ENERGY MARKET INVESTIGATION

Summary of hearing with the Department of Energy and Climate Change on 27 October 2014

Role and objectives

1. The Department of Energy and Climate Change (DECC's) role in the energy market was to fulfil three objectives: ensure security of supply, achieve decarbonisation in order to meet the Government's environmental targets, and ensure customers' bills were as low as possible. Robust competition in both the wholesale and retail energy markets was essential to ensuring that customers paid as little for their energy as possible. Ofgem was primarily responsible for the regulation of the energy market and promoting competition and protecting consumers' interests in it. DECC agreed with the assessment of the energy market which Ofgem and the CMA had published earlier this year, and which had raised a number of concerns about how competition in the market was functioning, particularly in respect of consumer trust and low levels of switching. DECC therefore welcomed the CMA's investigation of the market.

2. As noted above, DECC had a number of objectives for the market, and competition played its part in achieving these, but it did so within limits defined by the various regulatory interventions designed to ensure the security of supply and environmental objectives. DECC had concerns about how well competition was working, and Ofgem had already intervened to address these. For example, a package of measures known as 'Secure and Promote' had been introduced to promote liquidity in the forward wholesale markets to assist the operation of independent energy suppliers and generators. Ofgem had also introduced a set of measures known as the Retail Market Reforms (RMR) in order to reduce the complexity of the retail market and encourage customer switching. The effects of these reforms were still being evaluated.

3. DECC noted that there was a debate over the effect on competition at both the wholesale and retail levels of the largest energy suppliers' vertically integrated business model. There had been some concerns, which DECC had had to respond to through the Transmission Constraint Licence Condition, about the ability in some circumstances of generators to exercise market power in the wholesale market. DECC wanted to ensure that energy market participants and customers could be confident in the market's operation.

4. DECC and Ofgem had complementary roles in regulating the energy market. DECC set the overall strategic framework, the policy goals and the legal framework within which Ofgem operated, while Ofgem's role was to regulate the market so that these policy goals were met. DECC was developing a strategy and policy statement, which would set out how Ofgem should take DECC's policy outcomes into account in making its decisions. There were a few areas where DECC sought regulatory powers. In some cases, such as in the case of Secure and Promote and the RMR, DECC sought backstop powers in order to support Ofgem.

Developments in the energy market

5. The market faced a number of challenges over the next few years involving security of supply and decarbonisation. DECC recognised that there had been a great deal of change and intervention in the market recently. It considered that this had been necessary for it to achieve its security of supply and decarbonisation goals, as it was possible that the market on its own would not have delivered these. DECC expected that these interventions, such as its Electricity Market Reforms (EMR) would remain in place, and it noted that support for EMR had been forthcoming from opposition politicians and industry. However, DECC considered that some of the recent market interventions, such as the RMR, might need to evolve over time to ensure that the benefits from the deployment of smart technologies and other developments were realised.

6. DECC wanted the market to be given as much certainty as possible about the long-term direction of travel. It noted that the EU had recently agreed the 2030 package, which required the EU to reduce its greenhouse gas emissions by 40% by 2030. It was therefore clear to businesses and the energy market what level of reductions would need to be made.

7. DECC also noted that currently there was an opportunity to review how the market had worked so far, address any problems which had arisen, and anticipate and prepare for a number of changes which were on the horizon, such as the use of smart technology.

8. DECC considered that the theories of harm set out by the CMA in its issues statement were the right ones and covered all the areas that DECC had expected.

Carbon emissions and renewable energy

9. The EU's Emissions Trading System (ETS) had not been as successful as DECC had hoped due to the weak carbon price signal, but DECC strongly

supported the market-led approach it involved as a cost-effective way of reducing carbon emissions in the EU. The commitment to EU ETS reform in the 2030 package would assist the creation of a more robust ETS mechanism. However, in the short to medium term, ie during this decade, DECC considered that there would continue to be a case for other interventions to promote emissions reductions in the electricity sector. It had been difficult so far to achieve a robust carbon price, so the Government had undertaken initiatives such as the Contracts for Difference (CfDs) as part of the EMR which would drive the transition to low-carbon electricity.

10. When developing its energy market policies, DECC used a government-agreed methodology to derive a notional carbon price based on the Carbon Price Floor set by the Government and its own projections of future EU Allowance prices. Policies designed to encourage low-carbon energy generation could have the effect of reducing the EU ETS carbon price, but DECC considered that any such effect would be small. Under the 2030 package agreement, while there was an overall EU target, there were not sub-targets for individual Member-States for renewable energy, as there were with the 2020 package, so that should provide more flexibility as to how to cost-effectively achieve the greenhouse gas reductions.

11. DECC considered that the setting by the Government of the Carbon Price Floor had been a necessary intervention because the ETS had not produced strong enough price signals to ensure that the Government's carbon targets would be met. The Government had set out some long-range trajectory for the price floor, but this is not legislated beyond two years ahead, which was why some energy companies had expressed concerns.

12. The Carbon Price Floor was seen as a way to send signals to the market and encourage changes such as switching from coal to gas. However it was a necessary but not sufficient condition to achieve the Government's carbon reduction targets. Relying simply on the Carbon Price Floor was not feasible as the level of the floor would have to be set very high, which would have led to higher electricity prices for consumers and the possibility of carbon leakage. DECC had therefore decided to introduce a system of CfDs to help achieve its decarbonisation targets.

13. The CfD system would benefit low-carbon generators by providing those generators with a protection from wholesale price risk which would reduce the cost of capital. The CfD system would also provide longer-term certainty to all generators.

14. DECC did not consider that the fact the Carbon Price Floor only applied to UK generators caused a distortion of competition over the interconnectors.

Interconnector developers focused on the fundamentals of electricity prices in the UK and continental markets rather than the levels of the UK Carbon Price Floor and the EU ETS carbon price. DECC had recognised the need for more interconnectors and there were a number of plans for further interconnectors at various stages of development. At the time of the hearing, Ofgem had an application window open for new interconnector projects to apply for cap and floor regulatory treatment. DECC did not anticipate that the infrastructure required for these projects would lead to increased costs for consumers.

15. The CfD system would replace the previous system of Renewable Obligation Certificates (ROCs). DECC had decided to move to the CfD system as it considered that it would be a more cost-effective way of achieving the Government's decarbonisation objective and would lead to a material saving of overall costs to investors and consumers. CfDs had a number of other advantages over ROCs including that they applied to all low carbon generation, not just renewable electricity, and would therefore be much more compatible with an electricity market which had a Carbon Price Floor than ROCs were. CfDs would also be competitively allocated, which meant that the market would determine what the price of subsidies for renewable and other low-carbon energy should be, rather than the price level being administered by Government, which had been the case with ROCs. CfDs would also better enable the market to decide subsidy levels for different renewable electricity technologies.

16. The transfer from ROCs to CfDs would take place over a transitional period which would last until 2017. During this period, many generators would have a choice as to which scheme to use. DECC had developed a methodology which enabled electricity prices under the two schemes to be compared during the transitional period.

17. Under the CfD scheme, renewable electricity technologies were sorted into three groups, the first for more-established technologies, the second for less-established ones, and the third was for biomass conversion. This approach was based on the relative maturity of the technologies and to ensure effective competition between technologies in the same group. Under the CfD scheme, DECC had powers to apply minimum or maximum levels of deployment for particular technologies, but had decided not to do so, with the exception of a small minimum requirement for marine technology. This was significantly different from the ROC scheme, where DECC had essentially set the price for each type of technology, while under CfDs DECC would only set an auction cap, ie a limit on the ultimate price the auction could set.

18. DECC envisaged that for the less-established technologies in the second group, competition for the available funding would revolve around the support

levels needed to bring forward deployment of the marginal technology, while for the more-established technologies in the first group, it would be concerned with ensuring the value for money of individual bids.

19. The Government had allocated funding for renewable energy under the schemes based on its affordability under the levy control framework and what it could currently afford and what it would be able to afford in future years in order to provide assurance that there would be a sustainable pipeline of bidding for projects and developers in future years which would provide value for money. Under the CfD scheme, funding for the first group of more-established technologies was smaller than for the second group of less-established ones for a range of reasons – for example, because the projects in the first group were on much shorter timescales and would in many cases be entitled to receive ROCs. Funding for pot 2 took into account longer lead in times for projects. This means that a number of projects that could not access funding under the RO, could potentially do so under the CfD DECC decided to offer eight renewable projects the administrative price (via FIDeR). DECC had decided to do this to prevent any hiatus in investment in these projects caused by the transition to the CfD scheme. DECC considered that by taking this step had helped to make the industry more comfortable with the move to CfDs.

20. In the case of Hinkley Point, DECC noted that had there been a number of energy suppliers that had wished to build a new nuclear reactor; then DECC would have run a competitive process to determine who should do so. This had not been the case. Instead, EDF had been the only supplier interested, so DECC had been required to enter into a bilateral negotiation with EDF. The resulting arrangements had been reviewed by the European Commission (EC), which had raised a number of concerns about risks of overcompensation to EDF under the contract and of distortions to competition in the rest of the market. DECC had taken steps to address these concerns, and this had resulted in the EC's recent approval of the contract. DECC's view was that the EC's decision should reassure potential investors in future nuclear projects.

21. In designing the CfD scheme, DECC had been aware that while encouraging support for renewables it needed to ensure that this support did not lead to significant distortions of competition. It also noted that for assets such as nuclear facilities, which needed to be planned on a long-term basis and which would have a long life, the CfD auction would not be practical, since other technologies could be built and become operational in a much shorter time. DECC sought to have as much competition as possible into funding for new electricity generation, but the best way to do this would vary depending on the particular technology. DECC's introduction of the CfD scheme was now giving

it a much better information on the costs of various low-carbon energy technologies.

22. Under the transition from ROCs to CfDs, some technologies, such as large-scale solar, would move to CfDs sooner than others. For some types of generation, the required lead-times would mean that ROCs were no longer a viable option. This would mean that developers of these technologies would have to engage with the CfD scheme. DECC was planning to introduce some changes to the pricing of ROCs, which would involve introducing a fixed price on a longer timescale, but this would not take place until ROCs were closed to new generation.

Energy generation

23. The Capacity Market was intended to address the risk of under-provision of generation capacity caused by investors' lack of confidence that energy prices would reach a level which would justify their investment. This lack of confidence could be exacerbated by increased uncertainty of the amount that thermal plant with high operating costs, such as gas, will run in the future electricity market given the increase of low carbon generation, which – once built – has low operating costs so tends to run as often as possible. The mechanism therefore sought to complement the electricity market by providing greater certainty to investors over part of their revenue. Policy-makers in other governments in Europe and elsewhere were taking similar approaches to the problem caused by having a large amount of low-carbon generation capacity which essentially has zero marginal cost on the system. In this scenario, revenues for reliable generation become very unpredictable, so investing in them becomes riskier. The Capacity Market would essentially pay generators and demand-side response to keep their capacity in the market. DECC intended that any such payment would be a minority of the revenues for generators, but it would hopefully encourage investors to proceed with building new flexible, eg gas-fired turbine plants.

24. Concerns about under-provision of generation capacity should also be addressed by changes to the 'cash-out' arrangements for the electricity balancing system, which would gradually lead to higher charges for generators which did not supply the amount of energy they had contracted to produce. It was increasingly understood by the energy industry that Government would not interfere in the operation of the balancing mechanism even if prices rose to very high levels. Therefore, the changes to the cash-out arrangements should lead generators to consider regularly how much reliable generation capacity they would need to meet their obligations. Over time, if

these policies worked as intended; it should be possible to phase out the Capacity Market as generation capacity should align itself with demand.

25. DECC noted that earlier electricity market arrangements, had included capacity payments to encourage investment. The Capacity Market was designed to ensure that the electricity market would provide enough capacity rather than relying on the creation of a reserve capacity which would sit outside the market. The experience of other markets with such reserve capacities was that their existence encouraged generators to shut down their capacity in the main market to try to move to supplying the reserve, whereas a properly designed market-wide mechanism should mean that the need and the costs of maintaining such a reserve would be unnecessary. The Capacity Market was technology neutral and not prescriptive about where capacity will come from. As well as incentivising reliable generation, it might come from increased interconnection with the Continent, more flexible demand-response assisted by smart technologies, or a way of making power storage more attractive.

26. National Grid – the delivery body for the Capacity Market – had already run a pre-qualification exercise for the first capacity auction and DECC had been encouraged by the interest shown, particularly in respect of the building of new gas-fired plants and because of the interest shown by independent generators. Theoretically, storage capacity as well as generation could be handled by the capacity auction. DECC noted that capacity auction systems had been used in energy markets in the USA and had performed well.

27. DECC was aware that some generators had concerns about the transmission charging regime, which it noted was a matter for Ofgem. As it was a nationwide scheme, how transmission charges were levied would affect the business case of generators in different ways. DECC noted that Ofgem had gone through a long process to review the regime and had approved changes that it believes will improve it.

Environmental policy and consumers

28. As far as low-carbon electricity was concerned, the Levy Control Framework (LCF) caps the projected total amount of money that Government could levy on consumers' energy bills to pay for support for the low-carbon generation required by policies such as the Renewables Obligation and CfDs as well as the Feed-In-Tariff scheme for small-scale generation. The LCF annual limits had risen each year to £7.6 billion in 2020/21 (in 2011/12 prices). Currently the Government was spending approximately £3.5 billion under the RO and FIT scheme.

29. The LCF would need to be adapted over time to take account of the evolution of the capacity market. The LCF limits would also force DECC to prioritise decisions about the types of generation technology it wished to encourage via the RO and CfDs. Having to do this now would give the market confidence that DECC had thought about what generation technology it wished to prioritise and how much it would cost and would reduce the risk of a change of policy at a later stage. Under the CfD scheme, DECC could decide on a yearly basis how much funding would be allocated for the various low-carbon technologies. The LCF had been set with reference to the Government's renewables and decarbonisation targets and its views on how those would be achieved.

30. DECC published annually a prices and bills document which showed how much of the Government's energy policy was paid for through consumers' bills. The figure for 2013 was £112 per year on an average dual-fuel bill. DECC considered that the bill savings achieved through a number of its other energy efficiency policies, such as the Energy Company Obligation (ECO) would reduce consumers' bills. DECC argued that paying for these policies via consumers' bills was preferable to doing so through general taxation as it encouraged energy suppliers to deliver carbon savings at the lowest cost they could, which might not be the case if these policies were paid for by taxes. There were elements of these policies which were intended to support low-income and vulnerable consumers, in particular, including help for them to improve the insulation of their homes and reduce their bills and the Warm-Home Discount, which was a rebate on the electricity bills of eligible households.

31. The money to pay for the move to low-carbon energy generation had to come from somewhere, and DECC's view was that the current arrangements enabled the transition to be driven in a way which would encourage investment in generation with limited intervention from Government. The current arrangements also had the effect of removing much of the transition from the political cycle, which had also made investment more attractive.

32. Currently, DECC did not consider that the fact that most of the environmental levies and taxes were applied to electricity rather than gas was distorting the supply market. It did however keep this issue under review.

33. DECC had made changes to the ECO and the Green Deal last year, including moving the low-cost insulation measures into the ECO for the years between 2015 and 2017, which had enabled it to reduce the amount of energy levies on consumers' bills whilst retaining most of the carbon reductions. Uptake of the Green Deal had not been as great as anticipated and by moving some of insulation measures into ECO they could still continue to be delivered.

34. Smaller energy suppliers were wholly exempt from complying with ECO, and it had been argued by larger suppliers that this was unfair. It had also been suggested by some smaller suppliers that the fact that they could suddenly have to comply with ECO once they acquired a certain number of customers acted as a disincentive to them growing. DECC did not think that this was the case as a few suppliers had passed the threshold ECO and for the Warm-Homes Discount scheme, but it would keep the policy under review. DECC's view was that the smaller suppliers exemptions had encouraged their growth and noted that they now had a larger and increasing share of the market (from 1% to 7.5%).

Customer engagement and switching

35. DECC was content with how environmental levies are reflected in consumers' bills. It was working on ways that third party intermediaries, such as price comparison websites, would, with their consent, be able to access consumers' data to make it quicker and easier for consumers to obtain bespoke price quotes from across the market.

36. DECC considered that levels of switching in energy, when considered alongside the low levels of trust and consumer satisfaction present in the industry, were a serious concern. The large number of sticky customers could hinder the entry and growth of independent suppliers as well as mean that those customers were less well-served that they would be in a more competitive market.

37. Smart meters were already being supplied by some energy suppliers, and these suppliers had seen improvements in their customer trust ratings. Smart metering would allow consumers to know how much energy they were using and would eliminate the need for estimated bills. This meant that consumers would be much better able to see how their energy use was reflected in their bills. There was evidence from other countries that once consumers could easily access real-time information about their energy use, they would become more conscious about their energy use and its cost, and they would begin to look at how they could reduce energy use and save money.

38. The data generated by smart meters would support consumers in seeking out or allowing third parties / energy companies a level playing field to compete for customers who might benefit from switching tariff / energy supplier / wider energy management services. Once enough smart meters were installed, the data generated by smart meters would allow for the creation of new types of tariffs (eg half-hourly tariffs), that could bring significant benefits to the electricity system and would enable smart appliances to respond to changes in energy prices. The settlement arrangements would need some

modifications to accommodate all of the new types of tariffs which smart metering would permit, but under the current system it would be possible to introduce some of these. Smart meters would make switching easier by providing consumers with easier-to-access meter readings, and combined with other improvements to the switching system, would reduce the time required to complete a switch. DECC wanted to see switching times reduced to 24 hours.

39. DECC noted that relying on energy suppliers to deliver the installation and promote the benefits of smart meters did have some risks, which depended on the broader commercial strategy of each supplier. While those suppliers which had customer acquisition and retention strategies based on energy service differentiation, customer satisfaction and brand recognition would likely be enthusiastic about the opportunities brought by smart meters, others which had different strategies might be less enthusiastic. However, the potential for the sharing of customers' energy data, subject to their consent, should help to mitigate this risk. The system is being built to be resistant to cyber-attacks to ensure that customers' data is secure, and to be future-proof to innovation in smart technology.

40. The changes to the settlement arrangements which facilitated time-of-use tariffs at the national level were the responsibility of Ofgem. DECC and Ofgem had agreed a joint policy statement on the development of the 'smarter-market' and this statement had been shared with energy suppliers so that everyone was clear on what responsibilities DECC and Ofgem had in this respect.

41. The energy market in Great Britain was different from other parts of the EU in that metering was the suppliers' responsibility in GB rather than the networks. DECC's view was that it made sense for suppliers to install smart meters because they already had a relationship with consumers and smart meters would help to build on that relationship and improve levels of trust in the market. The installation by suppliers of smart meters which give consumers more information about their energy use combined with effective competition in the energy market should enable consumers to make better decisions about their energy use. DECC estimated that smart meters should, on average, enable consumers to save around £26 per year on the average dual-fuel bill by 2020 and £40 per year on the same bill by 2030.

42. DECC acknowledged that some energy suppliers were more enthusiastic about smart meters than others, but it had evidence that customers with smart meters were becoming more informed and more trusting of their energy suppliers.

43. Smart meters would also be able to drive changes in customer behaviour by helping to implement time-of-day pricing. There were a number of other technological and regulatory elements which would also need to be implemented for this pricing model to come into effect.

44. DECC regarded the development of collective switching schemes as a positive development in the market, but it did not think that it would be transformative in the short term.

45. A number of energy suppliers had raised concerns that the amount of regulation they were required to comply with hindered them in improving their customer service. DECC considered that there was widespread evidence that many energy suppliers had not provided good customer service, but it did not consider that this was due to the amount of regulation that suppliers had to deal with. The regulators of other markets behaved in a similar way to Ofgem, and customer service ratings in those markets were generally higher than in energy. DECC did work with potential new entrants to help them negotiate regulations. It also conducted impact assessments for the regulations it introduced and reviewed the effects of their implementation. The current Government had worked to reduce 'red tape'. DECC also worked with the industry on how regulatory changes should be implemented, as it had done in the case of the EMR.

46. The CMA Group raised the concerns of some suppliers that the scripts they had to read to customers when they were switching supplier or changing tariffs were too long and prescriptive and that the length of time it took to read them would put consumers off switching and engaging with their supplier. DECC noted that the length and detailed nature of these scripts was likely a reaction to the problems of mis-selling and poor consumer outcomes which had previously affected the market. Once competition in the market was improved and consumer trust was increased; then these types of scripts may not be necessary. DECC's long-term target was for switching times to be reduced to 24 hours and for them to be halved by the end of the year. DECC wanted to make switching as straightforward as possible, but in doing so it was necessary to ensure that vulnerable consumers were protected.

47. There was a tension between consumer protection and competition, and it was necessary to strike the right balance between these and this balance might change over time. DECC had received some consumer protection powers relating to energy tariffs under last year's Energy Act. At present, it intended that Ofgem should act to protect consumers, so DECC currently had no plans to use its new powers, but its having them meant that it could ensure action in this area if necessary. DECC considered that Ofgem's introduction of

the RMR had been correct at the time, but the RMR would need to be kept under review to ensure it kept pace with changes in the market.

48. As noted above, DECC worked with smaller suppliers to understand and, where possible address, their concerns regarding regulatory requirements. It was Ofgem's and the wider industry's responsibilities to ensure that smaller suppliers had the right amount of input on matters such as code changes, but DECC would alert Ofgem to any concerns it had or was aware of about industry governance. The EMR had partly been about encouraging new entry and helping smaller suppliers. DECC considered that there were indications that the EMR had been somewhat successful in this regard.

49. It was noted that under the Energy Act 2010, when considering how to protect consumers, Ofgem was required to consider which measures would better protect consumers, whether they furthered competition or not. DECC's view of this requirement was that it had been developed at a time when it was felt that not enough consideration was being given to the needs of inactive consumers and that measures might be implemented which were beneficial to engaged consumers but detrimental to consumer outcomes overall. DECC did not think that this requirement had made a significant difference to how Ofgem had carried out its remit. Since 2010, Ofgem, through measures such as RMR and liquidity reform, had sought to promote competition and make it work.