Energy Bill. The Bill needs to make it clear that the 450gCO₂/kWh standard applied to plants consented after enactment of the primary legislation will not be subject to change during the life of those installations, even if the statutory rate of emissions is subsequently amended.

Proposed amendment

Clause 38, page 39, after line 36 insert—

“(2A) The Secretary of State may by order made by statutory instrument at any time vary the statutory rate of emissions with effect from a date to be specified in or determined in accordance with the provisions of the order.

(2B) An order under subsection (2A) must not have the effect of retrospectively altering the statutory rate of emissions that was applicable by virtue of subsection (2) at any time before the date referred to in subsection (2A).

(2C) A statutory instrument containing an order under subsection (2A) may not be made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.”

January 2013

Memorandum submitted by National Grid (EN 22)

EXECUTIVE SUMMARY

1. National Grid thanks the Committee for the opportunity to give oral evidence. The Committee raised conflicts of interest as a concern at the oral evidence session. We understand why there may be concern over conflicts of interest, so it may be helpful to provide more information.

2. We have included an annex with more detail about how we expect conflicts will be managed. In summary:
   — Our role as proposed EMR Delivery Body gives us very limited discretion.
   — Our analysis will be reviewed and challenged by an independent panel of technical experts.
   — We strongly welcome increased transparency and agree there will be a need to ring-fence information around EMR functions.
   — We believe there are extensive and sufficient regulatory and statutory provisions already in place including the potential of a quadruple lock to ensure appropriate business separation. The Bill includes further measures to strengthen these existing provisions.
   — We are conscious of need to minimise consumer costs and anticipate recovering our costs efficiently through allowances which will be regulated by Ofgem.
— Ofgem has the power to prevent us recovering costs on unnecessary investment.

A. Our role under EMR

3. National Grid would have four roles under EMR, building on much of our previous experience as System Operator. These roles would give us very limited discretion and task us with:
   — implementing effective IT systems and processes as we have done under NETA and BETTA;
   — carrying out analysis for DECC using methods, data and assumptions given to us by DECC;
   — assessing generation projects against eligibility criteria, which will be pre-defined and public; and
   — monitoring the performance of generators against EMR arrangements.

B. Managing conflicts of interest and contingency measures

4. We strongly welcome increased transparency and the need to distinguish and ring-fence information received as part of our role as Delivery Body. We will continue to work with DECC to ensure that as much information as possible is publicly available as early as possible. We agree that there will be a need to distinguish and ring-fence information received as part of our role as Delivery Body and information we already receive as either Transmission Owner (TO) or System Operator (SO). We expect DECC/Ofgem to amend our licence obligations to define what information needs to be ring-fenced.

5. We have 20 years of experience in managing actual or perceived conflicts. Our licence obligations set out clearly what we can and cannot do, for example, in how we manage and share data; how we deploy staff across different parts of the business; application of security partitions; and access to different entry cards between different parts of the business. Our employees are well versed in the practice of business separation and required to follow rigorous internal compliance measures.

6. We are also required to appoint a compliance officer and a compliance team who are responsible for examining our processes and communications to ensure effective safeguards. This team also make regular reports to Ofgem who assess the effectiveness of separation measures and have the power to require modifications. If we fail to comply we are subject to significant sanctions by Ofgem. A breach of our licence conditions could see fines of up to 10% or our turnover and ultimately our licences being revoked.

7. We believe that strong provisions already exist to manage conflicts of interest and there is the potential of a quadruple lock arising from proposals in Clause 29 of the Bill, that would further ensure compliance, promote best practice and act as a barrier to conflicts of interest across our businesses in delivering EMR.

8. Currently, National Grid is bound by an existing triple lock that includes:
   — regulation: our licences prohibit the improper use of information;
   — legal provisions: Competition law prohibits us from carrying out business in a discriminatory way. Additionally the business is bound by the Utilities Act 2000 and the Electricity Act 1989 which set out criminal prohibitions on disclosing information about an individual or business that we have received by virtue of our transmission licence to a third party except in very limited instances. The Electricity Act sets out statutory obligations to prevent conflicts of interest; and
   — industry codes: codes for our industry are set independently by Ofgem that govern market operation, for example, and Use of System Code (CUSC), Grid Code and the Balancing and Settlement Code (BSC).

9. The Bill provides assurance in the form of contingency measures (clause 29) so that under EMR National Grid would operate within a quadruple lock system:
   — Contingency measures: the Bill sets out provisions for the Secretary of State to protect energy consumers, including the ultimate sanction of giving the role to another body and introducing different kinds of corporate separation. Finally, if required by Government, we will need to report every year on how we are complying with separation measures.

10. We think that it is important for consumers that in addressing perceived conflicts, synergies between our proposed EMR role and our SO and TO functions are not reduced or lost. Additionally, the existing and very real synergies between our SO and TO roles should not be diluted as this would also not be in the interests of the consumer.

11. We therefore believe that the powers afforded to the Secretary of State in the current Energy Bill are sufficient to protect against conflicts of interest. We welcome the DECC/Ofgem consultation on conflicts and synergies we hope there will be greater clarity about the precise nature of these concerns.

C. Quality of our analysis under EMR

12. It could be argued there is further protection in the Bill as our analysis will also be scrutinised and challenged by an independent panel of technical experts.
D. Costs to consumers

13. We will incur costs efficiently, and these will be regulated by Ofgem. We expect that allowances will be set based on a regulatory review mechanism that will protect the interests of consumers. We do not, however, want to close off the possibility of appropriate incentivisation. Such incentives should be aligned to protect the interests of consumers.

Annex

FURTHER DETAIL ON HOW CONFLICTS OF INTEREST ARE CURRENTLY MANAGED

Regulation

18. National Grid Electricity Transmission (NGET) has transmission licences, issued by the independent regulator Ofgem, which directly impact our process of financial management, regulatory accounts, the management of information and business separation.

19. There is an explicit obligation on NGET to conduct its transmission business so as to secure that NGET, its affiliates, any users of the transmission system and other transmission licensees do not obtain an unfair commercial advantage on itself or on another company in the National Grid group. Every National Grid employee is rigorously trained to understand compliance measures and take these rules extremely seriously. A breach of our licence conditions could see fines of up to 10% or our turnover and ultimately our licences being revoked.

20. Licence rules also require NGET to deal with all parties (including affiliates) on an arm’s length basis and normal commercial terms and to avoid cross subsidies; not to discriminate between users or classes of users in the provision of connection to or use of its transmission system; and maintain separation between NGET’s transmission business and National Grid’s offshore transmission business. This is bolstered by the requirement for NGET to have a compliance officer to oversee this separation and to report annually to Ofgem.

Legal Provisions

21. Current competition law prohibits National Grid from carrying on its business in a discriminatory way. The abuse of dominance provisions require NGET to operate fairly where it is in a position to distort competition: this requirement could capture using information which NGET receives for one purpose to confer an unfair commercial advantage on itself or on another company in the National Grid group.

22. In addition to competition law there are two further legal disincentives. The Utilities Act 2000 and the Electricity Act 1989 set out statutory obligations to prevent conflicts of interest. First, Section 105 of the Utilities Act 2000 prohibits us from disclosing information about an individual or business that we have received by virtue of our transmission licence to a third party except in very limited instances. This is a criminal prohibition. Second, the Electricity Act 1989 requires NGET to develop and maintain an efficient, co-ordinated and economic system of electricity transmission and to facilitate competition in the supply and generation of electricity. NGET will need to have both these statutory obligations in mind when carrying out its EMR functions.

Industry Codes

23. Industry Codes for our business are set independently by Ofgem and establish detailed rules for industry that govern market operation. Industry Codes such as the Connection and Use of System Code (CUSC), Grid Code and the Balancing and Settlement Code (BSC), in general require that information that NGET receives as part of its regulated business be treated as confidential and be used only for the purpose of performing its activities.

Proposals in the Bill

24. In addition to existing regulation, legislation and industry codes, further protections are proposed in the Energy Bill that sets out provisions for the Secretary of State to protect energy consumers, including giving the role to another body and introducing different kinds of separation. Finally, if required by Government we will need to report every year on how separation measures are being complied with.

— Clause 29 (“modifications of transmission and other licences: business separation”) introduces measures to protect consumers and prevent abuse by enabling the Secretary of State to take very strong action in relation to our role as Delivery Body. For example, this includes:
  — Requiring a separate subsidiary to carry out EMR functions; and
  — Introducing separations between our role under EMR and our businesses based on geography, technology, accountancy and information/data.

— In addition, there will be an opportunity every year for further scrutiny by the Government, Ofgem, industry and Parliamentarians to scrutinise whether we are complying with the law. The Energy Bill makes provisions for the Secretary of State to require annual compliance report concerning separation measures.

January 2013
Memorandum submitted by DONG Energy (EN 23)

1. INTRODUCTION

1.1 DONG Energy is a Danish utility company and one of the leading energy groups in Northern Europe. Our business is based on procuring, producing, distributing, and trading in energy and related products in Denmark and Northern Europe. We have approximately 6,000 employees and generated DKK 57 billion (EUR 7.6 billion) revenue in 2011. With more than 20 years’ experience in the wind power industry, DONG Energy is one of the leading offshore wind farm developers in the world. We have installed half of the world’s largest offshore wind farms. The UK is one of DONG Energy’s primary markets for developing offshore wind, having invested over £3 billion in UK renewable since 2005. Our offshore pipeline of future projects in the UK comprises more than 4.8 Giga Watts (GW).

2. OVERVIEW

2.1 DONG Energy has been involved in discussions relating to the Energy Bill since 2010. We are pleased that many of our previous proposals have been adopted in the latest Bill and we will continue to work with Government departments towards acceptable proposals for industry and government.

2.2 Along with other offshore wind generators, DONG Energy is committed to cost reduction, which will lead to reduced subsidies and costs for consumers.

2.3 An efficient, certain supply chain is a fundamental requisite of our ability to deliver cost reduction. We have long lead time items and make investment decisions a long way ahead of commissioning a project. For example, a wind farm to be completed in 2021 would need a final investment decision in 2017. The supply chain needs to make investment ahead of this in order to be ready to supply our projects. A 2030 decarbonisation target offers greater certainty to the supply chain that there will be sufficient demand for its products, encouraging investment and innovation. In turn, this creates greater certainty for DONG Energy that its cost of energy reduction targets can be met.

2.4 For investment decisions made by developers, a 2030 decarbonisation target is one of a range of factors upon which a decision is based. It is a signpost to senior management that the UK continues to be committed to low carbon generation and, as such, is an attractive country in which to invest.

2.5 DONG Energy supports the analysis that has been completed to date by DECC to understand the impact on costs and impact for consumers of decarbonising the electricity sector. This work has led to the current policy framework and whilst we have not undertaken a similar piece of work, we believe that, broadly, the current Government proposals will lead to reduced customer costs in the longer term.

2.6 DONG Energy supports the ambition of the Energy Bill to consider, and support, the total UK energy system. We support the views of the CCC that financial and non-financial policy measures are required, along with development and expenditure on CCS demonstration models to drive down electricity sector emission reductions.\footnote{CCC, Building a low-carbon economy — The UK’s contribution to tackling climate change The First Report of the Committee on Climate Change, December 2008, Chapter 5, p 176.} We see renewables as being part of the total solution; we do not see the need for a merit order or priority despatch of renewables as this will not deliver the best value for consumers.

3. SPECIFIC COMMENTS ON ENERGY BILL CLAUSES

3.1 Clause 3(6)(b) Designation of a CFD counterparty

3.1.1 The current drafting in the Bill allows for the CFD counterparty to resign on 28 days notice. This is a very short period for an entity that is central to the CFD regime and extending this period should be considered to add certainty to the regime.

3.2 Clause 6 Direction to offer to contract

3.2.1 The current drafting in the Bill allows for CFDs (Contract for Difference) to be allocated by means of a competitive process, such as an auction. There is not sufficient detail around the trigger for the Secretary of State or the system operator to move from the administrative process of CFD allocation to a competitive process. This lack of certainty will potentially undermine confidence in investment in offshore wind.

3.3 Clause 11 Regulations: further provision

3.3.1 The current drafting in the Bill includes provision for the Secretary of State to instruct the CFD Counterparty to vary or terminate a CFD. Given that we do not have sight of the regulations, we are concerned at the scope of this power. A reduction in the value of the CFD runs the risk of seriously undermining the value of assets, potentially undermining confidence in current future investments.
3.4 Clause 29 Modifications of transmission and other licences: business separation

3.4.1 The current drafting in the Energy Bill gives the Secretary of State power to amend the national system operator’s transmission licence to introduce business separation or ring fencing. Competition in generation market leads to the best price for consumers. To maintain competitiveness between developers and generators, information flow must be managed in strict confidence. DONG Energy therefore believes that the electricity market reform delivery body must be a licensed activity to ensure accountability and transparency for the industry and improve confidence for consumer.

3.5 Clause 37 Transition to certificate purchase scheme

3.5.1 The current Bill does not sufficiently clarify how the existing support mechanism for renewables, (ROCs) will be treated after 2027. It is our understanding that the Government’s policy intention is that there will be a grandfathered transition to a fixed price regime. However, without such a commitment explicitly stated in the Bill, there is the risk that sunk investment costs will be undermined.

January 2013

Memorandum submitted by the Solar Trade Association (EN 24)

About the Solar Trade Association

The Solar Trade Association was established in 1978 as a not-for-profit trade association. In 2011 it affiliated to the Renewable Energy Association. We represent a diverse membership across the solar power and solar heating industry. STA’s corporate membership consists of over 350 companies ranging from large manufacturers, through to distributors, installers, consultancy firms and training bodies. We are by far the most influential Association on Government policy related to solar, and have been instrumental in eg the recent RO banding announcements, the Renewables Roadmap and devising the capacity/cost control mechanism for the Feed-In Tariff.

Summary

Solar power has emerged as a major future source of power and it now requires less subsidy than most renewables at the utility-scale. It is likely to be considerably cheaper than nuclear and CCS in the 2020s and competitive with all forms of power generation. Solar opens up the electricity sector to much wider ownership, choice and competition—key stated objectives of EMR. However, the Energy Bill does not yet work for independent generators and the important autogeneration (onsite self-supply) market has been marginalised. The Bill is not fit for purpose unless this is addressed as a matter of urgency, through:

— a commitment in the Bill (Chapter 6, Clause 34 ) to the Green Power Auction Market (GPAM) (also referred to by DECC as the short term auction market) to be operational from 2014;
— a clear Ministerial Statement as soon as possible on the establishment of the Green Power Auction Market;
— recognition that autogeneration, and solar in particular, has a major role to play in transforming electricity markets and the removal of barriers in the current FIT;
— A clear CO₂ target; and
— Improvement of wider liquidity problems in the electricity market going forwards.

General Comments

1. As it stands, the Energy Bill does not work for independent generators. This is surprising given Electricity Market Reform was previously described as opening up the electricity market for greater competition and new entrants. Opening up the market in line with the stated objectives of the EMR package is in the public interest. The “market” can only be reformed with new entrants offering new and innovative product and opening diversity and choice to the consumer. Consumers will not benefit from greater choice, competition and innovation if the status quo persists.

2. For example, Secretary of State Chris Huhne said (DECC press release 15 September 2011), “I want to put small companies on an equal footing with the bigger players in the energy sector. The coalition Government is bringing about greater openness in energy markets and will strengthen competition—that’s good news for both business and consumers.” (DECC press release 7 July 2011) “we need more companies and more competition to keep price rises as low as possible.” (Hansard 7 July 2011) “That is why we want more companies to enter the market, and the electricity market reform will encourage more market entrants on the generator side.”

3. The evidence from Germany is clear; given an accessible support mechanism vast numbers of new generators will enter the market. The great majority of the 25 billion Euros of investment in renewable power in Germany in 2011 came from individuals, farmers, commercial and industrial plant and independent project developer. Utilities, which are not under an Obligation in Germany, provided only around 15% of investment. Many of these investors invested for returns on equity of typically 7% (Alexa Capital). Given the hard evidence from Germany, it is difficult to understand why these investors, which are bringing the low cost capital that the Government is looking to attract through the EMR package, are facing increasing barriers to investment in the current market and are being largely ignored in the policy package devised to date.
4. Marginalising these new investors is a major failure in EMR. Independent generators are expected to provide a third to a half of the necessary investment to 2020. Unless this failure is addressed the Bill is not fit for purpose.

5. This means that not only does route-to-market have to be addressed for independent generators, but the role of autogeneration (self-supply through onsite renewables) also needs to be recognised. The STA supports the Green Power Auction Market for utility-scale solar. We are aware many groups are promoting the raising the maximum size of scheme for the Feed-In Tariff too. For solar power it is more important that the 250kW–5MW existing FIT band, plus other illogical budget constraints, are addressed. However, for utility-scale solar larger than 5MW, if the GPAM is not pursued, a raised fixed FIT would be preferable to current proposals.

Solar Power

6. The cost of solar power has fallen by 70% in two years. This is an unprecedented rate of cost reduction. While future cost reductions are likely to be much more modest, prices will continue to fall if the technology has a clear support framework towards achieving grid parity.

7. Mainstream analysts, including Ernst & Young and the IEA, anticipate solar power will be competitive with grid electricity before the end of this decade in the UK. However, as well as a stable support framework to enable grid-parity, coupled with an effective route to market the electricity generated, this will also depend on fair treatment of distributed power in the UK. For example, network access, investment in storage and smart grids, and correct pricing of locally generated power.

8. Research by the Intergovernmental Panel on Climate Change shows that solar power could be the biggest generator of power in the world by 2050. Solar power is now recognised as the major power source for the future. It is now one of DECC’s “key” technologies.

9. Utility and commercial-scale solar now gets 1.6 ROCs of support (1.7 for roof-mounted), so it is cheaper than offshore wind, biomass CHP, AD, Advanced Conversion Technologies, deep geothermal, wave and tidal. Given cost estimates for new nuclear and CCS (£100MWh in Gas Strategy) in the 2020s, solar power will be considerably cheaper than both of these. We have seen historically how quickly the cost of solar have declined, we think that the scalability of the technology will enable cost reductions to continue, albeit at a more modest rate.

The Potential Opportunity could Transform the UK’s Energy Mix

10. If south facing roofs and facades alone were fitted with solar, it would generate power equivalent to around a third of UK electricity demand.

11. Solar has a complementary generation profile to wind. Together they achieve a smoother annual generation output. This is why many countries are now engineering solar and wind growth together. We are concerned that engineering realities like this are considered in project allocation/capacity.

12. The solar industry forms three key sub-sectors; domestic solar, commercial-scale solar, and utility-scale solar (which is often ground-mounted). Domestic and commercial-scale solar on building roofs will compete with the retail price of electricity. Utility-scale solar will seek to access the wholesale market and secure PPAs.

13. Solar power therefore opens up a new competitive front with the retail price of electricity. This is mostly ignored in DECC analysis, yet it is important because solar power is likely to be competitive earlier than eg Levelised Cost of Energy analysis shows.

14. Furthermore solar power puts ownership and the power to generate directly in the hands of the household/business. Therefore solar is a disruptive technology with the potential to transform choice and competition in the electricity sector.

Contracts for Difference (CfD’s) under the EMR

15. Utility-scale solar typically secures a Power Purchase Agreement (PPA), but there is only one main company providing these PPA’s, impacting competition. To the best of our knowledge, utility-scale schemes are being largely driven by independent project developers. We are concerned about future route-to-market for these schemes under EMR CfDs.

16. CfDs are meant to work through the generator securing a market reference price. For variable technology the current proposals are that this will be based on day-ahead pricing, the reason given is that to will combine market signals with stability of support. However, this market signal opens the market to a limited number of contract providers to charge very high margins. Furthermore we have seen no clear methodology for setting the reference price.

17. The UK has a highly consolidated and illiquid market. This is one factor in creating a high risk that generators will not meet their reference price. High risk will reduce the bankability of a project and increase the cost of finance and reduce returns to project developers. If the strike price does not account for the increased cost of increased risk, projects are unlikely to proceed.
18. National Grid has a major role to play under EMR, including in the allocation process which is unclear. We are concerned about a conflict of interest with solar power between the objectives of the system operator that is responsible for providing allocating contracts and operating the electricity transmission network. There may be an intrinsic bias against the distributed technologies like PV that require greater investment in distribution networks and could provide savings in transmission assets. These do not contribute directly to national grid's regulated asset base and may present operational challenges to national grids existing systems and structures.

19. CfDs require large amounts of individual contracts between Government and generators. This seems very administratively heavy. We are concerned this may favour a small number of larger generators rather than a large amount of smaller generators. Solar is a modular technology. Above 250kW to any size of MW there is little difference in price. Therefore, there is no cost advantage to giving preference to the largest schemes.

20. Detail is needed about how the contract allocation process will work, but this is not expected until secondary legislation is published. As with all technologies, solar developers may undergo significant expenditure in planning and grid connection and they will need to be confident of securing a CfD in any allocation round (whilst in Headline terms this may be less than nuclear or offshore wind, as a proportion of the company’s balance sheet it is higher and therefore the risk exposure may be considered greater).

CURRENT ROC AND PPA DIFFICULTIES

21. Many of the “Big 6” now meet their Renewables Obligation through their own generation portfolio. Strategically we understand some prefer to pay the buy-out price. This, and the uncertainty over EMR, is one of the key reasons why the PPA market in the UK is now very difficult. There is a reducing market for purchasing independent generation from the Big 6. We understand there is only one reliable supplier of PPA contracts, and terms are unattractive. Smaller suppliers have told us they are offering PPAs but there can be a mismatch between the new small suppliers seeking short-term PPAs and the need for longer-term PPAs for project developers.

22. Similarly, low demand for independent generator output is part of the reason for a fall in the ROC value. A surplus of ROCs from independent generators reduces the value. The ROC value is now only marginally above the buy-out price.

23. This situation is likely to be further worsened by the loss of the Obligation on suppliers to purchase a given proportion of their supply from renewables. As above, clear evidence from Germany does not suggest Transnational Energy Companies invest significantly in renewables. This makes it even more essential that EMR works for independent generators.

24. The current PPA and ROC value situation is a serious concern, the banding levels for solar only having recently been clarified under the RO. It is vital to have confidence as soon as possible that ROC values will be sustained.

25. And this situation makes it imperative that EMR provides confidence for project developers as soon as possible. We want to see a clause in the Bill that ensures the establishment of the GPAM to be operational from 2014, under Chapter 6, Clause 34. The Bill must link the CfD to the GPAM auction price, and commit to the auction process for the 15 year CfD duration.

GREEN POWER AUCTION MARKET AND FEED-IN TARIFFS

26. The STA supports the Green Power Auction Market proposal. We understand details of this have been submitted by the REA and the Independent Generators Group/Renewable Energy Systems so we will not repeat details of how GPAM works here.

27. GPAM provides a clear route-to-market for utility-scale solar at low risk. This will reduce the cost of capital and therefore public cost. It provides institutional simplicity because it joins CfDs to the existing NFPA, and it provides a clear and simple reference price which generators can be confident they will achieve. It is likely to attract a lot of entrants, providing competitive tension and good value for consumers.

28. GPAM provides the opportunity for solar developers to engage with a working market and with new suppliers. This is important because solar power is likely to be competitive with fossil generators earlier than most other renewable power technologies.

29. It is therefore also essential that wider liquidity issues are addressed in the electricity market. We understand Ofgem are bringing forward further proposals. We are interested in Labour’s proposal to reintroduce the Electricity Pool. We believe solar power will be very competitive in the electricity market if a stable support framework is provided today. It is vital that the unsubsidised electricity market in future allows solar to compete on a level playing field.

30. Balancing risk must be levied appropriately. GPAM provides an opportunity for better clarity on the true cost of balancing and it puts balancing risks on the supplier.

31. There is a wider public interest in investing in active, intelligent networks that provide much better responsiveness to variable generators like solar power. We are concerned that too much onus may be put on individual generators for meeting balancing costs. Variability is an innate characteristic of solar power generation.
A modern electricity system should adapt to the characteristics of new technologies, not expect new technologies to behave like old generation technologies and apply excessive penalties when they don’t.

32. Increasing the existing fixed FIT would be preferable to the status quo and is our second choice, compared to GPAM. However, the fixed FIT is designed for autogeneration (self-supply) and returns are calculated on this basis (for example including the displaced cost of imported electricity into a building). It would be sensible if the fixed FIT is increased, to include a specific FIT Tariff calculated to work with PPAs/sale to market. This is not how the current FIT has been designed.

Why has autogeneration been ignored?

33. The fixed FIT is treated as somewhat token in the UK and it has been focussed on domestic schemes as a matter of political choice, even though they are less cost effective. We understand the wider public value of domestic solar, however.

34. However, the 250kW–5MW FIT band has attracted no investment at 7.1p. This only needs to be raised slightly to become economic. It would still be lower than the equivalent of 2ROC support given to many renewable technologies.

35. Furthermore FIT deployment is severely constrained by capacity triggers that have been set according to a much smaller budget than the RO/EMR. In practice this means deployment of solar under the 250kW to 5MW FIT band is severely constrained even when it is more cost effective than other options under the RO. This is therefore a bias against onsite renewables. This further makes no sense when onsite generation is very efficient because it incurs no network losses and can avoid transmission investments. Furthermore the autogeneration market can transform competition and ownership in the electricity sector. That is particularly the case for solar power.

36. We urge members of the Committee and MPs speaking in the debate not to ignore autogeneration given clear evidence from overseas shows is likely to be the way forward for future energy provision, with increasing emphasis on buildings performance. As energy prices increase and the cost of solar falls, in a free market businesses and households are more likely to turn to autogeneration through solar power and Government should prepare for that.

37. While the issue of the existing FIT band is not the subject of the Energy Bill we would argue that it is very material to meaningful market reform. This requires political attention and pressure.

CO₂ Target

38. The STA strongly supports the CO₂ target suggested by the Committee on Climate Change. We also support a merit order for dispatch to minimise carbon. Furthermore the onus should be on the system to adapt to new technologies, not on new technologies to adapt to an outdated energy system.

39. The loss of the Renewable Obligation on suppliers means that the Big 6 will not be required to invest in renewables from 2017. Furthermore new unabated gas has now been exempted from EPS for decades. Therefore a CO₂ target is needed to ensure major utilities invest in renewable energy. This should be an explicit and clear target, not a range or a target that fluctuates according to other sectors because clear direction is needed for investment in low carbon electricity assets which have a very long life.

40. Major mainstream institutions from the World Bank to the IEA are clear the world is on course for a 4°C temperature rise with no guarantees societies around the world can adapt. The UK currently lags far behind both EU and world average renewable energy performance. The UK will have no climate leadership credibility if it continues to lag or continues with its pro-fossil fuel rhetoric and policy framework. It will also face a major opportunity cost if it fails to strengthen its position in the global clean energy market recently estimated to be worth $1.9 trillion over the next five years by The Pew Charitable Trust.

Value for Money

41. Despite the rhetoric on public value for money the Government is continuing to actively promote and make explicit its support for more expensive technologies such as new nuclear and CCS in the 2020s. This reflects an ideological fixation with given technologies and the influence of incumbent interests. Policy should be based on evidence.

42. Even within renewables we are concerned that solar will be suppressed because the Government is fixated with offshore wind. While we support this technology it should not inhibit the cost-effective expansion of solar power. A balance needs to be struck. The Government claims it supports offshore wind for industrial policy reasons but there has been no evaluation of existing jobs in the renewables industry by Government, yet alone future jobs. The only such report that we are aware of is by Innovas/REA and this also illustrates the huge potential for industrial benefits in solar as well as other technologies. Again, policy must be based on evidence.
CONCLUSIONS

1. Solar has a major role to play in future UK electricity generation and at all scales; from domestic to utility-scale.

2. There is a much greater role for autogeneration to transform market choice and competition than the Government/EMR recognises. Onsite solar is already cost effective with other renewables above 250kW and provides wider system benefits.

3. Route-to-market for independent generators must be solved as a matter of urgency and we recommend GPAM. The Bill is not fit for purpose without delivering confidence for independent generators who are essential to investment needs.

4. Government must commit to the GPAM from 2014 and ensure that the Bill links the CfD to the auction price, and commits to the auction process for the 15 year CfD duration.

5. Timing is important; the sector needs to grow strongly to meet challenging renewable energy targets, yet independents generators face real difficulties today.

6. It is essential to have a clear CO\textsubscript{2} target to provide a direction of travel given the loss of the RO and the removal of EPS standards for new gas.

7. Smaller, distributed generators must not be marginalised by Government policy. There is no case for doing so given the multiple benefits they offer.

\textit{January 2013}

\textbf{Memorandum submitted by Department for Energy and Climate Change (EN 25)}

I am writing to follow up on a point that was raised during the Committee session yesterday. The Member for Rutherglen and Hamilton West raised the question of whether the Contract for Difference (CFD) provisions, as drafted, could potentially allow for a return to a multiparty counterparty model. I would like to clarify this point, as our move to a single counterparty model was an important change to the Bill following the Energy and Climate Change Committee’s helpful report on pre-legislative scrutiny.

For the avoidance of doubt, the Bill does not allow there to be a multiparty CFD counterparty. A CFD is defined as “a contract which a CFD counterparty is required to enter into by virtue of section 6”. If this were intended to cover a contract to which multiple counterparties were required to enter into collectively, the Bill would have to say so explicitly.

In addition, it is not the Government’s intention to have more than one CFD counterparty. Nonetheless, the Bill must provide for the highly unlikely scenario that the counterparty is not considered adequate or effective. In such a scenario, the Secretary of State would require the ability to quickly transfer contracts and ensure access to supplier obligation payments to a new counterparty. To minimise any delay that could arise between undesignating one company and designating another, Clause 3 of the Bill allows for more than one designation to have effect so that designations may overlap. Any new CFD counterparty would enjoy the same powers to raise funds from suppliers to meet its liabilities (both under new contracts, and those that had been transferred to it).

I also thought it would helpful to provide some clarification with regards to points raised by the Member for Southampton Test about the Government’s decision to introduce a Capacity Market despite the Government’s modelling appearing to show a Strategic Reserve creating a lower cost to consumers. I wanted to reassure you that, in practice, we do not think a Strategic Reserve is cheaper for consumers than a Capacity Market; nor do we think it would be as effective in delivering security of supply.

A Strategic Reserve appears to have a lower cost because it involves only paying for reserve capacity which is used only in emergencies. However, to be effective this would mean keeping the reserve out of the market and allowing electricity prices to peak to very high levels at times. While the Capacity Market may appear to cost more, as it is paid to all eligible generators, not just those acting as reserve, this cost should be partly offset by lower prices in the electricity market by avoiding these very high peaks. While it is difficult to forecast with absolute precision, we do not expect the Capacity Market to have a significant impact on consumer bills.

We also identified a risk with the Strategic Reserve that it might lead to a “slippery slope”, whereby there is pressure to use the Strategic Reserve under normal circumstances to avoid these very high prices. This might help to lower wholesale prices, but would also mean that a Strategic Reserve could end up undermining the investment case for reliable capacity and failing in the primary objective to deliver security of supply.

The analysis supporting these judgements can be found in the impact assessments published in December 2011E11 and December 2012E21.  

I hope that these points of clarification are helpful. I am copying this letter to the members of the Energy Bill Public Bill Committee.

John Hayes
January 2013

Memorandum submitted by Dr Nick Eyre, University of Oxford (EN 26)

ENERGY SAVING FEED-IN TARIFFS

EXECUTIVE SUMMARY

— Energy saving feed-in tariffs (ESFITs) are a relatively new concept and are designed to use the same principles as Feed in Tariffs for renewable energy (REFITs).
— They offer a promising way of improving electricity efficiency and reducing electricity demand, thereby decreasing carbon emissions.
— The Electricity Market Reform (EMR) proposals currently provide a bias towards investment in new supply that could be addressed using ESFITs.
— In the context of EMR, ESFITs offer a means of delivering decarbonisation with a lower impact on consumer bills.
— Because ESFITs do not rely on energy companies, they would provide incentives for innovation in project delivery in a much wider range of actors including householders, community groups, local authorities and small businesses.
— The concept of ESFITs is simple, but there are detailed policy design issues that still need to be addressed.
— Primary legislation will be required and could be included in the Energy Bill.

1. INTRODUCTION

A key aim of energy policy is to reduce carbon emissions. UKERC and other analysis shows that to achieve this at reasonable cost, it is necessary to both develop cleaner energy supplies and reduce energy demand.

Existing Feed-in tariffs for renewable energy (REFITs), which offer generators of renewable energy a guaranteed level of payment for energy they produce, are designed to promote the development of clean, carbon free electricity generation. Energy Saving feed-in tariffs (ESFITs) would be designed to use a similar approach to encourage reductions in energy use. This evidence is based on a very recent paper (Eyre, 2013) in the journal Energy Policy, which is the world’s first peer-reviewed publication on this topic.

Historically energy efficiency improvements have made a far greater impact on reducing UK carbon emissions than supply side changes. Recent Government estimates (in the Electricity Demand Reduction consultation, DECC, November 2012) indicate that improving the energy efficiency of electricity could reduce demand by more than 40% by 2030. However, in their current form, the EMR proposals offer significant subsidies for all low carbon generation technologies, but none for reducing demand. This risks an inefficient outcome with higher bills for consumers than are necessary to deliver the key aim—secure energy services with carbon emissions reduction. ESFITs could play an important role in meeting energy and carbon goals, but will require policy change to do so.

2. FITS FOR MEGAWATTS OR NEGAWATTS?

REFITs were first set up in Germany in 1990 to encourage the development of renewable electricity generation. They are a market mechanism, designed to encourage growth and innovation among renewable generators. Renewable electricity is currently more expensive that electricity produced in conventional fossil fuel power plants. By supporting growth in the renewables market, the aim is to cut the cost of these technologies, and ultimately eliminate the need for subsidies.

In the UK, REFITs are currently used to help only small scale renewable electricity generators. However, the EMR proposals include contracts for difference (CFDs), which are essentially FITs for all new low carbon power generation—renewables, nuclear power and fossil fuel generators that use carbon capture and storage (CCS). However, neither REFITs nor CFDs address the issue of the need to improve efficiency and reduce energy demand.

ESFITs, by contrast, are conceived specifically as a way to reduce energy demand, thus reducing the need for new generation. The basic idea is to offer a fixed price subsidy for each unit of energy saved. This would encourage investment in “negawatts” as an alternative to generation. Savings delivered via demand reduction can be thought of as creating a “negawatt” power station. “Generating” negawatts, rather than simply building new generating capacity, offers a number of advantages. It is generally cheaper than generating more electricity, does not require the building of large new infrastructure, and therefore can be delivered more quickly.
3. **ESFIT Advantages**

The introduction of ESFITs would offer a number of advantages. They are well suited to the proposed GB electricity market structure under EMR, as they would offer incentives to demand reduction that are consistent with those proposed for electricity generation.

ESFITs would largely support energy saving technologies that are already cost effective. This would increase the economic efficiency of providing electricity services—enabling decarbonisation at the lowest cost to consumers. It would also mean less pressure to increase electricity production as quickly, which can be problematic in terms of, for example, securing planning consent, deploying new unproven technologies, and increasing consumer prices.

By offering a transparent, guaranteed price support system, ESFITs would encourage awareness of the importance of energy efficiency, especially its role in reducing carbon emissions. And because ESFITs do not rely on energy companies for delivery, they would provide incentives for innovation in project delivery in a much wider range of actors including householders, community groups, local authorities and small businesses.

4. **Design Issues**

To deliver the potential advantages ESFITs offer, there are policy design issues to be addressed.

4.1 **Measuring and calculating payments**

The basis for calculating ESFIT payments is a key issue. Unlike electricity generated, a quantity which can be metered, ESFITs payments would be based on energy efficiency savings that are harder to measure. Adopting a simple approach—such as using the annual reduction in energy use—risks offering payments for savings that occur due to factors unrelated to energy efficiency improvement, such as building occupancy or manufacturing output. In industrial settings it will be possible to use well-established monitoring and verification methods to address this. But for households and small companies this is not realistic. A more feasible approach is to use the expected average (deemed) savings for each technology deployed, an approach that has been well established in UK energy efficiency programmes (ECO and its predecessors) for nearly 20 years.

The most important issue is to determine the size of the appropriate payments. Equity with the treatment of low carbon generation technologies in EMR implies that ESFITs should be set at a level equal to the premium payment of the “strike price” for these technologies above the wholesale market price for electricity. For example, if the latter is £80/MWh and low carbon generation technologies are paid at least £118/MWh, an ESFIT of £38/MWh (3.8 p/kWh) is justified. However, there are arguments for even higher payments to address the well-established additional barriers faced by energy efficiency investments. These could be as high as the strike price itself. These arguments are provided in detail in the peer reviewed publication upon which this evidence is based (Eyre, 2013).

4.2 **Different fuels**

The treatment of different fuels needs consideration. Most discussion of FITs focuses on electricity, but direct use of fossil fuels also leads to carbon emissions and can also be reduced by energy efficiency. Moreover, much analysis of climate change mitigation indicates that electricity may need to replace fossil fuels for heating, and therefore that energy efficiency improvements in buildings that largely save gas today may ultimately save electricity. This points to including such measures within the scope of ESFITs.

4.3 **Approaches to ESFIT payment**

The method of payment also needs attention. The biggest individual users of electricity are in the industrial sector, but two thirds of the electricity generated in the UK is used in households and non-domestic buildings. This highlights the need to target electricity saving measures at all users, and to designing approaches appropriate for all. For very large industrial users capable of participation in the electricity wholesale market, payments might be made based on half hourly wholesale price. But for the vast majority of users, payments will need to be made through the retail market. Moreover, capital grants are expected to be more effective than kWh payments spread over the life of the project (see Eyre, 2013). The appropriate scale of these payments for common technologies is set out in the table appended to this evidence.

5. **General Conclusions**

My conclusion is that, despite the complexity of some issues, ESFITs could be designed to reward the benefits of energy efficiency, and would fit well with proposed new policies under EMR. They would provide a transparent incentive to households and companies alike to adopt technology and procedures to save electricity. Important details remain to be worked out, but ESFITs would provide an effective complement to the proposed CFDs in EMR, improving market efficiency in delivering carbon reduction.

6. **Implications for the Energy Bill**

The logic for including FITs for energy saving in the EMR proposals is based on the simple proposition that the fairest and most economic approach to decarbonisation requires equal treatment of low carbon generation
and energy saving. But the appropriate mechanisms may need to be different. The reason is that generators interact with the electricity wholesale market, whereas energy users predominantly access the retail market.

In principle it would be possible for FITs for energy saving to be paid via the wholesale market through aggregation of many individual energy saving actions. However, this would involve additional complexity and cost. Moreover it would entail the public and system benefits of energy saving being subject to trading by the dominant actors in the wholesale market, the vertically integrated "Big 6", for whom there is no business case for successful energy demand reduction. A more effective and transparent approach will be to pay ESFITs directly to final users or their agents.

For the reasons set out above, there will be a requirement for many detailed rules, for example on eligible technologies and techniques, accreditation, customer complaints, monitoring and verification, and payments by energy suppliers. None of these need to be fundamentally more difficult than what is done in the existing arrangements for energy supplier energy efficiency obligations (ECO and its predecessors) and payment of renewable electricity FITs. But the arrangements will be complex and therefore require consultation on the detail. They are therefore better done through Statutory Instrument (SI) than included in primary legislation.

But without primary legislation, ESFITs cannot be adopted, and the Energy Bill provides the logical place to do this. I am not a lawyer, and therefore do not propose to set out proposed amendments to the Bill. But from my experience of the operation of existing energy legislation, I suggest that the Energy Bill needs amendment in four important ways.

(a) Most importantly, to provide the powers to the Secretary of State to introduce statutory instruments (SIs) to provide for ESFITs. And specifically within this framework:

(b) To specify that payments may be made for fixed sums for using energy saving technologies and techniques, on a range of timescales (eg annually or as a single payment) both for electricity users and, for the reasons set out above, energy users more broadly. These should be based on verification techniques to be set out in the SIs. The legislation should ensure that payments may be made to both energy users directly, or to other agents of energy efficiency improvement, including energy suppliers, energy service companies, equipment retailers, local authorities and third sector organisations.

(c) To allow for licence modifications of all classes of energy suppliers to enable the SIs to recover the costs of ESFITs from energy suppliers and, by implication, to socialise the costs across their customers. Fairness indicates that this should allow for costs to be specific to classes of licence, eg for household electricity efficiency improvement costs to fall on domestic supply licence holders.

(d) To provide for the formation of a counter-party to make the ESFIT payments and recoup their costs. This counterparty will need to be backed by HMG, for the same reasons as the CfD supply counterparty. In my view it is an open question whether the counterparty should be the same as for the supply CfDs. Arguments in favour would be institutional simplicity and effective management of the Levy Control Framework. Arguments against would be that the focus is very different—retail market, end users and the energy efficiency industry in this case—compared to wholesale market participants for CfDs. I believe this question of the choice of counterparty does not need to be resolved at this stage, but the existence of one with the relevant powers and duties does need to be in the primary legislation.

REFERENCE


Table

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[These calculations are based on the assumptions that ESFITs would be paid as a single capital grants, equivalent to £38/MWh saved over the lifetime of the project. £38/MWh is DECC’s estimate for the difference between the levelised costs of offshore wind and gas fired generation in 2012. More detail on the energy saving calculation methodology is given in Eyre (2013).]

January 2013

Memorandum submitted by the Renewable Energy Association (EN 27)

The REA is the largest trade body in the renewable energy sector, in terms of number of corporate members. Its membership is active in power generation, as well as heat and transport.

SUMMARY

This submission elaborates on the following list of issues. Not all of these can be addressed by amendments to the Bill, several will be the subject of secondary legislation. However we feel these issues are significant enough that we should register our concerns with the Committee at this stage.

Amendment to the Bill is sought in order to:

— introduce an auction for the output from renewable CfDs, so that generators have a guaranteed route to market for their electricity sales.
— enshrine a right or duty for the counterparty to recover sufficient payments to pay for CfDs. There must be protection against the counterparty collecting insufficient funds for covering CfD payments from suppliers, and against suppliers defaulting on their levy payments.
— Introduce a decarbonisation target for 2030.

We wish to register the following concerns:

— There is no coherent contract allocation process, and it seems likely that larger projects with longer development lead times will have an advantage over smaller schemes.
— The Levy Control Framework may need to be increased if some of the funds are spent on demand reduction.
— All CfDs should be of the same length.
— Eligibility criteria from the Renewables Obligation should not simply be read across to CfDs unless there is good reason to keep them the same.
— The Electricity Market Reform package should not overlook industrial onsite generation.
— There is evidence the ROC market is already not functioning as intended. Consideration should therefore be given to bringing the introduction of fixed price ROCs forward.

ROUTE TO MARKET

1. We would like to add a sub-schedule to Chapter 6 Schedule 34 which will provide enabling powers for a short term auction market, which can be used to set reference prices for CfDs. The text of the proposed amendment will be provided by representatives of the independent generators who have been working on the details of the proposal.

2. Independent generators are expected to provide a half to a third of the necessary investment in renewable energy to 2020. However, as currently drafted the Energy Bill does not provide adequate certainty for independent generators or their investors. Independent generators will decline in the UK if this is not addressed.

3. For renewable energy, the main significance of EMR is the closing of the Renewables Obligation. Taking over from this as the main driver for deploying renewable electricity generation is the system whereby “Contracts for Difference” are awarded to potential generators, on a project-by-project basis. The CfD should enable a generator to earn the “strike price”50 for their output, from a combination of two income streams: the revenue from selling the power, and the income from the CfD. The CfD pays out the difference between a “reference price” for electricity and the strike price. Therefore if a generator does not manage to achieve the reference price for its electricity, it will not achieve the strike price.

4. In order to raise project finance the vast majority of independent generators51 will need to sell their electricity through a Power Purchase Agreement (PPA), with an electricity supply company. Electricity supply companies will make a charge for balancing power and taking on the risk of this balancing cost over the 15 year duration of the contract. Thus the independent generator cannot actually earn the reference price. Aggregators

50 Each technology supported with CfDs will have a specific strike price, and prices for new projects are anticipated to degress over time. As with all UK financial incentives for renewables, degression in tariffs is not applied retrospectively. The new, lower strike prices, will only apply to new projects. Strike prices are initially to be set by an administered process. The objective is to deliver a sufficient rate of return such that a certain percentage of the possible supply curve is made economic. Government’s intention is that strike prices are set on a competitive basis later this decade.

51 By independent we mean not part of a vertically integrated utility with electricity supply interests.
may be able to assist to reduce the cost of the PPA, however they have historically struggled to operate in the UK market as a result of the market structure, and aggregators typically struggle to provide a long term financeable route to market. Therefore, in order to ensure generators do earn the return specified by the Government one of two things has to happen; either the strike price has to be increased to compensate for the cost of the PPA, or generators must have an alternative route to market that enables them to achieve the reference price. The first approach will increase the cost to consumers and possibly over-reward integrated project developers. The second has the potential to reduce the cost to consumers as the balancing risks will be lower if suppliers are only judging them at 6 month intervals, rather assessing them and factoring them in 15 years in advance.

5. Rather more fundamentally, as a result of pending changes to Accounting Standards, if Electricity Suppliers sign long term PPAs, they are likely to be required to account for the inherent liabilities of these on their balance sheets. The effect of this will be to increase the reluctance of suppliers to enter into any long term PPAs, thus making it effectively impossible for independent generators to obtain finance for their plants, whether they hold a CfD or not.

6. Some independent generators have proposed an auction process which effectively guarantees the ability to earn the reference price and the REA recommends the committee adopts this approach. It has been termed the “GPAM” (Green Power Market Auction) approach (or as DECC refers to it in Annex A the “Short Term Auction Market”).

7. DECC seems wedded to the idea of the generator managing its balancing risks. This is fundamentally unsound, because a portfolio electricity supplier is far better placed to minimise the costs of managing the balancing risk within its overall portfolio than the individual generator is. The result of DECC’s policy will therefore be to increase the costs to the consumer (this point has been recognised by independent commentators, such as Cornwall Energy Associates).

**Allocation of CfDs**

8. We are registering this as a concern. It could be possible to add a subschedule to Chapter 2, Schedule 13(1) along the lines of “d) cost to be minimised by ensuring contracts are allocated preferentially to the lowest cost technologies.”

9. We have a concern that the allocation process might lead to projects with long lead times squeezing out those with shorter lead times. The intentions with respect to the allocation of CfDs are set out in Annex A: Feed-in Tariff with Contracts for Difference: Operational Framework, DECC, November 2012. The proposal is that most technologies are funded from a “general pot” within the Levy Control Framework (LCF), but that PV and biomass conversion (which could both be deployed particularly swiftly) have a ring-fenced funding allocation.

10. If there is no competition for CfDs, and they can be awarded without rationing there should be no problem. As Annex A puts it “when the System Operator has a high degree of confidence that the demand for CfDs in any given year will comfortably fit within the overall budget envelope, CfDs will be issued on a “first-come-first-served basis.” (paragraph 75.)

11. When this is not the case, there will be a move to six monthly allocation rounds. It is suggested this “might occur when it is expected that there will be less than, say, 50% of the CfD budget left remaining for each delivery year once CfDs have been allocated over the next 12 months.” (paragraph 77.)

12. No methodology has been agreed for situations where CfDs will need to be rationed. Whilst there are administered prices and when contracts are being awarded via an allocation round, it is clear that the date of application can no longer be used. In this situation REA proposes that projects be awarded to maximise the deployment of the most cost effective low carbon technologies. This however, cannot entirely solve the problem, as there will almost certainly always be competition between projects at the margin. For example, in a situation just involving wind energy—if, after awarding all the (cheaper) onshore wind projects with CfDs, there are a number of (more expensive) offshore Electricity Demand Reduction: Consultation on options to encourage permanent reductions in electricity use Reference Number: 12D/403. Published 29/11/2012. ore projects still awaiting contracts and insufficient funds to cover all of them, then there is no basis upon which to distinguish between them.

13. DECC says it “will continue to work with National Grid and industry stakeholders to develop the mechanism”. Paragraph 78 talks of “the System Operator [being able] to monitor and control the number of projects coming in to the system. It will ensure that there is an orderly process of securing CfD contracts, and will allow effective rationing when demand for CfDs exceeds the available budget.” Other than moving to competitive tendering, or allowing National Grid discretion in deciding which it would the only means this could possibly be done would appear to be the modern day equivalent of pulling names out of a hat. This is evidently ludicrous.

14. Allowing National Grid to use its discretion would run straight into one of the most significant of the conflict of interest problems that several stakeholders have raised concerning National Grid’s role (the most obvious of which, in this case, would be the interest National Grid would have in having plant connected to transmission in England and Wales rather than in Scotland).
LEVY CONTROL FRAMEWORK

15. We would like to register our concern that the LCF cap has been announced with little understanding about how the figures have been developed. Fundamentally it is not clear how this figure can be defined with confidence until the Delivery Plan has been established.

16. A demand reduction mechanism is currently being consulted upon. It is proposed that this will be paid for out of the Levy Control Framework. If there is any risk that the funds left are insufficient to achieve 30% of renewable electricity generation by 2020, either an alternative means of paying for demand reduction should be found or the LCF should be increased.

CfD LENGTH

17. In EMR policy documents it is envisaged that the CfDs contract length will be 15 years for renewable generators, and up to 25 years for nuclear and CCS. There seems to be no explicit mention of contract durations for different low carbon generators in the Bill itself. The contract duration could have a significant impact on the strike price and the type of investor that is brought into the sector. Having shorter terms for renewables could be disadvantageous and may be counterproductive by deterring the lowest cost capital funds that the EMR is looking to attract. CfDs should be for the same duration irrespective of technology.

ELIGIBILITY WITH RESPECT TO TECHNOLOGY

18. We are registering this as a concern, although we have not drafted any suggested amendment to the Bill.

19. The REA is concerned that the EMR regime is intending to use the same eligibility criteria as the Renewables Obligation, for CfDs. Annex A states “Only those types of renewable generation which are currently able to receive support under the Renewables Obligation (RO), will be eligible for CfDs”. The transition from RO to EMR allows for a rational re-examination of the eligibility criteria. To adopt the existing criteria, simply because they are there, misses an opportunity. For example, there is no logic for precluding a tidal barrage over 1GW of capacity from a CfD. It was logical to exclude such a project from the RO as it would have entirely distorted the ROC market. This does not apply under EMR.

20. There are many unnecessary or unhelpful aspects relating to eligibility that have crept into the RO over the last ten years, which should not be transferred into the new regime.

ONSITE GENERATION

21. CfDs are only available to generators that are selling power which could rule out, or pose problems for, on-site consumption. The EMR policy documentation states that “payments under the CfD will be made on the basis of net ‘green’ electricity that is generated and is available for sale” (paragraph 154, Annex A).

22. Onsite renewable electricity generation is a very efficient method of supplying power because there are negligible network losses and it offers potential savings on wider network investment. Onsite is increasingly attractive to a wide range of commercial and public sector investors. Sub 5MW onsite generators can apply for the small-scale fixed Feed-In Tariff, however there are three problems. Firstly the small-scale fixed Feed-In Tariff does not cover all technologies (biomass being a notable omission). Secondly industrial onsite generation could well be larger than 5MW. Finally the small-scale fixed Feed-In Tariff is constrained by a much smaller budget than the RO or CfDs.

23. In practice, a renewable generator, producing electricity for onsite consumption could sell it out to the market and then purchase it back again. It is very important that the Government gives clarity that it is not the intention that onsite consumption will be excluded from the CfD structure. Failing that, it becomes imperative that the small-scale fixed Feed-In Tariff is extended to cover industrial onsite generation at larger scale.

COMMUNITY SCHEMES

24. The CfD (or for that matter the Renewables Obligation) is complex in comparison with the small scale fixed feed in tariff. For those for whom renewable energy project development is not core business, CfDs are likely to be hard to access and understand. Community schemes should be welcomed, and these have the potential to be over 5MW, possibly up to around 10MW. Encouraging such schemes is an additional argument for increasing the size threshold of the small scale FIT.

TRANSITION FROM THE RENEWABLES OBLIGATION

25. The text around the transition from renewables obligation to the CfD is unclear. It appears to contain the powers to open up financial terms that, in principle, should remain unchanged from the final Renewables Obligation Order. The powers to reset the RO banding levels should not be included in the Bill without good reason, as leaving these exposed to future reviews will raise the prospect that contracts may be undermined in their later years.
26. The Bill needs to be more explicit in order to minimise the risk of opening up of existing PPA contracts.

27. There is also a risk that Suppliers’ appetite for ROCs will diminish over time, due to some being able to meet much of their Obligation through ROCs generated by their own schemes. There is merit in bringing forward the commencement of the fixed price ROC regime from the 2027 date suggested in the EMR documentation to a date significantly earlier. There is also merit in considering introducing a voluntary agreement for suppliers to buy ROCs rather than buy out of the obligation.

Counterparty Model

28. An amendment is sought to the Energy Bill. It is essential that the Government-owned counterparty does not default on its payments to generators. At present the Bill only allows the counterparty to pay out what it has collected from suppliers. There must be protection against the counterparty collecting insufficient funds from suppliers, or suppliers defaulting on their levy payments.

29. Chapter 2, Schedule 8 (2) “provision made by virtue of subsection (1) may include provision about the meaning of “unable fully to meet obligations under a CfD”… could be changed to “provision made by virtue of subsection (1) will include provision about the meaning of ‘unable fully to meet obligations under a CfD’ and how such obligations are to be made whole”.

Decarbonisation Target

30. We are supportive of a decarbonisation target within the Bill and pleased to see strong support for this from the Chairman of the ECC Committee. It is clear that renewable energy companies and their supply chains need confidence in the post 2020 framework in order to invest for expansion, including investment in skills. There is EU-wide recognition that this is needed and a process for establishing a 2030 target has begun. The UK trails behind other countries in terms of its industrial stake in renewables; this is one reason why the UK needs a clear CO₂ target, even if other countries do not have one. Furthermore, the Government itself has introduced uncertainty into the electricity sector through mixed-messages and competing strategies/departments—the 2030 CO₂ target will therefore provide the clarity needed on the Government’s objectives.

January 2013

Memorandum submitted by Independent Renewable Energy Generator (IREGG) (EN 28)

The Role of Independent Generators: Investing in Delivering a Secure Energy Future

Government has stated that the Big Six suppliers alone cannot deliver the critical investment required to upgrade the UK’s aging energy infrastructure due to constraints on their balance sheets, competition for capital across a range of markets and shareholder requirements. Independent generators and financial institutions will therefore have a substantial role to play, providing, under the right conditions, between a third and a half of the £110 billion required by 2020.

The Deterioration of the Route to Market: A Threat to Energy Infrastructure Investment

The ability of independent electricity generators to invest has been compromised as a result of the Government’s decision to remove the renewable obligation (RO). This obligation on the Big Six to source a proportion of their electricity from renewables was successful in driving the growth of renewables and independent generators in the UK.

However, with the obligation removed under EMR, the Big Six are no longer incentivised to offer viable long-term contracts or power purchase agreements (PPAs) to independent generators. This is because without the ROC regime there is no incentive to accept the uncertainty implicit within pricing a 15-year PPA. Guestimating the cost of balancing over some 15 years requires an assessment not only of weather patterns but also how the whole physical nature of the electricity system—consumer demand, generation mix, grid infrastructure and interconnection—will evolve in a balancing system which is particularly exposed to regular regulatory and political intervention. It is impossible to undertake this assessment accurately or efficiently and either PPA providers will be unwilling to provide a viable long-term PPA or they will charge a high risk premium as a result.

The lack of viable long-term PPAs and a clear route to market will preclude independent generators from securing the necessary finance to invest and take projects forward. Project financing banks are clear they will not finance the CfD-FIT without a PPA.

Without action to address the significant deterioration in the route to market for independent generators there is a risk of a permanent reduction in UK energy infrastructure investment as the market becomes less attractive and capital moves overseas. This will have negative ramifications for the delivery of the UK’s energy infrastructure upgrade and security of supply, not to mention jobs and growth.
THE ENERGY BILL: OUTSTANDING ISSUES REMAIN

The Energy Bill’s central objective is to provide a framework that sets the UK on course for a secure, affordable and sustainable energy future. However, as currently drafted the Bill does not solve route to market issues for independent generators, threatening the achievement of this ambition.

Specifically, the Feed-in-Tariff with Contracts for Difference (CfD-FiT) is flawed in that it does not provide independent generators and financiers with a “stable financial incentive to invest”.

MODEL PPA CONTRACT TERMS: WON’T DELIVER VALUE TO CONSUMERS

The Government fails to acknowledge or recognise the degree of market failure in the PPA “market” and its corresponding inefficiency. Officials appear to be starting from the premise, as stated in the Bill’s impact assessment, that a single participant may “represent normal competitive market activity” (Impact Assessment paragraph 27). This inefficiency is at the expense ultimately of the consumer but the annexes to the Bill fail to recognise the opportunity to address this.

The Government’s preferred solutions, voluntary model PPA contract terms to serve as a basis for commercial negotiation, and a voluntary code of conduct on transparency of PPA pricing, must therefore be assessed in light of the distorted view of competition and liquidity held by officials. A model contract is relatively easy to agree and equally easy for suppliers to ignore.

Despite the evidence of balancing costs in comparable markets such as Nordpool, other international examples and the Non-Fossil Fuel Purchasing Authority (NFPA) which show balancing and trading costs in the region of 1%-3%, officials seem to accept—without evidence—as justifiable the 10%-20% that independent generators are being charged by suppliers in the UK. They mistakenly assume that rational market behaviour, driven by commercial interests and pricing long term risk (Impact Assessment paragraph 32) is also efficient, failing to recognise the existence of barriers to market entry that, for example, will continue to be present in the UK but are not present in Nordpool.

The objective of Government policy is to put in place a framework that minimises costs and passes on the savings to the consumer. Without improving competition (ie the number of viable suppliers in the market able to offer long term PPAs), improving liquidity (defined as the volume of energy traded) will not ensure that an efficient and cost effective route to market is realised, and that the resulting savings are passed onto the consumer, or to ensure that independent generators can play their full role in the market.

The EMR framework provides a unique opportunity to do that. However, rather than grasping this opportunity, officials risk embedding the existing PPA margins (or worse) into the new CfD structure. This could increase consumer costs by £2 billion for onshore wind alone.

An obligation on suppliers to offer terms: won’t work and will leave insufficient time to implement the only viable solution.

The Government’s preferred backstop power, an obligation on suppliers to offer [unspecified] terms (Annex A paragraph 330–331), will not work for much the same reason as outlined above. The problem is not a lack of PPAs, it is a lack of viable PPAs. The Impact Assessment explicitly rules out (paragraph 82) any obligation on suppliers to specify the terms that they will be obliged to offer (without which there is no reason that they should be viable) and concedes, this “may lead to PPA offers that are not bankable”.

This is precisely the situation that we are in. Companies may offer PPAs but then quickly make them unviable by either offering discounts that can be most appropriately described as “price gouging” or offering terms that transfer so much risk to the generator that they are to all intents and purposes unfinanceable.

For the Government to propose a backstop position to that essentially re-enforces the current situation that we have today and the ability to dominate access to the market whilst expressly ruling out a definition of financial terms is clearly a paper tiger.

THE GREEN POWER AUCTION MARKET: A MARKET-LED SOLUTION THAT CAN REDUCE CONSUMER COSTS

The Government’s second backstop option is to introduce a short-term auction market (hereafter referred to as the Green Power Auction Market).

The Green Power Auction Market is a market solution to market failure that does not impose a regulatory burden.

The Green Power Auction Market uses the existing Non-Fossil Fuel Purchasing Authority (NFPA) structure to auction a site’s output in a six-monthly block (or possibly longer), on a rolling basis for the duration of the CfD (15 years).

Purchasers bid for each site’s output creating a clear market-based auction price, under standard contract terms as they do currently in the NFPA. The auction price sets the market reference price against which the CfD will be struck—creating long-term price certainty.
Under existing arrangements, the balancing risk is transferred from the generator to the PPA provider for the duration of the contract. The Green Power Auction Market would see balancing risk transferred for a much shorter period, improving the calculation of cost.

By breaking the market down into bite-sized pieces where risk is clearly defined, smaller suppliers and new market entrants are encouraged to participate, enhancing much-needed competition in supply and generation. The competition of the auction ensures that the reference price is priced accurately, whilst rolling short-term nature of the market ensures that the calculation of balancing risk is much more transparent.

All these factors combined create a financeable investment proposition, providing a clear route to market for independent generators, and providing banks with the long term certainty that projects will be financeable.

By breaking the market down into bite-sized pieces the Green Power Auction Market provides:

— A route to market for independent generators.
— Liquidity into the market.
— Market access for smaller suppliers/new entrants.
— Lower costs to the consumer.
— A non-regulatory intervention implemented through existing market structures.

**BENEFITS TO THE CONSUMER: SIGNIFICANT SAVINGS**

The switch from existing PPAs to a Green Power Auction Market would see a £2 billion saving for consumers in cash terms over 10 years (approximately £190 m/yr). This is equivalent to an £11/MWh reduction in the strike price and a current value saving of more than £2 billion over a 20 year period (discounted back at 7%).

**WHAT NEEDS TO BE DONE: THE ENERGY BILL MUST FACILITATE THE GREEN POWER AUCTION MARKET**

The Green Power Auction Market cannot be implemented overnight and reignite investor confidence. Rather the existing structures that are in place need to be updated in full discussion with participants to ensure that risks and responsibilities are allocated appropriately.

DECC states that it wants keep the PPA market “under review” after the initial allocation of CfDs [summer 2014] to “see whether further action is required”. Yet by officials’ own admission there is evidence of a problem now:

> “The evidence received broadly supports the views of independent generators that the market has shifted in recent years, and that generators are securing PPAs on terms that are not as beneficial as they used to be,” (Annex A para 26).

By 2014 it will be too late. The investors will have left the market before a “backstop” power could be implemented.

**WHAT NEEDS TO CHANGE: AMEND PART 1, CHAPTER 6**

It is vital that under Part 1 Chapter 6 of the Energy Bill, an amendment is made to ensure that the Government brings forward regulation to establish the Green Power Auction Market in which generators are entitled to offer, and holders of supply licences are entitled to bid for, electricity generated from renewable sources.

Critically, the Green Power Auction Market must be operational when the first CFD is made and for the duration of the CFD. It must also ensure that the reference price under a CFD entered into by a generator is based on the auction price.

January 2013

Memorandum submitted by Carbon Capture and Storage Association (EN 29)

**INTRODUCTION**

1. The Carbon Capture and Storage Association welcomes the release of the Energy Bill and the associated Electricity Market Reform (EMR) package. This is an important step forward for this critical piece of legislation and for the future of Carbon Capture and Storage (CCS) in the UK.

2. A number of CCS project developers have entered into the DECC CCS Commercialisation Programme (launched in April 2012) and further clarity on which projects will be taken forward is expected in early 2013. For those projects not supported under the Commercialisation Programme the arrangements contained in the Energy Bill are critical to enable their further development. Of particular importance to all UK CCS projects—whether they are part of the CCS Commercialisation Programme or not—are the proposed Feed in Tariff with Contracts for Difference (FiT CfDs) and its precursor, the Investment Contract, as these will support CCS as well as other forms of low carbon generation.
The importance of CCS to the UK should not be underestimated. With the closure of 35GW of existing electricity generation capacity over the next few decades, fossil fuels will continue to dominate our energy mix going forward. Only with CCS can this use of fossil fuels be compatible with UK climate change objectives and mandatory targets. Successfully deploying CCS can also bring real benefits to the UK economy. Modelling by the Energy Technologies Institute suggests that CCS dramatically cuts the annual cost of meeting carbon targets potentially saving around £42 billion per year by 2050. In addition the global market for CCS is expected to be worth trillions of pounds by 2050, and the UK share has been estimated at £6.5 billion per year by 2030, supporting more than 100,000 jobs.

The Energy Bill

4. The CCSA strongly supports the Energy Bill and believes that it provides a good basis from which to move forward. The Government has listened to many of the concerns previously raised in relation to the Draft Energy Bill (published in May 2012) and sought to address these in the much-improved Energy Bill. Moving forward, the CCSA has a number of key points it would like to raise on the Energy Bill, including:

5. Timing of Royal Assent: It is critical that progress of the Energy Bill is not delayed. Any significant delay risks undermining investor confidence, delaying early investment decisions and jeopardising the Government’s goals for early CCS deployment from 2016 onwards. Early CCS deployment is achievable but requires Investment Contracts to be signed from 2013. The CCSA is concerned that Royal Assent of the Energy Bill is not expected until the end of 2013 and believes that this should be viewed as the very latest acceptable date. Timely progress is also required for the secondary legislation which will implement the details of EMR.

6. Emission Performance Standard (EPS): The Energy Bill no longer contains the EPS exemption for CCS demonstration plants which means that all new fossil fuel plants, including those fitted with CCS, will have to operate under the new EPS regime. Concerns were raised previously that the EPS exemption might be seen to provide an opportunity for new fossil fuel plant to operate unabated for decades. The CCSA does not believe this is a real risk, but recognises the argument for the removal of the blanket EPS exemption.

7. However the CCSA believes that the EPS should not be applied to a CCS project until the project has been through a full commissioning and proving period. The commissioning of a CCS project is a lengthy and complex process and will take some considerable time and potentially even a number of years for all of the components of a new CCS project to operate to their designed limits and be completely integrated. The imposition of an EPS during this period places an additional regulatory restriction on the project developer which may indeed make it more difficult to complete the commissioning and integration effectively.

8. The CCSA therefore proposes that the Energy Bill be amended so that the EPS is applied to CCS projects once a agreed and clearly defined (eg a three-year time limited or defined performance criteria) “commissioning and proving window” has passed. This removes the regulatory burden of the EPS for project developers while still preventing plants from operating unabated for decades.

9. CfD Counterparty and Supplier Obligation: The effectiveness of the CfD to support investment in low-carbon power generation is largely contingent upon the establishment of a robust, legally-enforceable contract between the generator and a single, credit-worthy counterparty. The CCSA welcomes the progress that the Government has made on the CfD payment model issue, in particular the move from the “virtual” counterparty that was previously proposed to the single counterparty model in the Energy Bill. There is still concern that the Energy Bill provides for there to be multiple CfD counterparties which could risk undermining the robustness of the payment model.

10. However, there are also concerns that the “pay when paid” principle set out in the CfD Heads of Terms will introduce a significant revenue risk to generators. This means that the CfD Counterparty is not held liable for funds owed to the generator unless the counterparty has received these funds under the Supplier Obligation.

11. To help mitigate these risks the CCSA recommends that the Energy Bill is amended to:

(a) Provide the CfD Counterparty with the powers and duty to enforce the Supplier Obligation to ensure that it is fully funded.

(b) Require the CfD Counterparty to make full and timely payments under the CfD contract to the electricity generator.

(c) Provide legal recourse for the generator in the event of default by the CfD Counterparty.

(d) Ensure that only one CfD counterparty is established to manage all CfD contracts.

12. Investment Contracts: Investment contracts may be required to support the first CCS projects developed under the CCS Commercialisation Programme or FID enabling process as well as providing early support for other low-carbon technologies. However, to enable investment decisions in capital-intensive projects to be made the investment contracts must provide a high level of confidence that the terms agreed in the contract will persist.

13. The Energy Bill provides the Secretary of State with extensive powers to transfer the investment contracts at a future point in time to the CfD counterparty (or another counterparty) at which point the CfD funds might be paid under a different payment model. This creates a significant and potentially unacceptable risk for early investors that could be forced to accept future terms that are inconsistent with those originally contained in the investment contract. The CCSA recommends that the Energy Bill should be amended so that the transfer only...
occurs with the consent of the electricity generator that has entered into the investment contract, subject to this consent not being unreasonably withheld.

14. **Decarbonisation policy:** The CCSA supports the recommendation by the Committee on Climate Change that the power sector will need to be largely decarbonised by 2030 if the UK is to meet its target to reduce greenhouse gas emissions by 80% by 2050. A reference included in the Energy Bill to this objective, would not only reassure potential investors by lowering the perceived political risks, but could also reduce the cost of capital for decarbonising the power sector. The CCSA notes the Government’s proposal for an amendment to the Energy Bill that references a decarbonisation policy to be decided on in the next parliament and will follow these discussions closely.

**THE EMR PACKAGE**

15. Alongside the release of the Energy Bill DECC also published a number of updates on the detailed design of the EMR mechanisms. The CCSA is committed to working with Government as this work is developed in the coming months to ensure that the needs of the CCS industry are met. Key issues include:

16. **2013 Delivery Plan:** The Delivery Plan must send a clear investment signal to CCS developers, investors and the supply chain to provide them with the confidence to make the large pre-investments necessary to develop projects for the first EMR delivery period. Therefore the 2013 Delivery Plan must provide clarity on the Government’s CCS objectives and set out the allocation process for CCS CfD contracts. These signals need to provide a degree of confidence equivalent to that provided to other technology classes.

17. **Contract for Difference Feed in Tariffs:** CfDs have to be an investable instrument for each of the low carbon technologies in order to meet EMR’s core objectives. More work is still needed on the design of CfDs to enable these to support CCS projects. The CCSA looks forward to working with Government to resolve outstanding issues including, CfD contract length, indexation of the strike price eg to global fossil fuel prices and the appropriate reference price for CCS projects.

18. **Capacity Market:** The CCSA welcomes the Government’s commitment to consider the contribution of CCS plant to the Capacity Market. This includes the option of turning off the CO2 capture unit for periods to enable increased electricity output when the market is tight.

*The view expressed in this paper cannot be taken to represent the views of all members of the CCSA. However, they do reflect a general consensus within the Association.*

January 2013

Memorandum submitted by the Centre for Energy Policy and Technology at Imperial College (EN 30)

**INTRODUCTION**

The Centre for Energy Policy and Technology at Imperial College was created in 1998 to provide a cross discipline research base to inform national and international policymakers. ICEPT works at the interface of technology, economics and policy. ICEPT papers are widely cited in Select Committee Reports, Departmental White and Green Papers and by bodies such as the Committee on Climate Change. A 15 strong research and teaching team is comprised of engineers, natural and physical scientists, economists and policy analysts. ICEPT has strengths in technology assessment, innovation policy and modelling. Dr Robert Gross is Director of ICEPT. He is also a Co-Director of the UK Energy Research Centre and the Policy Director at Imperial’s Energy Futures Lab. He directs a substantial research programme, teaches at post graduate level on Imperial’s MSc courses on Environmental Technology and Sustainable Energy Futures. He has published extensively on energy policy and technology. In Spring 2011 and again in 2012 he was specialist advisor to the Energy and Climate Change Select Committee enquiries into energy market reform (EMR). He was a member of the DECC academic advisory council on EMR. In 2008 he acted as Specialist Advisor to the House of Lords Committee on the European Union enquiry into the feasibility of the 2020 targets for renewable energy. He has contributed extensively to Government policy development through commissioned reports, independent assessments and membership of numerous committees and steering groups. He is Co-Chair of the British Institute of Energy Economics.

Relevant research papers and reports can be found here:

http://www3.imperial.ac.uk/icept/publications/workingpapers

http://www.ukerc.ac.uk/support/tiki-index.php?page=TPA%20Overview

The author has undertaken extensive analysis of “what works” in energy policy, drawing upon international experience and analysis of the interaction between policy design, investor needs, technological deployment and cost reduction. Some of the key issues outstanding associated with the Bill and relevant to the Committee are set out briefly below.

1. **Philosophically and pragmatically, the Bill is right-minded.** The Committee should not be swayed by arguments rooted purely in economic theory, divorced from investment reality. Long run, fixed price contracts are essential to investment in new nuclear and most renewables.
In the absence of intervention electricity companies will invest in gas fired generation. The reasons for this are that gas fired power stations are cheap and quick to build, flexible in operation and gas price movements pass through to consumers. This last point is critical and not often well understood. In the UK, and increasingly in other countries, gas generators are “price makers” in power markets. If the price of gas goes up with it, offering investors an inherent hedge. High gas prices do not deter investment in gas fired generation. However, the electricity wholesale price volatility that results from this effect acts as a major impediment to investment in capital intensive, “price takers” such as nuclear power and renewables. Even if the levelised cost of nuclear/wind and gas is similar, rational investors will still prefer to invest in gas. These effects are explained more thoroughly here http://www.ukerc.ac.uk/support/tiki-index.php?page=InvestingInPower

2. Gas/power market price interaction is the principal reason why arguments that the Bill amounts to “picking winners” and could be replaced by a simple carbon tax/price, are wrong. A carbon tax offers a partial solution to the climate change problem. However it is not the sole solution, and cannot replace the long run fixed price feed in tariffs that the Government proposes. Investors in long lived, capital intensive asset based forms of power generation (nuclear power, wind, hydro) require power stable prices. Carbon taxes cannot deliver this. Moreover, to the climate change problem. However it is not the sole solution, and cannot replace the long run fixed price levelised cost of nuclear/wind and gas. R&D alone is insufficient. For similar reasons to those set out in point 2, the Committee should not be swayed by arguments that the Government could put more money into R&D instead of creating investable conditions for low carbon technologies. Innovative effort is essential to getting cost effective low carbon technologies. This includes research, development and demonstration. However, the absence of policies that allow for deployment of emerging technologies as they emerge from the R&D stage creates a “valley of death”. Promising technologies are unable to begin the process of real world learning that is essential to making them viable. Feed in tariffs are a well proven means by which to allow emerging technologies to begin to progress along their learning curve, ultimately allowing costs to fall to levels where subsidies are no longer needed. These arguments are explained in more detail here. https://workspace.imperial.ac.uk/icept/Public/On%20Picking%20Winners%20low%20res.pdf

3. Innovation and cost reduction requires deployment, R&D alone is insufficient. For similar reasons to those set out in point 2, the Committee should not be swayed by arguments that the Government could put more money into R&D instead of creating investable conditions for low carbon technologies. Innovative effort is essential to getting cost effective low carbon technologies. This includes research, development and demonstration. However, the absence of policies that allow for deployment of emerging technologies as they emerge from the R&D stage creates a “valley of death”. Promising technologies are unable to begin the process of real world learning that is essential to making them viable. Feed in tariffs are a well proven means by which to allow emerging technologies to begin to progress along their learning curve, ultimately allowing costs to fall to levels where subsidies are no longer needed. These arguments are explained in more detail here. https://workspace.imperial.ac.uk/icept/Public/On%20Picking%20Winners%20low%20res.pdf

4. A “decarbonisation target” would help provide long-term investment certainty. Including an explicit 2030 target to reduce the UK power sector’s carbon emissions in the Bill would help in particular to ensure investment certainty in the low carbon energy supply chain. The absence of such a target risks creating a perception that there will be a “cliff edge” post 2020, where renewable energy investment will almost cease. This has very deleterious effects for the UK. It discourages investment by British and international companies in the supply of equipment and services needed to make and install renewable energy. The result is that UK bill payers support industrial jobs and provide economic value to neighbouring countries such as Denmark and Germany. This seems a rather poor deal for UK households.

5. Concerns on the ability of independent renewable energy generators to access the electricity market must be addressed (Chapter 6, Sections 34 and 35): Internationally, most feed in tariffs offer some form of obligation to connect. Developers have a good degree of certainty that they will be able to connect to the grid, and that they will be able to realise the price set by the scheme. The Government’s proposals do not guarantee connection, and the way the UK power market functions means that independent renewable energy developers may not be able to realise the benefits that the Contracts for Difference are supposed to offer. Independent generators fear that the “Big 6” will have little incentive to offer them attractive power purchase terms, or indeed any power purchase agreements at all. The Bill therefore risks undermining investment in renewables by all but the large vertically integrated developers. This has the potential to decrease competition and innovation, increase costs and decrease industrial benefits to the UK.

The Bill Committee should carefully consider the concerns and proposals put forward by independent generators regarding the risk of their access to the electricity market deteriorating in the years to come. Another partial solution to this problem would be to increase the threshold for the microgeneration feed in tariff from 5 MW to 30 or 50 MW as recommended by the Energy and Climate Change Committee. This could offer smaller developments and particularly community owned schemes a more attractive environment.

6. An enabling power to support energy efficiency measures should be introduced now. Current energy efficiency policies are fraught with difficulty. Yet in many cases energy efficiency could offer a cheaper means to decarbonise and deliver security of supply than investment in new generation. One option would be an “energy efficiency feed in tariff”; the details and merits of such need to be assessed. However, we know that it requires an enabling power in primary legislation. The Bill should provide an enabling power for energy efficiency measures now to avoid any delays in implementing the conclusions of DECC’s consultation process on electricity demand reduction.

January 2013
Memorandum submitted by Sedgemoor District Council (EN 31)

Sedgemoor District Council has a significant interest in the development of Hinkley Point C, the first proposed new nuclear site. Sedgemoor will be significantly impacted (directly and indirectly) by the development, in particular the major town of Bridgwater, through which the majority of resources to build Hinkley Point C, both human and physical, will need to be transported.

1. Summary

1.1 Sedgemoor Council supports the aims of the Energy Bill and the Electricity Market Reform Process (EMR). The Council and our local community recognise the national need for new nuclear power stations to help achieve the aims of the Bill to achieve “secure, clean and affordable” energy supplies.

1.2 Although the building of any large scale infrastructure project carries with it barriers by means of local opposition, the community’s role as a pioneer in the new nuclear age is widely accepted. Nonetheless, this support is not owed per se, nor will it be offered “at any cost”, without fairness and equity towards a local community who will arguably experience the real, tangible impact of EMR more than any other in the UK. In order to achieve a co-operative and engaged community, we seek appropriate benefits and positives from such developments which can be determined locally.

1.3 The Government has acknowledged that the planning process is not fit for purpose in terms of adequately compensating communities for the “disbenefit” of hosting new, nationally beneficial long term infrastructure projects of this sort. They are therefore supportive of a system of “community benefits” outside the planning process for renewables projects, and are currently examining potential for such a regime for onshore wind. The Government committed in the National Infrastructure Plan (in November 2011) to delivering a system of community benefits for new nuclear by the end of 2012. No such policy was forthcoming.

1.4 This community are particularly aware that the provisions in the Energy Bill operate such that they (along with all energy consumers) will be helping to fund new low carbon infrastructure including nuclear, via their bills. The Council submits that without an adequate process in place to ensure fair and proportionate community benefits as soon as possible, a very real risk exists that communities like ours may perceive the Energy Bill as not only steamrolling local interests, but also charging them for doing so.

1.5 The Government treats “renewables” and “low carbon” identically for the purpose of support in the Energy Bill, and has taken particular pains to emphasise that this support is offered to all low carbon technologies: renewables, nuclear and CCS alike. It would be a bizarre aberrance for a distinction to be made only for the purposes of excluding host communities of larger scale energy infrastructure from benefitting from a policy of community benefit which it applies to renewables.

1.6 The experience of local communities in and around Hinkley is likely to shape the level of acceptance of local communities across the country when it comes to future similar infrastructure. It is in the national interest that the first experience is as positive as possible. The Council therefore considers it vital that a power be included in the Energy Bill for the Secretary of State to impose on developers a duty to provide compensation outside the planning system (Section 106) to communities hosting nationally beneficial infrastructure projects, such as new nuclear power stations.

2. Why do we need community benefits in the Energy Bill?

2.1 Benefits provided through the planning system, via Section 106 Agreements, must be “directly related” to the tangible impact of the development (eg the need for wider roads, temporary housing, air quality measures etc). In practice, this system is limited and inflexible, capable of addressing only a narrow range of projects rather than delivering fair and proportional compensation for the community as a whole.

2.2 The Government has acknowledged that the planning system (including 106 Agreements and the Community Infrastructure Levy) cannot address the scale, scope and nature of the burden that will be borne by local communities as a result of hosting new nuclear developments. They have, therefore, committed to a bringing forward a package of community benefits capable of redressing this imbalance and providing an opportunity for communities and individuals to focus the potentially positive outcomes of infrastructure projects.

2.3 However, while our communities watch the Energy Bill (intended to incentivise the new infrastructure they will be both hosting and paying for through their energy bills) get underway, they have no clarity from Government as to the proposed package—when it will appear, or what form it will take. This situation risks long term polarisation of the local host communities which, the Council submits, should be acknowledged as a major consideration in getting the Hinkley Point C project built on time and on budget.

2.4 It is, therefore, crucial that the new system of community benefits be included within (not lag behind) legislation intended to incentivise the new low carbon infrastructure communities are being asked to accommodate.

3. Precedent for Community Benefits

3.1 A Community Benefit contribution would represent a fair and reasonable settlement for the community affected by Hinkley Point C and would be consistent with policy in other sectors in the UK and EU.
3.2 The principle that those most impacted by development should be duly and proportionately compensated is well established in Government policy across many sectors. The Government has been particularly supportive of community benefits for areas hosting onshore wind infrastructure (and is moving towards a similar principle for other renewables) because this infrastructure is required in order to meet a national need, but the most permanent, significant impacts are felt locally. There are also strong precedents in other sectors such as oil and aggregates.

3.3 It cannot be equitable that what is appropriate for communities hosting renewable developments is not equally appropriate for communities hosting new low carbon developments including nuclear; particularly given the increased scale, magnitude and risk associated with new nuclear developments compared to, say, an onshore wind farm. The Government treats “renewables” and “low carbon” identically for the purpose of support in the Energy Bill, and has taken particular pains to emphasise that this support is offered to all low carbon technologies: renewables, nuclear and CCS alike. It would be a bizarre aberrance for a distinction to be made only for the purposes of excluding host communities of larger scale energy infrastructure from benefitting accordingly.

3.4 Additionally, the recognition by the Government of the need to encourage communities to welcome alternative low carbon energy is clearly set out under the proposals for Business Rate Retention for renewables, including wind and biomass generation. It is patently unjust that a development of the scale of a new nuclear plant, which carries the same benefits of low carbon energy and energy security, does not receive the same treatment.

3.5 The international precedents for community benefits (either by way of retention of local business taxes, like business rates or through a direct contribution from the developers) exist all over the world. In much of the rest of Europe (including France, Spain and Finland) as well as Japan, USA and Ukraine, community benefit is a common and well established practice.

3.6 Local communities in Somerset are aware of these precedents, and feel let down that similar opportunities are not being presented in the development process created for new nuclear in the UK. This is particularly true since it is in some cases it is the same developers operating here in the UK. The new framework for low carbon infrastructure in the Energy Bill must not facilitate such a prejudice against UK communities, but instead reflect the clear moral imperative which exists on developers and on Government to ensure that affected communities are justly and proportionately compensated for the local impact of hosting national infrastructure on this scale.

4. The Particular Impact to be Addressed by New Nuclear Infrastructure

4.1 Hinkley Point C is a substantial development, far bigger than the existing power station, which will have a significant, long term effect on the community hosting it. It will be a “defining feature of the community”, operational for 60 years and with waste generated at the plant stored on site for up to 100 years. Construction will take at least eight years, with considerable disruption and pressure on local facilities via the influx of those involved in the construction process and subsequently maintenance of the facility, changing the nature and character of the community.

4.2 Communities adjacent to Hinkley Point C have lived with the presence of nuclear energy production since 1957 and are accustomed to the presence of nuclear infrastructure. The perception of risk however remains as they are aware of the implications of a catastrophic event would potentially be more significant and detrimental than a similar event at a coal fired power station, for example. The distribution of iodine tablets to local communities for use in the event of a release of radioactive material acts as a constant reminder of the additional risks that exist for a nuclear power station.

4.3 The events at Fukushima (and the on-going repercussions) in addition to other historic problems at nuclear power stations have impacted on the perception of risk. It is important to note that whilst communities take comfort from the long period over which the current facilities have operated without incident, it merely has the effect of emphasising the low likelihood of the risk rather than minimising the impact of the seriousness should an event take place. Perceptions of risk have undoubtedly risen since Fukushima, and we have become aware that the current planning system fails to deal with these in a way which is fair and appropriate for local communities. While it may never be possible to lay to rest residents’ concerns entirely, we should however, attempt to compensate them for the loss of this peace of mind.

4.4 Currently only a tiny proportion of the revenue generated by Hinkley Point is reinvested in the local community and few of the jobs created by the ongoing operation of the facility go to people from the local area. Some sectors of the Hinkley Point communities currently suffer from a high level of social and economic deprivation relative to the national average. Fuel poverty rates are among the highest in the UK; wages and educational attainment levels are low. These residents are particularly vulnerable and many will never directly benefit under the current system of compensation, nor from the jobs and other investment that will come with such an infrastructure project.

4.5 Among the residents who will be most impacted, yet benefit the least under the current system, are children and the elderly. Sedgemoor and West Somerset District Council have a disproportionately high elderly population, which is even greater in the communities surrounding Hinkley Point C. These individuals will not benefit from jobs at the site and are likely to find their recreational facilities dominated by a large well paid temporary workforce as well as roads occupied by significant amounts of construction traffic, potentially cutting
them off from their normal places of entertainment, shopping and friends. This is exacerbated by other inter-generational equity issues where upon the completion of the construction of Hinkley Point C, there will be a significant out flow of jobs and resources from the area. Those who are children now may not see the benefit of the current jobs and find a boom and bust situation arising should there not be sufficient investment or opportunity to create a sustainable economy post construction.

5. Conclusion

5.1 Our responsibility is to put the interests and welfare of the local community first during this process and this is why we are pursuing a programme of engagement around fair and proportionate compensation for local communities in the form of community benefits.

5.2 Community support for large scale, high-impact, national projects like Hinkley Point C is essential to ensuring smooth progress during development. The success of the Energy Bill in incentivising such new generation will be necessarily limited in practice if communities feel that they are bearing the entire burden, and seeing none of the benefit, from this nationally significant infrastructure.

5.3 An opportunity exists for the Energy Bill to redress this imbalance and provide an opportunity for communities and individuals to focus on the potentially positive outcomes of infrastructure projects in a manner consistent with international precedents and other areas of Government policy.

January 2013

Memorandum submitted by Statkraft (EN 32)

Executive Summary/Overview

As a major inward investor in renewable energy, and offshore wind in particular, Statkraft UK is fully supportive of the Government’s aims for Electricity Market Reform (EMR)—to keep the lights on, to ensure energy bills are affordable, and to decarbonise power generation. Delivering these aims can be achieved by industry and Government working together to drive deployment of renewable technologies and reduce support as costs fall. Putting in place a predictable, transparent, and long-lived regulatory framework is essential to making this happen.

We welcome the introduction of the Bill to Parliament. The policy detail has come a long way since the publication of the Electricity Market Reform White Paper in 2011 with some significant improvements in particular related to the creation of the single counter party and early allocation of contracts. However, there are a number of substantial outstanding concerns that need to be addressed before we consider the framework to be fully functional and able to unlock the £110 billion investment required to achieve the Government’s aims.

We believe that further clarification and amendment is needed on some key aspects of the Bill. In order to maximise cost reduction and overall deployment, the Bill needs to:

— provide clarity earlier on the transition from the Renewables Obligation (RO) to a fixed certificate scheme and provide more detail on the powers granted for future changes to the RO to avoid uncertainty around the intention of true grandfathering of the Renewables Obligation Certificates (ROCs) in order to safeguard new and existing investments made under the RO;

— strengthen Change of Law provisions regarding the Contract for Difference (CfD) mechanism to reduce income risk for generators and ensure that projects are “bankable”;

— introduce a decarbonisation target on the face of the Bill to provide industry with greater market visibility post-2020 and enables UK supply chains to develop, securing jobs and cost reductions;

— maximise the certainty of contract allocation particularly for R3 offshore wind projects that have a long lead time (four to seven years) and require substantial pre-consent costs (tens of millions of pounds) to ensure continued growth without driving up the cost of capital; and

— establish the importance of improving power market functioning and liquidity to make EMR work and to provide a clear route to market for small and independent generators; the role of the capacity market should be clarified as this represents a potential risk to the overall functioning of the power market.

We will also point to the need to ensure sufficient flexibility when defining delivery obligations in the CfD contracts. There is a need to amend the Heads of Terms for the CfD mechanism to introduce more flexibility.

We look forward to working with Government and other stakeholders on addressing the above concerns as the necessary detail is developed.

1. Introducing Statkraft UK

1.1 Statkraft is Europe’s largest renewable energy generator, and we have chosen the UK as our strategic base for offshore wind development. Statkraft has been active in the UK since 2003, developing four onshore wind farms through joint ventures with local partners. Together with Statoil, we recently completed our first major offshore wind farm in the UK which opened on 27 September 2012 at Sheringham Shoal, Norfolk (317MW). We have acquired a large share of a neighbouring project, Dudgeon (560 MW) that now is being developed.
We also aim to build the world’s largest wind farm at Dogger Bank. This Round 3 scheme will represent a total investment of £30 billion, generating thousands of jobs and delivering 9,000MW of renewable energy for the UK.

2. THE ENERGY BILL: POINTS WE WELCOME

We very much welcome the broad goals of decarbonisation, security of supply and affordability set out in the Bill, and believe that it has the potential to deliver on all of these points. In particular, we are pleased to see:

2.1 An earlier process for CfD allocation:

Investor confidence in the new framework will be dependent on a clear, stable and transparent pathway to CfD allocation which reflects the different demands of diverse technologies and projects, as in the case of nuclear energy. We welcome the concept of contracts at consent, which will underpin investor confidence (although the way this is dealt with through secondary legislation will be crucial to whether it delivers the intended benefits).

2.2 A single, Government-owned counterparty:

The creation of a Government-owned company to act as a single counterparty to long term support contracts under the new market framework has been warmly welcomed. This will give investors confidence in CfDs and their long-term stability.

2.3 Allocated funds under the Levy Control Framework:

We were pleased to see that £7.6 billion of market support will be available for low carbon electricity investment by 2020. We note that Government will have aligned volume of support to be consistent with delivery of the 2020 renewables target, and bring forward other low carbon projects anticipated within this window. As the necessary funds will depend on factors like power price development and the cost of other instruments to be included within the budget, some flexibility to do adjustments when and if necessary is still needed.

3. THE ENERGY BILL: AREAS OF IMPROVEMENT

To achieve the full potential of the Bill in securing renewable energy deployment and reducing cost for consumers, we believe that the following key areas need to be improved:

3.1 Transition from the Renewables Obligation to Contracts for Difference:

3.1.1 Under the Bill in its current form, the RO will be open for accreditation until 31 March 2017, and we expect this to remain the preferred support mechanism for new projects making investment decisions in the near future. To manage the end of the RO’s term, it is proposed that a fixed price instrument is introduced from 2027.

3.1.2 Whilst we do not consider the establishment of a fixed price ROC to be a problem in itself, in turn we don’t see this as a necessary step. Furthermore, we believe that Chapter 7 of the Bill (which would legislate on the grandfathering arrangements) is drafted in such a way that it increases, rather than allays, uncertainty for investors with regard to these proposals.

3.1.3 In particular, we note that the Bill currently grants the Secretary of State very broad powers to redefine band levels; to change redemption values; to set limits on number of certificates that can be redeemed in any given period, and also to set the deadline for certificate submission. All these powers create confusion as to whether the fixed certificate mechanism will render a certificate based support of the same relative value as ROCs in 2027.

3.1.4 Whilst we note that DECC intends to consult on fixed price ROCs in Q3 2014 and will lay the secondary legislation in Q1 2015 to provide clarity on this issue, we believe that this will not be soon enough for investors hoping to take investment decisions before then.

3.1.5 There are three possible ways in which the Bill could be improved in respect to the above:

(i) Remove the move to a fixed price.
(ii) Set out on the face of the Bill more in detail concerning the changes and reduce the powers granted to the secretary of State to make further changes.
(iii) Clarify on the face of the Bill what is the intention of the changes to be made.

Recommendation 1: We are agnostic when it comes to the choice between points (i)–(iii) in section 3.1.5, although option (iii) would most likely be the easiest to deliver. However ensuring investors understand the full detail of a true grandfathering regime for ROCs is a minimum requirement. Getting these details right in Chapter 7 will be key to avoiding a significant investment hiatus as investors acclimatise to the new regime. Therefore we strongly recommend that the Committee review the relevant clauses to improve clarity on these issues.

3.2 Prolongation of the RO

3.2.1 The RO is scheduled to close for new accreditations 31 March 2017. To reduce uncertainty in the transition to a new regime, the RO should be kept open at least for the full year of 2017 to encounter for project
delays. The timetable for the EMR (approval and implementation of the Energy Bill, secondary legislation and regulations) is very tight. Even if the timetable holds, taking investment decisions on renewables projects going forward will be challenging for generators.

3.2.2 With this in mind the development timeline for large offshore wind power projects is a particular concern. The Final Investment Decision enabling process introduced is helpful in this respect, but does not by itself solve the challenges of the transition.

3.2.3 For projects aiming to reach the March 2017 deadline there is as of now a limited possibility to get a grace period for transmission and radar issues. A minimum requirement would be a more generous approach to grace periods, where also other forms of unforeseen project delays will be taken into account. Given there is any delay in the time schedule for implementation of the EMR the ROC option should be prolonged correspondingly.

Recommendation 2: We propose a prolongation of the RO to the end of 2017, or longer if there is any delay to the EMR delivery. Secondly a grace period for grid issues, radar issues and other unforeseen project delays should be included.

3.3 Change of law provisions for the CfD contract

3.3.1 Under the Bill in its current form, there is protection against changes in formal law or amendments to the broader regulatory code that are specific to (or discriminatory against) a particular technology type or CfD plant as a whole. However, changes which would be economy- or sector-wide are not protected, and generators would be expected to bear that risk. A consequence of this would be that code changes such as the current proposals for transmission charges under Project Transmit or the current Electricity Balancing Significant Code Review would be specifically excluded from the change of law provisions.

3.3.2 Under the present system, the RO provides a hedge to investors against changes in regulation and market rules such as transmission pricing and imbalance costs. This is because changes in cost will tend to be reflected in the market price over time, and hence in the revenue stream to generators. However, the introduction of a CfD would remove this natural hedge meaning that a change of law could significantly impact revenue returns. This leads to an overall increase in risk for investors under the new system which needs to be addressed.

Recommendation 3: If a change in law has the effect of reducing a generator’s revenues this must be compensated for by a corresponding increase in the strike price. If this principle is not incorporated into the Bill provisions, the cost of capital will rise to reflect the increased risk and the forecast benefits of CfDs will not be gained. Change of law protection should be added to the face of the Bill.

3.4 Visibility past 2020

The UK currently benefits from great clarity on support levels, ambitious renewable energy targets, and legally binding carbon reduction commitments offering investors and the supply chain excellent visibility with regard to demand and revenue up to 2020. These are welcome and will potentially bring forward a significant volume of offshore wind by 2020.

However, beyond 2020 this market visibility rapidly diminishes. This is of real concern for renewable and low-carbon technologies, and for Round 3 developers in particular as the majority of projects will be commissioned after this date. Without the market signal a long term technology neutral electricity decarbonisation target would offer, there is real possibility that many of the Round 3 offshore projects may not be developed. As a direct effect, it is unlikely that turbine manufacturers and other supply chains would be able to develop a business case for developing manufacturing facilities in the UK and thus deliver the attendant benefits of cost reduction, investment and skilled job creation.

Recommendation 4: A 2030 decarbonisation target should be included on the face of the Bill to provide investors in renewable and low-carbon technologies that there will be a strong market for their investments post-2020. This will avert the risk of an investment hiatus which could have significant implications for growth and job creation right down the supply chain.

3.5 Allocation of CfDs

3.5.1 We welcome the Government’s recent decision to amend original proposals regarding the allocation of CfDs. Ensuring this is carried out at an earlier point in the project process will offer much greater revenue visibility for investors, and help to manage costs effectively. We believe the current time frame is correct and will support project development.

3.5.2 However, the allocation and rationing mechanisms are still unclear and there is unnecessary risk associated with moving to an auction-based allocation process too soon. Whilst offshore wind is making significant strides in all aspects of development and efficiency, the scale and long development timelines do not fit well with an auction based approach. Round 3 projects require significant investment in the order of many tens of millions of pounds over four to seven years before they reach consent and can be considered viable. It is extremely unlikely that a developer would be able to make the financial commitments necessary to develop a project without being confident that they could secure a contract or recover their development costs. As a result there is a high risk that project development will not be taken forward and/or that the additional risk would be priced into the cost of capital and drive up costs.
3.5.3 As the offshore wind industry matures and experiences emerge from auctions in other sectors there may be scope for introducing an appropriate auction based scheme for offshore wind that takes into account the large up-front cost and development times. However transition to such framework needs to be very carefully managed.

Recommendation 5: At this stage we see a thorough and clear administrative process as the best way to ensure value for money and continued deployment of offshore wind. Such provisions could be included in Clause 6(5) of the Bill.

3.6 CfD contract—Heads of Terms—delivery obligations

3.6.1 We believe that a CfD mechanism in itself has the potential to increase investor certainty compared to the Renewables Obligation support scheme. However, the present Bill provisions are such that they actually introduce additional risk which needs to be addressed in order for the framework to be fit for purpose.

3.6.2 We have already highlighted our concerns about allocations risks and the change of law provisions (see points 3.1 and 3.2 above). However, further to this, we believe that the indicative Heads of Terms for the CfD contract are also of concern. The delivery obligations in the Heads of Terms are too rigid, and would offer generators very limited opportunity to negotiate the contract, or respond to any factors that could influence project timing and exact capacity installation. For example, worse than expected weather conditions could easily mean delays of one year for an offshore wind power project as “weather windows” that allow installation activities can be small and typically only appear in the summer. A small change of number of turbines or in turbine specifications for a wind park should be possible without the risk of the project losing the CfD contract or getting a reduced support level.

Recommendation 6: We acknowledge the need for some kind of delivery obligation on a generator under the CfD. However there needs to be sufficient flexibility with regards to setting and adjusting key parameters related to these obligations. There should be some flexibility with regards to the installed capacity, both up and down, and the proposed target commissioning window and long stops date must allow sufficient flexibility in order to enable reasonable adjustments to the project.

3.7 Power market functioning, route to market and the capacity market

We believe it is vital that generators are able to continue to trade their own power under a CfD framework. We see this as beneficial for the liquidity and general functioning of the power market. All measures to increase liquidity and reduce of barriers to entry in generation, trading and supply will be important.

Many developers are currently dependent on power purchase agreements (PPAs) which guarantee a buyer for their power output to secure project financing in the development stage. In order to offer reasonable terms for PPAs it is vital that the market is contestable and liquid. In this respect we see the introduction of a capacity market as a risk as it will influence prices and may make the market less predictable. Capacity auctions should only be introduced when and if necessary and the energy market should remain the main instrument to incentivise investments.

Recommendation 7: The capacity market should be a supplementary tool to ensure sufficient security of supply given that this may not be provided by the power market itself. This intention should be added to 17 (1) at the face of the Bill.

January 2013

Memorandum submitted by Nuclear Industry Association (EN 33)

1. The Nuclear Industry Association (NIA) welcomes this opportunity to provide written evidence to the Committee on the Energy Bill.

2. The NIA is the trade association and information and representative body for the civil nuclear industry in the UK. It represents over 260 companies operating in all aspects of the nuclear fuel cycle, including the current and prospective operators of the nuclear power stations, the international designers and vendors of nuclear power stations, and those engaged in decommissioning, waste management and nuclear liabilities management. Members also include nuclear equipment suppliers, engineering and construction firms, nuclear research organisations, and legal, financial and consultancy companies.

OVERVIEW

3. The electricity market reform proposals set out in the Energy Bill can make an important contribution to achieving the Government’s energy security and low carbon objectives. With all but one of our existing nuclear stations likely to close before 2025 the UK needs credible plans to decarbonise the power sector.

4. We believe the Government’s proposals provide the initial basis of a package that could provide investor certainty to enable the construction of new low carbon plant.
5. As a producer of safe, reliable, low carbon energy a new nuclear build programme has a key role to play in the UK’s future energy generation infrastructure. Inter alia it will help strengthen UK energy security, and provide long term price stability for consumers, protecting them from high or volatile fossil fuel prices.

6. Importantly it will also be a major engine for growth at a critical point in the economic cycle. The delivery of new nuclear power stations is among the biggest construction projects expected to take place in Europe in the next few years. It represents a huge opportunity for jobs and economic activity in the UK, and can be expected to leave a legacy in terms of skills and infrastructure to the benefit of the economy for years to come. An IPPR report published in June last year estimated it could boost UK GDP by up to 0.34% per year (equivalent to £5.1 billion in 2011) for 15 years.

7. The NIA completed a study last year on the capability of the UK supply chain, and one of its findings was that there needs to be certainty around the new build programme if the supply chain is going to invest in capability, and make the most of the opportunities. It is therefore vital that the passage of the Energy Bill is completed as soon as is practicable, and that the arrangements are robust.

CfD ARRANGEMENTS

8. In our evidence to the Energy and Climate Change Committee’s pre-legislative scrutiny the industry argued strongly that the legal framework and payment model in the draft Bill was insufficiently robust for potential investors. We therefore strongly support the changes made in the Bill to the CfD arrangements and the associated payment model. We believe that the new arrangements—with a single government-owned counterparty body for CfDs that will enter into private law contracts with generators—will be far better suited to incentivising the market for low carbon projects.

9. Nonetheless, as EDF have pointed out, a number of refinements are required if these CfD arrangements are to work in practice. These include:

- Amending the Bill to create enforceable debt on the CfD counterparty. The Energy Bill should be strengthened to ensure the full and timely payment by the CfD counterparty of monies due, and the draft CfD should be amended to ensure such debt is enforceable by the generator.
- The inclusion of direct enforcement powers against suppliers over payment of money due. The enforcement provisions of the Energy Bill should be strengthened to give the CfD counterparty enforcement duties and rights in respect of default amounts under the Supplier Obligation, and a statutory duty to carry out such enforcement.
- CfD transfer rights for Investment Contract investors. The Energy Bill should be amended so that an eligible generator investing before the secondary legislation is passed has appropriate veto rights over the transfer of its investment Contract from the Secretary of State to the CfD counterparty.
- The grandfathering of rights conferred by the arrangements for the life of the projects benefitting from the arrangements.

10. Our members also believe more detail is required in a number of areas before Government can begin implementing a sufficiently robust system. Investments on the scale of new nuclear construction require high degrees of certainty, and would be undermined by any lack of confidence in the CfD detail. Clarity on issues such as the calculation of baseload reference prices and the indexation of strike prices are examples where not enough detail has been provided.

OFFICE OF NUCLEAR REGULATION

11. The NIA strongly supports the inclusion in the Bill of provisions consolidating the Office for Nuclear Regulation as an independent statutory body. A strong and independent nuclear regulator is vital for maintaining the high safety levels necessary to underpin the UK’s nuclear industry, and this is a vital reform if the UK is to deal effectively with the new challenges resulting from the new nuclear build programme and our growing decommissioning and nuclear legacy activities.

12. That said it is important that appropriate governance arrangements are put in place for the new body to ensure accountability and transparency of decision making, and this should be made transparent in the Bill. We also believe that the non-executive membership of the Board should include nuclear competence, and this requirement should also be included in the Bill.

January 2013

53 Benefits from infrastructure investment: a case study in nuclear energy June 2012.
54 Capability of the UK nuclear new build supply chain, Nuclear Industry Association, December 2012.
Supplementary memorandum submitted by E.ON (EN 34)

E.ON PROPOSAL ON ACCESS TO MARKET

SUMMARY
1. In today’s world some renewable developers require Power Purchase Agreements (PPAs) for three purposes:
   (a) to reduce power price risk (eg through the inclusion of a floor price for purchased power);
   (b) to secure access to market; and
   (c) to transfer balancing risk to another party.

   The first of these challenges is currently most difficult and is removed by the introduction of CfDs under which a party will only need to secure access to the Market Reference Price (MRP) under the CfD.

2. Of the two challenges remaining under EMR, providing access to market is a relatively low risk low cost activity. It is provided by banks, trading houses and also by some utilities as a service. Therefore, we believe independent developers without a trading business should have plenty of options available for securing the MRP.

3. This leaves imbalance cost (or balancing) as the key risk to be managed via a PPA. This risk is one that will increase for all market participants—it is not specific to independent generators.

4. It is important that the methodology for setting the CfD Strike Price includes a reasonable assumption for the long term costs of balancing. Provided this is the case, E.ON continues to believe that the PPA market will function properly and deliver the required risk management at a fair and reasonable cost to the generator.

   However, we also acknowledge that there is uncertainty over the long term cost of balancing, not least because the methodology for determining this has changed frequently over the last decade. Should Government wish to reduce the risk for investors, we believe this would be best achieved through an indexation of the CfD strike price which is explicitly linked to the cost of balancing.

MANAGING BALANCING RISK
5. In principle there are two types of balancing risk which all generation plant, including renewables, need to manage:

   (a) long-term risks around a change in the cost of providing balancing services over many years—these changes can be driven by regulatory change or by changes in the mix of plant available on the system; and

   (b) short-term plant performance risks—driven by the performance of each individual generation plant in forecasting and then delivering on its contracted output.

6. We are not opposed in principle to reductions in the risk which renewable generators are expected to take against the long-term costs of balancing. No individual generator has any ability to control these costs and so there is a policy choice between:

   (a) customers paying a risk premium to generators for their managing these risks and customers receiving a fixed price in return; or

   (b) customers taking the risk and paying more when costs are high and less otherwise.

7. We are concerned that transfer of short-term balancing risk away from generators would have a number of significant adverse consequences for the operation of the market. Plant operators (generators) are able to manage many of the factors which can impact these risks, including plant design and plant maintenance. Transferring short-term imbalance risk away from a plant operator who can take some actions to mitigate it to others who cannot, is likely to result in an increase in the volume of balancing actions taken by the System Operator to accommodate that plant; this would add to the costs to be borne by customers. Generators should not be neutral to such risks—they should maintain an incentive to take responsibility for managing them.

8. For this reason, E.ON has considerable concerns around the “Green Power Auction Market” proposed by some independent generators. This proposal effectively creates a full Feed-In-Tariff with either no or reduced incentives for the generator to balance. We strongly believe that renewables should remain part of the mainstream power market, especially as they take on ever increasing importance within the UK generation mix. Furthermore, this system would give suppliers absolutely no visibility of their costs prior to the date of the auction, making selling multi-year fixed price contracts to end customers (for example, large corporate customers) far more difficult. It would also be impossible for suppliers exactly to match the weighted market reference price across all of the CfD assets, which is against the principle of using transparent and reliable indices. Finally, the volume of generation which went through the auction, instead of through the existing current markets, would result in a dilution of liquidity in the market, at just the time when we need the market liquidity to increase.

9. One unnecessary factor which makes balancing risk more difficult to manage is the current dual cash-out price system. “Cash-out” refers to the imbalance price that a market participant is exposed to if they consume or generate more or less energy than they are contracted for. In the current system the matching of supply with demand occurs over half hourly balancing periods. Under the trading arrangements, offers and bids for incremental and decremental energy are submitted into the balancing mechanism by an hour prior to each
balancing period (termed “gate closure”), and these are accepted as appropriate by National Grid as system operator (SO) on a pay-as-bid basis.

10. The current system is one of “dual” cash-out prices, with the price varying depending on whether the bidder is seeking to rectify a short or a long position. Those market participants who are short in any period pay a higher price than would be received by those who were long. This was in part designed to incentivise participants to self-balance by gate closure. Dual cash-out prices are intended to provide a disincentive to self-balancing by plant beyond gate-closure, which is the point at which the SO takes responsibility for ensuring demand and supply is in balance. However, this has the side effect of penalising intermittent renewables such as wind. We therefore support a move to a single cash-out price as this would treat under-or over-delivery of generation against a contracted position equally. By changing to this regime, generators can profit when they help the system to balance in addition to paying when they hinder it. This is one of the options being considered by Ofgem’s Significant Code Review into Balancing Arrangements.

Reducing Longer Term Risk for Investors

11. We believe there is a way forward which preserves incentives on generators to be “good” balancers, whilst addressing the long-term, systematic risks: to index that proportion of the strike price intended to cover balancing costs to the actual average cost of balancing. A key aspect of the design would be that the index would be based on the costs of balancing for a particular technology (eg onshore wind) rather than a particular plant. Adjustments to the strike price would reflect the national average forecasting error of contracted positions and the difference between the day-ahead and spot price of electricity. This is relatively straightforward to derive under a single cash-out regime.

12. We would suggest that this indexation be applied on an annual basis and with a long notice period for each annual change in price (eg a year or more). This would have two benefits: first, it would remove the need for greater complexity in operational systems needed to cope with frequent or short-notice changes; secondly, it would enable suppliers to forecast their costs and so price to customers effectively.

13. This proposal removes the long-term risk which might make investing difficult, but continues to preserve strong incentives on parties to be “good” balancers. Plant operators that can balance better than the industry average (by achieving lower forecasting errors) and are therefore helping the System Operator will be able to secure a higher income stream. By contrast, plant operators that experience higher forecasting errors and are contributing more to the balancing actions of the System Operator would earn a lower return. Plant would therefore continue to be incentivised to act in such a way as to reduce total system, and importantly the cost to customers.

Response to Question asked by Public Bill Committee

At the hearing on 15 January 2013, the Minister of State for Energy and Climate Change asked the following question of the panel of industry representatives:

“... on the emissions performance standard and grandfathering, the grandfathering goes out some considerable way, so over what period of time do you anticipate that new-build gas-fired power stations would be amortised? [follow up] Over what period would you amortise the new gas-fired power stations?”

E.ON’s response to that question is as follows.

1. Property, plant and equipment are depreciated over the expected useful lives of the components, generally using the straight line method. Useful lives for Technical equipment, plant and machinery in E.ON is 10 to 65 years.

2. At its current level, the Emissions Performance Standard (EPS) allows the construction of gas fired power stations within the limit set down. We are pleased that Government has legislated to grandfather this level until 2045.

3. However, as we said in our written evidence, the Bill needs to make it clear that the 450g/kWh standard applied to plants consented after Royal Assent will not then be subject to change during the life of these plants (if they are constructed before 2044 but continue in operation after that date). To minimise the risk that the EPS increases costs to consumers for no benefit, it should be grandfathered for new gas generation plant at the point of consent for the full operating life of the power station. This would give a positive signal for developers looking to invest.

4. A revision to the level of the EPS or the methodology by which it applies (for example a change to the annual bubble approach) after 2045 could still impact a gas plant built over the next 5–10 years. This is likely to result in additional risk which could increase costs to customers.

5. We firmly believe that decarbonisation should be driven through carbon pricing at EU level and from proposals to support low-carbon generation (the CFD). Provided these are designed appropriately and adequately funded, the level of gas generation in future will be limited by the market.

January 2013
Memorandum submitted by EEF (EN 35)

EXECUTIVE SUMMARY

— The Energy Bill is a major political intervention in the market that lacks a clear objective. It should include a requirement to set a 2030 electricity decarbonisation target. A clear statement of ambition will act as yardstick to measure the success of policies, provide an exit strategy for the Government and help drive investment in low carbon technologies. The target itself should sit outside primary legislation and be subject to regular review like carbon budgets. A target written into law would risk binding the UK to policies that prove unrealistic and unnecessarily costly.

— The Bill will empower the Government to set prices and volumes for a significant and growing portion of the electricity market. It must include a requirement to set out and commit to a clear timetable for moving back to a competitive market for low carbon power as soon as possible. A market-based, technology-neutral, approach to supporting low carbon electricity is the only way to keep it affordable and hence politically and economically sustainable in the long run.

— The Bill must safeguard the international competitiveness of electro-intensive industries which are highly exposed to the cost of decarbonisation policies. It must allow the Government to manage their exposure to the cost of supporting low carbon electricity. This must be an on-going commitment that is in place as long as subsidies for low carbon technologies are adding to electricity prices.

1. ABOUT EEF

1.1 EEF is the representative voice of manufacturing, engineering and technology-based businesses with a membership of 2,500 companies representing 6,000 industrial sites.

1.2 A large part of our policy work focuses on the issues that make a difference to the productivity and competitiveness of UK manufacturing, including investment, innovation, skills and tax issues.

2. REFORMS NEED CLEAR OBJECTIVE IN FORM OF A DECARBONISATION TARGET

1.3 The electricity market reforms introduced by Bill are a major political intervention in the market that lacks a clear objective. The general aim is to accelerate investment in low carbon power generation, but there is no measurable objective. This creates a risk that the British electricity market will be subject to open-ended and undirected political intervention.

1.4 The lack of a clear, long-term, direction for the Government’s electricity decarbonisation policy is also a potential barrier to industrial investment. Businesses making major capital investments in manufacturing facilities for clean energy technologies need the confidence that a long-term market for their products will exist.

1.5 To address this major shortcoming, the Bill should include a requirement to set a 2030 “decarbonisation target”—ie how far the Government wants its reforms to reduce the carbon intensity of power generation.

1.6 A clear statement of ambition and vision for the UK’s energy system will help drive investment in low-carbon technologies and provide a yardstick against which to measure the success of Government energy policies. The latter is crucial. The reforms introduced by the Bill are a major intervention in the market that will see prices and volumes for low carbon power set by the Government. The objectives for such a major intervention must be clear and there must be an exit strategy.

1.7 Flexibility, however, is vital. Energy policy has to contend with a range of factors that are difficult to predict far in advance, such as the pace of technological change and the future price of fuels. A fixed target in primary legislation would risk binding the UK to policies that unnecessarily drive up the cost of energy.

1.8 For example, if current assumptions about the development of carbon capture technology, the level of investment in nuclear power or the future cost of offshore wind and gas prices prove to be wrong the UK could end up committing itself to an unrealistic and extremely costly energy policy. We do not know today, with precision, what low carbon generation technologies will be available, and at what cost, tomorrow.

1.9 Recommendation: the Bill should include a requirement to set a decarbonisation target, but the target itself should sit outside primary legislation, be grounded in robust analysis of what is achievable and affordable and subject to regular, statutory, review like carbon budgets.

3. A TIMETABLE FOR RESTORING COMPETITION TO THE MARKET

1.10 The Bill empowers the Government to set prices and volumes for a significant and growing portion of the electricity market. This is not a politically or economically sustainable in the long run. The only way to keep electricity decarbonisation affordable over time is to adopt a “technology-neutral” approach where the market, rather than politicians, decides the most cost-effective mix of technologies needed to meet environmental objectives.

1.11 The Government has stated that its long-term plan is to move to a market-based approach to supporting low carbon power. The plan is to move from administered prices set by the Government to competitive auctions, first for particular technologies and then for low carbon power in general, before finally relying on a carbon price alone to drive investment in the electricity market.
1.12 However, the timetable set out for moving to a more competitive market for low carbon power—sometime in the 2020s—is too vague and lacks ambition. The Government needs to set out its plans with greater clarity and should aim to start moving to a market-based approach from 2020.

1.13 By 2020 the UK should have a diverse, and more competitively priced, mix of low carbon technologies to draw on. The 2020 renewable energy target should have delivered significant new capacity, the offshore wind cost reduction programme will have been completed and any nuclear new build programme should be well underway.

1.14 A statutory underpinning to the timetable is essential to ensure that the Government can be held to account on progress towards a competitive market.

Recommendation: the Energy Bill should include a requirement for the Government to set out and commit to a clear timetable for moving to a competitive market for low carbon power. The timetable should be updated and laid before Parliament on an annual basis.

4. ROBUST SAFEGUARDS FOR ENERGY INTENSIVE INDUSTRIES

1.16 Energy-intensive industries (EII) operating in international markets are most at risk from policy-driven electricity price rises. The Government has acknowledged the threat with its commitment to developing a compensation package to offset the costs of its policies for these industries.

1.17 However, the package fails to address one of the most significant drivers of competitive disadvantage for UK-based companies—the cost of policies that provide direct support to low carbon electricity such as the RO and the proposed Contracts for Difference. In contrast, in many other EU countries, such as Germany and Sweden, energy-intensive industries are only exposed to a fraction of the cost of measures to support renewable energy.

1.18 At last year’s Autumn Statement, the Government acknowledged this gap in the compensation package and committed to exempting EII from the future cost of supporting low carbon generation technologies. The level and scope of the exemption will be consulted on later this year.

1.19 The Government must ensure that it can honour this commitment by including any necessary enabling legislation in the Bill and, most importantly, ensuring that the Bill does not unwittingly preclude an exemption.

1.20 Recommendation: the Energy Bill should include any enabling powers the Government needs to honour its commitment to safeguard the international competitiveness of UK EII by limiting their exposure to cost of supporting low carbon electricity. This must allow for an ongoing commitment that is in place as long as subsidies for low carbon technologies are adding to electricity prices.

January 2013

Memorandum submitted by Cornwall Energy (EN 36)

THE ENERGY BILL AND COMMUNITY ENERGY

At the Public Bill hearing into the Energy Bill on 15 January, I didn’t get the opportunity to complete the answer to a question asked at the end of the session by Luciana Berger.

The question was how the Bill’s provisions might impact on community energy. I indicated there was a “black hole” in the Bill that would disadvantage community energy developers specifically but also smaller independent generators in particular but didn’t get much further or explain why.

The fuller answer I would have given is set out below.

THEORY VS PRACTICE

There is strong political support for community energy. Ed Davey, Secretary of State for Energy and Climate Change, recently said “I want nothing less than a community energy revolution”; and the May 2010 Coalition Agreement states “we will encourage community-owned renewable energy schemes where local people benefit from the power produced.”

These are commendable objectives, and a community energy strategy has been under development for some time. But a key opportunity is at risk of being lost. This is because the provisions in the bill as it stands—most notably the introduction of contract for difference (CfD) feed in tariffs (FiTs)—will have significant unintended consequences for small developments; rather the chance should be seized to ensure there is a level playing field for market access that is open to players irrespective of their size and which will support local schemes. The problems stem from the fact that the Bill does not recognise community energy as such. Under EMR the key consideration for new low-carbon generation will simply be size.

Below 5MW a site seeking renewables support will be eligible for the current fixed FiTs set in place in 2010. This has two elements—the production rate which will be technology and size specific and an export rate where a site exports onto the public system. The former is project specific and ranges between 4.48p/kWh and
For eligible plant above the threshold the current RO regime will remain in place until 2017, though developers will have a choice from 2014 as to whether they opt instead for a CfD FiT. After 2017, when the RO is due to close out to new investment, they will only be eligible to apply for a CfD FiT. In practice allocation of the CfD FiT means that project backers will benefit from a guaranteed payment awarded for that technology. Furthermore they will not face wholesale price risk as the amount of the incentive payment will depend on the difference between a market index and the relevant strike price.

As a general proposition, while there may be exceptions for larger sites with backers who are energy experts, this arrangement will be very problematic for most smaller generators. Indeed, for reasons I set out below, there are real risks that this system of split incentives could place a cap on local schemes at 5MW.

A related point, in this context, is that DECC seems to believe that community energy schemes are invariably small and therefore the current arrangements applying below 5MW will suffice, and the response to pre-legislative scrutiny restates this view. This is not the case.

While many community energy schemes are small and certainly below the threshold, there are notable instances that are not. There are now about 20 schemes above 10MW that enjoy community involvement, and this Government should be looking to build on this momentum.

WHY CfD FiTs don’t Work for Small Players

There are four ways in which CfD FiTs impact negatively on smaller power producers:

- participating in the system requires a high degree of specialist knowledge about the energy market and regulation, and the details available on the design and allocation process clearly indicates that smaller players, especially non energy experts, will be participating at a disadvantage. This is a significant barrier to entry for smaller generators;

- smaller generators do not trade on the open market and actually receive lower prices for their electricity than larger companies. This is because their output can be less certain and they are selling smaller amounts, but also suppliers also charge for the access they are providing and the larger ones have significant market power. Yet the CfD FiT top-up payment is based on average traded market prices for all generators, not the amount actually received by an individual generator under a power purchase contract. So larger generators who access wholesale markets will receive more per unit of power than community energy schemes;

- with the end of the RO to new schemes in 2017, there will be no requirement for electricity suppliers to source a proportion of their power from new renewable sources. Therefore they will have no reason to choose to buy power from smaller renewables generators if other, larger or more reliable sources of power are available. This lack of “demand pull-through” will further depress prices for smaller players; and

- these factors in combination are likely to make community energy projects more risky. This in turn will make it more difficult and expensive to secure capital funding. Access to finance is already very difficult for many community schemes, so the change-over will make such schemes more expensive.

Put together, these impacts will result in higher development costs and lower returns for community energy, and, indeed, other independent generators. This situation is likely to mean that far fewer independent companies participate in the electricity market above the 5MW threshold, and there is anecdotal evidence already that some independents have already decided they will keep below the limit.

A Different Approach

What do I believe needs to be done?

In the first instance the Government should urgently undertake a systematic analysis of how the proposals put forward in the Energy Bill are likely to affect community energy projects. It should align these proposals with the forthcoming Community Energy Strategy (due to be published in spring 2013).

This assessment needs to include identifying:

- cost and complexity for accessing support regimes for non-energy experts;

- the potential benefits of a broader investor base;

- wider benefits that may arise from community projects alongside low-carbon investment, such as greater consumer engagement and understanding of energy and overlaps with other projects (e.g. localism, social inclusion, waste, transport etc.); and

- risks of unintended consequences.

The opportunity afforded by the Energy Bill should also be grasped. There are two separate but complementary elements to the action needed to provide a different price support mechanism for community energy projects above 5MW in order to avoid the complexities and uncertainties of CfD FiTs.

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55 Feed-in Tariff Scheme Tables.

56 Government Response to the House of Commons Energy and Climate Change Select Committee Report into the draft Energy Bill, page 8.
First there should be a FiT, similar to those offered to smaller generators below 5MW, which are termed “fixed FiTs”. This has the advantage of simplicity and certainty, but relies on Government setting a price that is neither too high nor too low. This mechanism is proven and familiar to developers and lenders. The threshold could be raised generally to 20MW, though I personally believe that generators below 100MW (who are typically licence exempt) are unlikely to participate in the wider electricity market because of its cost and complexity, and may need to have this option.

Alternatively, community schemes above 5MW should be able to require suppliers to offer terms. I would obviously prefer a fixed FiT but DECC has indicated that it is exploring a regulatory solution based around a requirement to offer terms, perhaps using administered prices. The end result would, probably, be broadly the same.

A second key mechanism is some form of guaranteed market for community energy schemes and other smaller generation projects. This could be based on an auction process, which DECC evidently likes. It would be topped up by the CfD FiT payment, which could use the auction prices for calculation of CfD FiT payments. This would mean that smaller generators were not disadvantaged because of their inferior position in the electricity market.

In this context, I have previously written a longer piece on the current e-power auction that has operated for over a decade and how this might be modified for the new world of EMR and integrated with the new CfD FiTs, and a copy is attached as Appendix A.

This option has the advantage of prices being set through a market process. But it may still be seen by some community energy developers as too complex compared with the certainty of fixed FiTs, so because of this I think the developer should have the option.

Additionally there a mix of additional measures that could help bridge the knowledge gap and provide useful support to local developers and small generators. In particular the Government should offer information and advice to all small developers during the transitional phase of implementing EMR (2014–17) to help them better understand the options and the processes they need to engage with.

Finally the proposed Policy and Strategy Statement to be issued by the Government and provided for in section 4 of the Bill to govern the relationship with Ofgem should also provide reinforcement to a supportive policy environment for community energy.

A Lost Opportunity

There is considerable potential for development of local and business-funded installations where electricity generation may not be the primary reason for investing in low-carbon plant, and community energy developers have a key role to play in this area. There is the potential for significant volumes of low-carbon generation to be funded outside of the traditional utility sector. But the shift to CfD FiTs could deter much of this investment from materialising, and DECC urgently needs to use the powers it proposes to take in Section 7 of the Bill to deliver a more supportive market environment.

Many of these themes and arguments are developed in a report we produced last Autumn for Cooperatives UK. The report can be found at http://www.uk.coop/energybill-impact.

APPENDIX A
GREEN POWER MARKET FACES A NEW YEAR HANGOVER

GREEN POWER MARKET

In our response to the call for evidence we supported the Green Power Auction Market (GPAM) concept developed by leading independent generators.

The GPAM design is based on the existing NFPA e-Power auctions. Under the proposal, each auction would enable renewables generators to sell their power to any licensed electricity supplier. In these auctions suppliers would participate in a competitive bidding process for the right to receive electricity from renewables stations for a specified period, which can be six months or longer.

Suppliers that are registered with the auctions can view the contracts on offer and make formal bids on the website for individual contracts.

Contracts are then awarded to the supplier who submits the highest bid (by generating station), which is not bettered after a period of two hours.

Bidding for the contracts takes place over a secure internet service. During the auction, all participants are able to see current highest bids, and final bid prices, though all bidding is anonymous.

The site specific auction price sets the market reference price for that station, from which the CfD payment can then be made.

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One of the documents issued alongside the Energy Bill in November was the Government’s response to its July call for evidence on the state of the independent generation market. It is tucked away as chapter 6 of Annex A, which more generally provides the updated Operational Framework for contract for difference feed-in tariffs (CfD FiTs). We argued back in the summer for a guaranteed route to market for green power to replace the pull-through mechanism represented by the Renewables Obligation (RO) once it is closed to new investment from 2017.

Here we take stock of the prospects for merchant renewables operators now that the Government response has been published, and reiterate why we think DECC should support development of a green power market.

Out of Condition

The call for evidence elicited 56 responses. These highlighted generators are finding it increasingly difficult to secure power purchase agreements (PPAs) on attractive terms, confirming a tightening of the PPA market, leading to higher discounts against market rates for power as well as against Roc and Lee values.

Independent project-financed schemes need a decent PPA in place with floor prices to get off the ground financially. But terms were generally being offered over 10 year periods instead of 15, and reference prices tended to be set against day-ahead indices, increasing price risk for the generator. This situation, combined with the increasing absence of floor prices in offers, meant that fewer deals offered were now bankable.

Stakeholders identified the gloomy economic outlook but also the Big Six’s ability to meet their demand for Rocs through certificates from their own projects and PPAs already in place as the principal reasons behind the worsening market conditions. There was also widespread concern that the deterioration would continue.

Good Intentions

Overall DECC has decided, at least for now, against intervention in the PPA market. In its response the Government reaffirmed its position that CfD FiTs offer a number of advantages over the RO for new investment, especially in the context of the PPA market. CfDs are said to provide long-term certainty for generators and a more transparent approach to contracting for power. It also believes they will be beneficial for competition as the impact of PPAs on suppliers’ balance sheets will be lower.

DECC acknowledged problems with the current market conditions, but generally dismissed them as being “temporary in nature”. There were three particular issues identified in responses to the call for evidence that may present challenges during the transition to CfDs:

— low levels of competition in the PPA market could continue;
— imbalance risks will remain difficult to price accurately; and
— the transition under EMR creates uncertainty and adds administrative barriers to early projects.

DECC also highlighted moves to improve liquidity, which should lower barriers to entry and support the entry of aggregators. As for the transitional problems, it proposes to work with market participants to prepare for the introduction of the CfD and “to ensure that advance consideration has been given to contract approaches and structures, financing arrangements and division of risk between PPA counter-parties”. In particular, model PPA contract terms could be worked up to help commercial negotiation.

New Year Resolution

DECC is nevertheless keen to work with independent generators to further examine possible regulatory interventions, and it is prepared to take fall-back powers in the Energy Bill “to make modifications to electricity supply licences for the purposes of reducing barriers to entry associated with the PPA market” if they are needed.

An obligation to offer terms appears to be the Government’s favoured option if it does intervene in the market because it could allow PPAs to be agreed but would avoid compulsion. To enable this, it contemplates setting minimum contract terms, but notes there would be no guarantee that the costs of a PPA to a developer would be acceptable.

In contrast, DECC seems to be opposed to the offtaker of last resort option as there are [unspecified] “significant risks”, and the need for administrative price setting this option would involve could cause “market distortions, precluding normal market development”. Above all “we are concerned about the risks associated with any approach that involves the Government making interventions that mandate the way that costs are priced in commercial contracts.”

Healthier Lifestyle

But the short-term PPA auction, which was not covered in the call for evidence, is now included as an option. It has been championed by a group of renewables generators, including the major players in the offtake market such as RES and Infinis through their Green Power Auction Market (GPAM) proposal. We believe its inclusion in the DECC document is a very welcome development. The GPAM would see power auctioned through an organised auction platform on a rolling basis for six month (or longer) periods. It would build on the existing structure of the e-power auctions already successfully managed by the NFPA (see box on previous page), with an additional optional embellishment of using the individual price released through the auction by site to reference the difference payment under the CfDs.
We believe this option of a CfD price referenced to GPAM has considerable merit and warrants further consideration because it can provide real benefits for generators, suppliers and consumers.

For generators, it provides a route to market that is proven and trusted by smaller players. It removes basis risk (the difference between the offtake contract rate and traded market prices), which is set to be systematic under CfD FiTs as use of a third-party market index is proposed. It allows some balancing risk to transfer to suppliers but who are much better able to consolidate it and manage it across their portfolios. Larger suppliers that are best placed to manage imbalance risk because they have the resource, skills and systems in place to do so. The Big Six saw an average imbalance of less than 2% in 2011 (see chart above), and these savings would be shared with consumers.

This does not mean generators will not face balancing risk. Suppliers would still bid on a site-specific basis through GPAM so the primary power payment to the generator would reflect suppliers’ views of this, but the auction would create competition between them for who can best integrate the output from the station. Indeed, as average e-power NFPA prices have exceeded comparable seasonal rates, it is possible that difference payments will be lower using a bespoke green auction, again benefiting the customer. There would still be strong incentives on generators to deliver and maximise output. The financial incentive would be ever-present as they would only be paid the auction price on each MWh delivered.

DECC acknowledges that imbalance risk will increase as more intermittent plant comes onto the system. But values of different technologies to the system should be reflected in changes to forward strike prices and in allocations of the CfD FiTs, not through discounting the power output once a station has been built.

Suppliers also usually can net the output against their consumption, thus realising embedded benefits (savings on charges levied at the transmission level). They would also benefit from the flexibility of power being available on a shorter-term basis than from the PPA market and also the convenience of standardised contracts. Collateral would be minimised too at least relative to trading on other markets as they will not have to mark their full exposure to market prices. Furthermore, suppliers could target the right sites that fit their needs, including local sites.

More generally all suppliers would also benefit from a liquidity pool with low associated transaction costs. Perversely recent moves by the larger suppliers to boost day-ahead trading are having an adverse effect on liquidity in longer-dated products. So power being available for purchase in six month periods could add liquidity further out and could also allow for new trading opportunities by arbitraging the auction price and the season-ahead price.

Finally, an auction design would lead to increased transparency for both generators and suppliers as a clear composite price signal could be constructed for all trades or by technology, but retaining full bidding history for individual sites.
The PPA market has hit a wall in recent months, and current indications are that the deterioration is continuing. CfD FiTs will not offer the panacea DECC claims. While we welcome the transitional measures contemplated in the Government’s response and the further analysis promised, action must be taken to instil confidence and support the offtake market in the absence of any obvious pull-through mechanism.

Importantly, an organised green power auction should lower the costs to the consumer and could obviate the need for regulatory intervention. By better allocating balancing risk and improving competition for output, the margins charged by offtakers should fall, resulting in lower strike prices and lower overall subsidies needed.

Now isn’t that a positive note on which to start the New Year.

February 2013

Memorandum submitted by the Royal Academy of Engineering (EN 37)

The Royal Academy of Engineering welcomes the Government’s Energy Bill and its efforts to establish an electricity market that will deliver the necessary level of investment in low carbon electricity generation. The Academy feels that the mechanisms in the Bill will help provide security for investors and this is to be supported.

The Academy understands that the Public Bill Committee is considering the Bill in detail and, following extensive consultation with relevant parties, is putting forward a number of amendments. The Academy does not wish to comment on the particulars of the Bill but is keen to highlight two points that we feel should be at the forefront of the Committee’s thoughts as they scrutinise the Bill.

The UK’s energy system is large and complex, encompassing a number of different sectors, primary sources of energy and end uses. It is vital to the country’s prosperity and the key to economic growth. We recognise that the main part of the Energy Bill—Electricity Market Reform—focuses on electricity generation. However, electricity generation forms only a part of the whole energy system. In order to meet targets for carbon emissions reduction, consideration has to be paid to the whole system of energy use and its management—including the use of energy for heat and transport. Electricity generation plant, transmission lines, distribution systems and metering systems all need upgrading, alongside heating and transport systems. Since none of these operate in isolation, a systems-level strategic policy overview of energy generation and use is needed.

The need for a systems view means that it is not appropriate to simply leave the market to provide solutions, but rather a system level policy must be developed, based on sound engineering principles and realistically deliverable from global supply chains and resources. This will provide the market with certainty and policy direction against which it can bring forward efficient solutions. The Department of Energy and Climate Change (DECC) would appear to be the body most appropriate to design and implement such a policy and it is crucial that it is given the mandate to deliver it, backed up by sufficient capital, both financial and human. Only by providing a strategic vision will the UK move towards a coherent energy system with the necessary resilience to cope with the uncertainties of future technological developments and political and societal change.

Recommendation one: There must be a holistic strategy for UK energy management, encompassing the whole system of generation, supply and use. We strongly recommend that DECC is given the responsibility of developing a strategic policy vision of the UK’s future energy system, encompassing energy generation and use across all sectors.

In terms of the aims of the overall energy system, it is vital that these are clearly defined and compatible with long-term political objectives. The Energy Bill maintains the government’s objective of providing low carbon, secure and affordable electricity while complying with commitments under both EU and UK legislation. While these are laudable objectives they can sometimes conflict. For example, the EU renewables target can act against other low carbon forms of generation that might be the most effective way of meeting the Climate Change Act emissions targets.

Recommendation two: The overriding objective of the Bill must be to reduce cumulative emissions of carbon dioxide at the lowest price over the long-term, while ensuring a secure supply of energy. It is essential that there is systems-level planning to ensure that there is sufficient low-carbon capacity to deliver the right mix of electricity at the right time.

Achieving this objective will require a complete model of the system, able to cope with the inherent economic, technical and social uncertainties. A clearer understanding of what constitutes security of supply will also be needed that takes into account inter alia reliability of different types of generation and robustness of global supplies of primary fuels. We understand that National Grid is already working on a delivery plan for the UK’s future electricity system that will encompass many of the necessary aspects. We fully support this work and encourage its development to include the wider energy system.

This response to the Bill was developed by The Royal Academy of Engineering’s Energy and Environment Community of Practice under the auspices of the Academy’s Engineering Policy Committee. It was felt important that an engineering perspective be brought into the scrutiny of the Bill and into plans for its implementation. The
Community of Practice will be developing its views on these issues further, and will seek to support DECC with expert advice as it implements the Bill.

February 2013

Memorandum submitted by The Co-operative Group (EN 38)

The Energy Bill, currently before Parliament, provides a vital opportunity to bring about greater community ownership of energy assets.

There is strong political and public support for community energy. Ed Davey, Secretary of State for Energy and Climate Change, recently said “I want nothing less than a community energy revolution”, and Greg Barker, Minister of State for Climate Change, states that “community engagement in the energy sector will be vital to our vision of the development of energy in the UK in the coming decades”. The May 2010 Coalition Agreement makes a commitment to “encourage community-owned renewable energy schemes where local people benefit from the power produced”. Public opinion research for The Co-operative Group shows that support for renewable energy projects, including onshore wind, increases considerably if they are owned by local communities.58

Yet the Energy Bill does not include provisions to ensure that community-owned renewable energy projects above 5 MW will be able to compete with commercial generators. Work commissioned by Co-operatives UK and undertaken by Cornwall Energy59 highlights significant problems:

1. Participating in the new electricity market would require a high degree of technical knowledge, which acts as a barrier to entry for smaller generators;
2. Smaller generators currently receive lower market prices for their power, and this is not redressed through the proposed Contracts for Difference system in the Energy Bill; and
3. With the end of the Renewables Obligation, suppliers will have no incentive to purchase renewable electricity from independent generators.

Community energy is a vibrant and growing sector in the UK, with a number of projects already exceeding 5MW, including Westmill Wind Farm Co-operative in Oxfordshire (6.5MW) Lochcarnan Community Wind Farm on South Uist (7MW) and Neilston Community Wind Farm near Glasgow (10MW). Without amendment, the Energy Bill jeopardises the future development of similar mid-sized schemes and the potential for projects up to 20MW.

PROPOSED AMENDMENTS

To overcome these problems, the Energy Bill should be amended as follows:

1. The Bill should place a duty on the Secretary of State to promote new renewable energy generation capacity from community schemes.
2. The fixed Feed-in Tariff scheme should be extended. The current cap of 5MW should be increased to 20MW in order to allow community energy schemes a guaranteed income and enable them to participate effectively in the energy market.
3. The Bill should establish a market for community energy schemes and independent renewables generators, through the creation of a “green power auction market” or similar mechanism.60

OTHER MEASURES TO PROMOTE COMMUNITY-OWNED ENERGY

There are other factors that need to be considered in order to promote community-owned energy. These include: more certainty in the planning and licensing process; better financing options; enabling joint ventures with local authorities and the commercial sector; and grid connection. These are discussed in detail in the Manifesto for a Community Energy Revolution,61 published by the Co-operative Group and Co-operatives UK and endorsed by the Community Energy Coalition.62 DECC’s proposed Community Energy Strategy, due to be published later in 2013, could address these issues.

We consider the following legal forms to be community owned:

— Community interest companies (CICs).

60 This proposal is being developed by a coalition of independent renewables generators, and has the backing of the Renewable Energy Association, Co-operative Bank, and other key players. For further details, please contact Greg Rosen of the Independent Renewable Energy Generators Group, gregrosen@bellenden.co.uk
61 http://www.uk.coop/energymanifesto
62 http://www.forumforthefuture.org/project/community-energy-coalition/overview
— Industrial and Provident Societies (IPSs) (bona fide co-operatives and community benefit societies).
— Northern Ireland IPSs.
— Registered charities and their wholly owned trading subsidiaries.

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