Energy market investigation

Summary of provisional findings report

Notified: 7 July 2015

Contents

Page

Summary

1. On 26 June 2014 the Gas and Electricity Markets Authority made a reference to the Competition and Markets Authority (CMA) for an investigation into the energy market in Great Britain.[1] The terms of reference for this investigation allow us to look at any competition issue connected with the supply or acquisition of gas and electricity in Great Britain, including both retail and wholesale markets, except that, in the case of retail markets, only the retail supply of households and microbusinesses are included within the reference. This document sets out our provisional findings from this investigation.

2. We are required to decide whether 'any feature, or combination of features, of each relevant market prevents, restricts or distorts competition in connection with the supply or acquisition of any goods or services in the United Kingdom or a part of the United Kingdom'.[2] If that proves to be the case, this constitutes an adverse effect on competition (AEC).

3. Alongside this document we have prepared:

    (a) a Notice of provisional findings,[3] in which we identify the features that we provisionally find give rise to AECs in the in the energy markets; and

    (b) a Notice of possible remedies,[4] in which we set out possible actions that we may take to remedy, mitigate or prevent the AECs we have provisionally identified or any resulting detrimental effect on consumers.

Overview of GB energy markets and key outcomes

4. The period since the privatisation of electricity and gas in Great Britain has been one of continued regulatory change, as policymakers have attempted both to secure greater degrees of liberalisation and, particularly in recent years, to achieve the overarching policy goals of reducing emissions, ensuring security of supply and improving the affordability of prices.

5. In several respects, the energy sector has performed well against these objectives. There have been no significant security of supply incidents in recent years, emissions from electricity and gas have reduced and renewable deployment has increased. However, concerns have arisen in relation to the affordability of energy – domestic price increases have far outstripped inflation over the past ten years and there have been concerns about levels of

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[1] Energy market investigation terms of reference.
[2] Section 134(2) of the Enterprise Act 2002.
[3] See the energy market investigation case page.
[4] See the energy market investigation case page.

profitability – and standards of service appear to have deteriorated. Pressure on prices is likely to grow in the future, due in part to the increasing costs imposed by climate and energy policies.

Market structure and participants

6. At a high level, there are some strong similarities between the physical supply chains for gas and electricity:

   (a) In the electricity sector, different types of generation technology (for example, coal, gas, nuclear or renewable) generate electricity, which is transported to consumers via high voltage transmission lines and low voltage distribution lines.

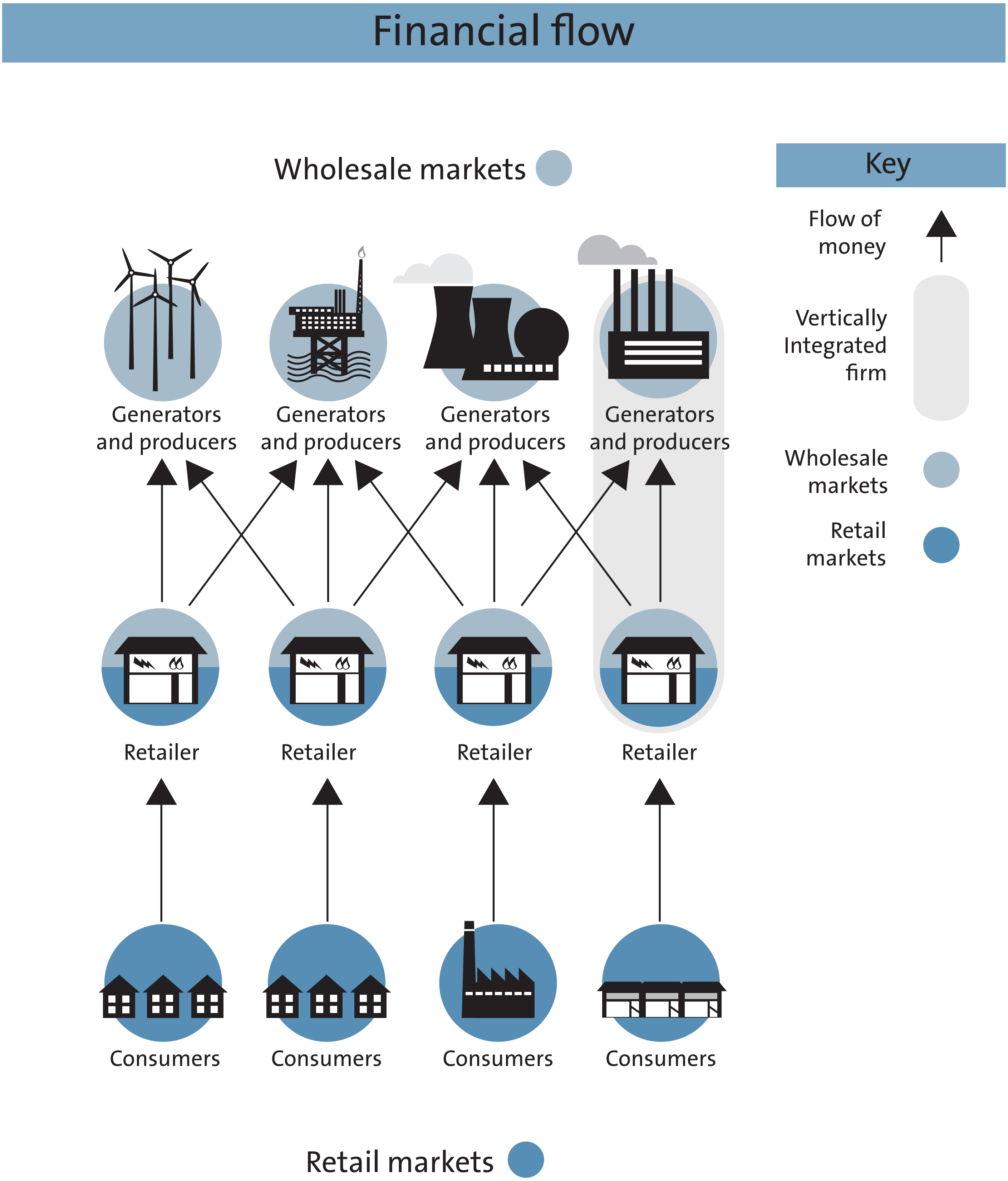
   (b) In the gas sector, different sources of gas (eg from offshore fields in the North Sea, imports via interconnectors to other countries or imports in the form of liquefied natural gas (LNG)) are transported to consumers via high pressure transmission pipes and low pressure distribution pipes.

7. The chart below provides a high level overview of the financial flows and market arrangements in the gas and electricity sectors.

8. Gas and electricity wholesale markets share several common features: trading can take place bilaterally or on exchanges, and contracts can be struck over multiple timescales ranging from several years ahead to on-the-day trading markets.

9. Retail markets provide the strongest point of commonality between gas and electricity, since the products are often sold together by retailers through a bundled tariff called a ‘dual fuel’ tariff. Moreover, the regulatory regime applying to retail functions generally applies equally to gas and electricity. As of 31 January 2015, there were 27 million domestic electricity customers and 23 million domestic gas customers. There were 19 million dual fuel customers, 8 million single fuel electricity customers and 4 million single fuel gas customers.

Figure 1: Financial flows and market arrangements



10. The Six Large Energy Firms are Centrica plc (Centrica), EDF Energy plc (EDF Energy), E.ON UK plc (E.ON), RWE npower plc (RWE), Scottish and Southern Energy plc (SSE) and Scottish Power. These firms are the former monopoly suppliers of gas (Centrica) and electricity (EDF Energy, E.ON, RWE, SSE and Scottish Power) to GB customers.

11. Together, the Six Large Energy Firms currently supply energy to around 90% of the domestic customers in Great Britain and generate over 70% of total electricity generation in Great Britain. They are all partially vertically integrated in respect of electricity (ie they are all active in both generation and retail) and Centrica is vertically integrated in respect of gas (ie it is active in both generation and upstream production). Both SSE and Scottish Power also have interests in electricity transmission and gas and electricity distribution.

12. In relation to retail, there are currently 25 suppliers selling both electricity and gas to households and a similar number of suppliers selling both electricity and gas to non-domestic customers. The largest suppliers to domestic customers outside of the Six Large Energy Firms are: Utility Warehouse, Co-operative Energy, First Utility and Ovo Energy (which we collectively call the ‘mid-tier suppliers’).

13. The single biggest cost item for both electricity and gas is the cost of wholesale energy (about 45 to 55% of the costs of supplying electricity and gas to domestic customers), followed by network costs (20 to 25%). The costs associated with retailing (including a profit margin) are between 15 and 20% of the costs of supplying electricity and gas to domestic customers. The costs of the social and environmental policies that energy suppliers are required to deliver on behalf of government (‘obligation costs’) are higher for electricity (almost 15%) than gas (around 5%).

Regulatory and policy framework

14. The regulatory and policy framework governing the energy sector in Great Britain profoundly affects the shape and nature of energy market competition. It is set out in:

(a) EU and UK legislation;

(b) licences, which Ofgem grants to operators for the purposes of engaging in specified activities relating to gas and electricity supply; and

(c) industry codes, which are detailed multilateral agreements that define the terms under which industry participants can access the electricity and gas networks, and the rules for operating in the relevant markets.

15. The past 30 years have seen a sustained liberalisation of both the gas and electricity sectors, driven by both UK and EU legislation. It has also been a period of rapid and regular regulatory change, particularly in the electricity sector. Policies developed over this period have increasingly had to balance the competing goals of ensuring security of supply, improving affordability and reducing emissions.

Physical flows

16. The period since privatisation has seen a significant change in the composition of electricity generation, with the introduction of combined cycle gas turbine (CCGT) plants and, more recently, a significant increase in generation from renewable plant. Residential consumption of electricity has fallen since 2005. The capacity margin – the excess of generation capacity over peak demand – has been relatively high in recent years, although margins are expected to tighten in 2015/16, reflecting in part the intermittency of renewable generation.

17. The UK moved from being a net exporter of gas to a net importer in 2004. Residential consumption of gas has fallen since 2004, and in 2013 was roughly at the level it was 20 years previously. The UK is relatively resilient to potential gas infrastructure disruptions and there has never been a network gas supply emergency in Great Britain.

18. Greenhouse gas emissions from the power sector were almost 30% lower in 2013 compared to 1990. This partly reflects the impact of policies to put a price on carbon and support low carbon generation. Residential emissions (largely combustion of gas) were only marginally lower than in 1990.

Prices, costs and profits

19. The rapid increase in domestic energy prices in recent years and the perception that profits and overall prices are too high have been a major source of public concern and were key drivers for the market investigation reference.

20. After a sustained period of real terms reductions in the years following privatisation, domestic gas and electricity prices have increased significantly over the last ten years. Average domestic electricity prices rose by around 75% in real terms between 2004 and 2014, and average domestic gas prices rose by around 125% in real terms over the same period.

21. We have reviewed financial data submitted by the Six Large Energy Firms, for the period 2009 to 2013. This suggests that, for electricity, the main drivers of

domestic price increases from 2009 to 2013 were the costs of social and environmental obligations and network costs. Reported wholesale costs remained flat while profit (EBIT[5]) margins fluctuated over the period. For gas, there has been a broadly even percentage increase in wholesale costs, network costs, obligation costs and indirect costs, with EBIT increasing significantly after 2009. Average EBIT margins earned on sales to domestic customers were 3.3% over the period. Average EBIT margins on sales of gas (4.4%) were higher than those on sales of electricity (2.1%).

22. We have noted that there is a wide variation in the prices that different domestic customers pay for energy, which is particularly striking since electricity and gas are entirely homogenous products. We calculate that, over the period Quarter 1 2012 to Quarter 2 2014, most customers of the Six Large Energy Firms could have made considerable savings from switching a combination of suppliers, tariffs and payment methods. For all the dual customers of the Six Large Energy Firms, average potential gains from switching externally to any tariff offered were equivalent to 14% of the average bill (equivalent to about £160 a year) over the period. As discussed further below, the gains available to specific customers depend considerably on the tariff and payment method that customers are currently on and the supplier they are currently with: for some categories of customer, the average gains from switching were equivalent to more than 20% of the bill over the period.

23. We have also noted that, over the period 2011 to 2014, average revenue per kWh earned by the Six Large Energy Firms from customers on the standard variable tariff (SVT) – which about 70% of the customers of the Six Large Energy Firms pay – was around 10% higher for electricity and 13% higher for gas than average revenue earned from customers on other tariffs.

24. We have also found considerable variation in the prices paid by small and medium-sized enterprises (SMEs) including microbusinesses. In particular, we compared rollover tariffs (tariffs that customers would pay if they took no action at the end of an existing fixed-term contract), retention tariffs (tariffs that customers actively renegotiate with their existing supplier at the end of an existing contract), and deemed tariffs (a tariff paid until a customer, typically in new premises, contacts its supplier to enter into its first contract).

25. Our comparison of average unit revenues (earned by the Six Large Energy Firms and a number of independent suppliers, from 2012 to 2014) showed that rollover tariffs were 29 to 36% higher than retention tariffs for electricity (depending on the size of customer), and 25 to 28% higher for gas. Deemed

[5] Earnings before interest and tax, or gross profit less indirect costs.

tariffs were 66 to 82% higher than retention tariffs for electricity, and 70 to 116% higher for gas. EBIT margins from retail sales in the SME segment were on average 8% over the period – significantly higher than those on sales to domestic customers or industrial and commercial (I&C) customers. Margins on sales of gas to SMEs (10%) were higher than those on sales of electricity (8%).

Quality of service

26. There have been considerable concerns about the quality of service offered by the Six Large Energy Firms. We asked them to provide information on the number of complaints they had received, broken down by type of complaint. The results indicated that the number of recorded complaints increased fivefold between 2008 and 2013. Problems related to billing, customer services and payments accounted for the majority of complaints.

Market definition

27. Defining the market provides a framework for the assessment of the effects on competition of features of a market. Our provisional view is to consider the relevant markets for this investigation to be the following:

    (a) the wholesale electricity market in Great Britain (including trading);

    (b) the wholesale gas market in Great Britain (including trading);

    (c) the retail supply of electricity to domestic customers in Great Britain;

    (d) the retail supply of gas to domestic customers in Great Britain;

    (e) the retail supply of electricity to SMEs in Great Britain, comprising, at least, a microbusinesses segment; and

    (f) the retail supply of gas to SMEs in Great Britain, comprising, at least, a microbusinesses segment.

28. Market definition is a useful tool, but not an end in itself, and we note that the boundaries of the market do not determine the outcome of our competitive assessment of a market in any mechanistic way. Notably, in some cases, where we consider that competitive pressures differ between different types of customer, we identify discrete customer segments within markets.

Nature of wholesale market competition

29. There are broad similarities between the nature of competition in wholesale gas and electricity markets. At a high level, both involve: upstream production and importation, for sale into wholesale trading markets; and bilateral and exchange trading between producers, generators, suppliers, traders and consumers in wholesale trading markets.

30. In gas and electricity, there are important interactions between market design and the need to physically balance the system. One of the most important differences between the two is that, because of the ability to store gas within a day, it is financially settled and balanced on a daily basis. Electricity, in contrast, is priced and financially settled on a half-hourly basis.

Competition in wholesale gas markets

31. A large but declining proportion of gas consumed in Great Britain is from the UK Continental Shelf (UKCS) in the North Sea (currently around 50%). An increasing proportion comes directly from Norway and also from the European gas grid, which is supplied mainly by Norway, Russia and North Africa. Finally, a small but increasing amount is shipped in on LNG ships, much of it originally extracted in Qatar.

32. We have provisionally not found any features in wholesale gas markets that lead to an AEC. Concentration in gas production is low, suggesting limited scope for exercising unilateral market power. Almost all gas producers are price takers most of the time: given a level of demand, price can be expected to be set by the opportunity cost of the last producer required to meet that demand.

33. There is a degree of vertical integration (VI) in the gas market. For example, Centrica, and to some extent Statoil and Total, have significant interests in several parts of the value chain. We do not believe that the harm that can sometimes arise from VI – typically involving using influence in one market to disadvantage rivals in another market – is a significant risk in the wholesale gas market.

34. There have been criticisms of the level of transparency in the wholesale gas market and some allegations of the manipulation of reported gas price indices. On the point of transparency, we have found that prices of almost all trades are available to market participants through the data made available by the trading platforms. Lack of price transparency therefore is not likely to constitute a barrier to entry in the gas market. On the question of index manipulation, we found that Ofgem and the Financial Conduct Authority (FCA)

have actively investigated allegations and have demonstrated a willingness to use the powers that they have to deal with problems they have identified.

Competition in wholesale electricity markets

35. The wholesale price of electricity represents just under half the total cost of supplying electricity to customers, and it is therefore important to consider whether competition operates well in the wholesale market.

36. The costs of producing electricity can vary substantially depending on which types of generating plant are required to meet demand at any one point in time. Nuclear and many renewables have near-zero short-run marginal costs, while oil-fired plants have high short-run marginal costs, for example. Coal- and gas-fired plant costs lie between these two extremes, with their relative positions depending on the prices of the input fuels, which are themselves variable. In addition, wind generators only generate when the wind is blowing. The eight largest owners of generating capacity have very different portfolios of technologies. EDF Energy is currently the largest generator with a 26% share of generation output.

37. We have considered to what extent any generating company can exercise market power to raise wholesale spot prices and have developed a model to test this. We found that, reviewing the period 2012 and 2013, no single generator had the incentive to increase the wholesale price by a significant amount in a significant number of half-hour periods.

38. Furthermore, our analysis of the profitability of the generation operations of the Six Large Energy Firms between 2009 and 2013 indicates returns that were generally in line with or below the cost of capital. Our provisional view is that the profitability analysis does not provide evidence that overall, the Six Large Energy Firms earned excessive profits from their generation business over the period or that wholesale market prices were above competitive levels. This evidence is consistent with our provisional conclusion that generators do not have unilateral market power.

Wholesale electricity market rules and regulations

39. We have also considered the impact on competition of five key elements of the design principles and market rules and regulations that shape competition in GB wholesale electricity markets. Two of these are established characteristics of the electricity wholesale market regulatory framework:

    (a) the principle of self-dispatch introduced about 15 years ago; and

(b) the absence of locational pricing for transmission losses and constraints, an issue that has been debated at length since privatisation 25 years ago.

40. We also consider three recent reforms that are likely to have a significant impact on the nature of wholesale market competition in the future:

(a) the reforms to the system of imbalance prices that Ofgem has recently approved;

(b) the Capacity Market that the Department of Energy & Climate Change (DECC) introduced in 2014 as a means of improving incentives to invest in and maintain thermal generating capacity and encouraging DSR; and

(c) the introduction of Contracts for Difference (CfDs) as the principal means of incentivising investment in low carbon generation.

Self-dispatch

41. Economic dispatch is the process by which the optimal output of generators is determined at any point in time, to meet overall demand, at the lowest possible cost, subject to transmission and other operational constraints. The current dispatch mechanism in force in Great Britain, introduced by the New Electricity Trading Arrangements (NETA) / British Electricity Trading and Transmission Arrangements (BETTA) reforms, was designed as a self-dispatch wholesale electricity market, based on bilateral trading between generators and suppliers. This contrasts with the system that it replaced, the England and Wales 'Pool', which was centrally dispatched.

42. We have reviewed the principle of self-dispatch that underpins current wholesale electricity market arrangements and considered whether there may be benefits to competition from a move to a more centralised system of dispatch. Our provisional view is that this does not appear to be the case. We do not believe that the self-dispatch system in Great Britain, when compared with alternative dispatch systems, reduces price transparency or increases transaction costs. Nor have we found evidence of systematic technical inefficiency arising from self-dispatch.

Absence of locational prices for transmission losses and constraints

43. Energy is lost when electricity is transported from one part of the country to another. In addition, it is sometimes not possible to generate electricity from the cheapest source because of limits to the transmission network (constraints). The costs of both losses and constraints vary considerably by geographical location. For example, in an area with relatively low levels of

demand and high levels of generation, consuming electricity will be associated with low losses and is unlikely to be subject to constraints, while generating electricity will be associated with relatively high losses and high likelihood of constraints. Despite this locational variation in the costs of losses and constraints, under the current regulatory regime, these costs are allocated to generators and consumers in a way that takes no account of their geographical location.

44. We have found that the current system of uniform charging for transmission losses creates a system of cross-subsidisation that distorts competition between generators and is likely to have both short- and long-run effects on generation and demand:

(a) In the short run, costs will be higher than would otherwise be the case, because cross-subsidisation will lead to some plants generating when it would be less costly overall for them not to generate, and other plants – which it would be more efficient to use – not generating. Similarly, cross-subsidies will result in consumer prices failing to reflect fully the costs of providing the electricity.

(b) In the long run, the lack of locational pricing may lead to inefficient investment in generation, including inefficient decisions over the extension or closure of plant. There could also be inefficiency in the location of demand, particularly high-consumption industrial demand.

45. **The absence of locational pricing for losses is a feature of the wholesale market rules that we provisionally conclude constitutes an AEC**.

46. Modelling conducted to inform consideration of a recent proposal to introduce locational charges for losses suggests that such a reform could lead to an efficiency benefit over ten years of somewhere between £160 million and £275 million. Introducing locational pricing for losses would also have a distributional effect, leading to transfers:

(a) from customers in areas of low generation relative to demand to customers in areas of high generation relative to demand (for example, the above modelling suggested that the reform would result in a transfer of just under £40 million a year from consumers in the South of England to those in Scotland and the North of England); and

(b) from generators in areas of high generation relative to demand to generators in areas of low generation relative to demand.

47. We have also considered whether the absence of accurate prices to reflect transmission constraints is a feature of the market that constitutes an AEC.

From our initial analysis, this question is finely balanced, with reasons to see both costs and benefits. EU legislation requires this issue to be considered at regular intervals in the future. For these reasons, we have decided not to investigate it further.

Imbalance price reforms

48. Imbalance prices play a key role in wholesale electricity trading in Great Britain, providing incentives to generators and suppliers continually to match supply and demand. Under current market rules generators and suppliers are charged an imbalance price if, in any given half-hour period, they have produced less than (or consumed more than) the volumes of electricity covered by their contracts. Conversely, they are paid an imbalance price if they have produced more than (or consumed less than) the volumes of electricity covered by their contracts.

49. Ofgem has recently approved fundamental reforms to the system of imbalance prices under the Electricity Balancing Significant Code Review (EBSCR). While no appeal was made against Ofgem's decision, several parties have written to us, expressing their concerns about the reforms.

50. These reforms are:

(a) A move to a single imbalance price.

(b) A move to making the imbalance price in all periods equal to the cost of the 1MWh most costly action in the balancing mechanism (known as 'price average reference volume of 1MWh', or PAR1), which is a narrowing of the base for the calculation from the previous 500MWh.

(c) A move to reprice Short Term Operating Reserve (STOR) actions (typically periods of tight short-run margins due either to high demand or to supply disruptions) to the probability of lost load multiplied by £6,000/MWh (the 'value of lost load' (VoLL), if this is greater than their utilisation price. This is known as 'reserve scarcity pricing', or RSP.

(d) A move to price disconnection or voltage reduction actions equal to the VoLL.

51. We consider the move to a single price for imbalances to be positive for competition, as it will eliminate the inefficient penalty that has previously been imposed on companies that find themselves in 'helpful' imbalance at any given time.

52. The reformed move to PAR 1 is being phased in, with an opportunity to learn from the experience at PAR50. Should this demonstrate that there are real problems with further tightening, the modification can be revisited. We suggest that Ofgem should use the opportunity of the move from PAR500 to PAR50 to do a careful empirical analysis of the likely effects of a further move to PAR1.

53. We think RSP (including the move to price disconnection or voltage reduction actions equal to the VoLL) will provide stronger incentives for contracting and forecasting ex ante, and some additional incentives for flexible generation and demand, but there is likely to be an irreducible element of risk that parties cannot directly control. While smaller parties are generally more exposed to imbalance volumes than larger parties, under single pricing they are as likely to benefit from an unexpected event as lose out. Further, the prevalent use by smaller suppliers of intermediaries should help any such risks be managed. Overall, while we have not seen strong evidence in favour of a move to RSP, we believe that there are insufficient grounds to consider that it is likely to lead to an AEC.

Capacity Market

54. The Capacity Market was introduced by DECC to help ensure sufficient investment to meet future demand. In an energy-only market, potential investors in generation might be sceptical about their ability to recover the costs of their investment, since this would require prices to be allowed to spike to very high levels on the (rare) occasions of system stress. Under the Capacity Market, National Grid holds auctions to secure agreements from capacity providers (generation and DSR) to provide capacity when called upon to do so at times of system stress.

55. Our provisional view is that there are cogent arguments for introducing a capacity mechanism, to help ensure that an appropriate level of security of supply is maintained. In particular, because it is based on a competitive process, this should help to improve incentives to invest in and maintain thermal generating capacity at a time of considerable policy change and provide greater incentives for DSR. We have found that since 2009 the Six Large Energy Firms have suffered significant impairment losses in relation to their conventional CCGT and coal generation fleet. Impairment losses are a clear indication that investors do not expect to fully recover the cost of past investments in these technologies.

56. A number of concerns were raised with us relating to specific aspects of the operation and design of the Capacity Market. Having considered these, our provisional view is that the design of the Capacity Market appears broadly

competitive. As regards the recovery of Capacity Market costs and the Capacity Market penalty mechanism, our provisional view is that these are unlikely to give rise to an AEC. As regards the length of the capacity agreements, and the different treatment of DSR providers, in view of DECC's work in this area and the case pending before the General Court, we do not intend to carry out further work in this area.

Contracts for Difference

57. A further area we have considered are the policy mechanisms in place to drive future investment in low carbon generation. The decisions being taken now in this area will have a major impact on future prices.

58. The Renewables Obligation (RO) has been successful in driving investment in renewable generation, which accounted for just under 20% of all GB generation in 2014. However, it has imposed an increasing burden on bills – DECC estimates that Renewables Obligation Certificate (ROC) payments will reach almost £4 billion per year by 2020/21, comprising around 8% of the domestic electricity bill in 2020.

59. CfDs have been introduced to replace the RO as the main mechanism for incentivising investment in low carbon generation. Unlike the RO, which takes the form of a payment on top of the revenue generators receive from the wholesale electricity market, under CfDs, generators are paid the difference between a strike price (which is fixed in real terms) and a market reference price.

60. CfD payments are due to increase steadily, reaching about £2.5 billion a year by 2020/21. DECC has expressed the view that, by insulating low carbon generators from a fluctuating wholesale price, CfDs will allow them to manage risks more effectively, resulting in a lower cost of capital and, in the long run, lower costs to consumers. We have found that there is some evidence to support DECC's view that the more attractive risk properties of CfDs will encourage investors to accept a lower level of support per MWh of generation.

61. In our view, a central benefit of the move from ROCs to CfDs is that, while under the RO levels of support are set administratively, under CfDs competition can be used to set the strike price and hence the level of support provided to low carbon generators. By enabling a competitive process, CfDs should provide a more efficient means of providing support.

62. We therefore think that DECC's move to a competitive allocation process was a positive step towards ensuring an efficient allocation of support. The first

competitive auction was held in 2015, resulting in prices considerably below the reserve price (‘Administrative Strike Price’). We estimate that the amount of support to projects awarded CfDs in the first auction was approximately 25% lower than it would have been had CfDs been awarded to projects at their Administrative Strike Prices, saving consumers around £110 million a year.

63. The scale of the decisions being made and their impact on future bills mean that it is essential that support to low carbon generation is provided at least cost to consumers. The benefits of using a competitive allocation process are, in our view, clearly demonstrated by looking at the Final Investment Decision enabling for Renewables (FIDeR) scheme, under which contracts were awarded through a non-competitive process. In March 2013, DECC launched this scheme to award an early form of CfDs to renewable generation projects with the intention of avoiding investment delays during the transition to the enduring CfD regime.

64. We have compared the subsidy awarded to the offshore wind projects under the FIDeR scheme to the levels of subsidy awarded under the competitive auction. Our analysis suggests that the support cost per MWh to consumers of the offshore wind projects awarded under the FIDeR scheme was between 30 to 60% higher than the support cost of similar offshore wind projects awarded through competitive allocation a few months later. We estimate that DECC’s decision to award a large proportion of the available CfD budget outside the competitive process under the FIDeR scheme is likely to have resulted in consumers paying substantially higher costs (approximately £250–£310 million per year for 15 years, equivalent to a 1% increase in retail prices). This provides a stark illustration of the additional costs that can be expected if the competitive process is circumvented. While DECC has highlighted the general benefits of providing greater certainty to investors, we have not seen any analysis of the specific benefits arising from supporting these projects early through FIDeR.

65. We are therefore concerned that some elements of the CfD allocation process currently in place potentially restrict the use of competition in setting the strike price in the future. Notably, the Energy Act 2013 gives DECC powers to award CfDs directly to parties through a non-competitive process in the future. While there will be some situations where competition may not be the most appropriate means by which contracts should be allocated (for example, where there is a very limited number of potential competitors), the experience of FIDeR shows that any proposal not to use a competitive process in the future needs to be considered carefully, transparently and in full recognition of the likely costs. Without this, there is a risk that future contracts may be awarded that do not deliver value for money for customers.

66. We have also reviewed two important aspects of the approach DECC has taken to the competitive allocation of CfDs. Specifically, we have considered the division of the technologies into separate 'pots', whereby DECC separates different technologies for the purposes of the competitive process; and we have also considered the way that budgets are allocated into each of these pots. Decisions on both of these parameters influence the intensity of competition and the level of support provided through the scheme.

67. While there could be reasons, based on economic efficiency, for different technologies to be separated out, these decisions need to be carefully made, given the potential impact on competition and future prices. Regarding the division of technologies into pots, we have not received evidence from DECC demonstrating how its preferred option would result in the best outcome for consumers. Nor have we been made aware of significant analysis undertaken by DECC on the rationale for its decision on how to allocate the budget between the pots. Going forward, we believe it is important that DECC regularly monitor the division of technologies into pots and provide for each auction a clear justification for the allocation of budgets between pots to ensure that an appropriate amount of support is allocated to technologies at different stages of development.

68. Overall, while DECC's introduction of CfDs represents a positive step towards an efficient competition-based process, **in light of these concerns and the potential impact on future bills we have reached a provisional finding that the mechanisms for allocating CfDs are a feature giving rise to an AEC**.

Vertical integration

69. A range of parties have expressed concerns about VI in the electricity sector, both in the context of this investigation and in the wider debate about competition in the energy sector. For example, in its decision to make a market investigation reference, Ofgem said that vertical integration 'can provide efficiency benefits but can also harm competition. A full investigation of the balance between costs and benefits is needed, to establish whether vertical integration is best for competition.'

70. The Six Large Energy Firms are all vertically integrated to some extent, in that they have electricity generation and electricity retailing activities under common ownership. Some other energy firms are also vertically integrated, including Drax, which owns the non-domestic supplier Haven Power, and Ecotricity. The degree of operational integration varies considerably between firms.

71. We have examined three main ways in which VI might harm competition in wholesale and retail electricity markets.

72. First, it could mean that independent (non-VI) generators are not able to compete effectively because of the prevalence of VI suppliers. The concern here is that independent generators would be harmed because VI suppliers refuse to buy from them, or will buy on worse terms. However, we have found no evidence of this, and continued investment in independent generation suggests that this is not a concern.

73. Secondly, if VI generators refuse to supply independent (non-VI) suppliers, or supply them on worse terms, it could mean that independent suppliers have to pay higher costs for wholesale energy than VI suppliers. As a result they may be unable to compete effectively, resulting in harm to consumers. The lack of unilateral market power makes it implausible that VI generators would be able to discriminate in this way, and the recent growth of independent retailers suggests that they have not been foreclosed from the market in this way.

74. Lastly, VI could raise barriers to entry and growth by new suppliers if they were unable to secure sufficient wholesale energy. However, our analysis of wholesale market liquidity suggests that VI firms carry out extensive external trading, and liquidity in the products that VI firms use to hedge their exposure to wholesale market risk is sufficient for independent firms to hedge in a similar way.

75. One concern that has been expressed in relation to VI is the lack of financial transparency. We consider the broader issue of financial transparency and the need for robust market-orientated financial information below.

76. We have also considered whether there are potential cost savings associated with VI. There may be a potential benefit to VI firms resulting from the ‘natural hedge’, whereby certain outcomes that may be detrimental to the VI firm’s supply arm may be beneficial to its generation arm (and vice versa). This would reduce the volatility of a VI firm’s returns. However, these benefits are likely to materialise only under fairly specific circumstances, and as a result are likely to be limited in scale.

77. Some other potential benefits from VI are not directly related to the natural hedge. VI is a form of diversification which may improve VI firms’ credit ratings (thereby potentially reducing VI firms’ financing costs), but we note that other forms of diversification could potentially give the same benefit. There may also be economies of scope resulting from VI between supply and generation (such as shared trading or management personnel). While it is not clear to what extent these benefits are likely to be passed through to consumers,

overall consumers are likely to be better off than they would be if these efficiencies were not present.

78. We have not sought to quantify precisely the scale of the benefits identified above, but our provisional view is that they are likely to be modest. The fact that some of the Six Large Energy Firms are moving away from a VI structure gives further weight to our provisional conclusion that any benefits from VI are likely to be limited (although they may have been greater in the past when integration took place).

79. Overall, we have not identified any areas in which VI is likely to have a detrimental impact on competition for independent suppliers and generators. In addition, we consider that there may be some efficiencies resulting from VI, which may be passed through to consumers. As a result, our provisional conclusion is that firms' VI structure does not give rise to an AEC.

Nature of retail market competition

Demand and supply characteristics and the parameters of retail competition

80. Reliable and continuous access to energy is a fundamental requirement of households, necessary for heating, lighting and the use of appliances. If demand for electricity and gas is not satisfied instantaneously, customers incur severe costs.

81. Gas and electricity can be characterised as 'necessity goods', which are goods that are considered indispensable for maintaining a certain standard of living. Such goods have a low income- and price-elasticity of demand. We note that the poorest 10% of the population spend almost 10% of total household expenditure on electricity and gas, while the richest 10% spend about 3% of total household expenditure on electricity and gas.

82. Gas and electricity are extreme examples of homogenous products in that the energy that customers consume is entirely unaffected by the choice of retailer. We would expect, therefore, that price would be the most important product characteristic to a customer in choosing a supplier and/or tariff. A further implication of homogeneity is that customers may be less interested in engaging in the market for electricity and gas supply than in other markets, where there is quality differentiation of products.

83. Traditional gas and electricity meters used in households do not record when energy is used and are only read infrequently. This means that households have no reason to adjust their use of gas or electricity in response to short-term wholesale price changes. Further, as a result of the infrequency of meter

reads, customer bills are typically based on estimates rather than actual consumption, which can create barriers to understanding and engagement in the market.

84. Retail energy suppliers do not own or operate any of the physical assets required for the delivery of gas or electricity to their customers' homes. They are engaged, rather, in financial and commercial activities relating to the sale of energy to customers. These activities are: energy procurement; securing network access; sales and marketing; metering; billing and customer service; the delivery, on behalf of DECC, of obligations relating to environmental and social policy objectives; and, optionally, the provision of a range of bundled products and services.

85. We would expect competition in a well-functioning retail market to be largely on price, with competitive pressures bearing down on elements of the overall costs of energy supply, in particular suppliers' gross margin (ie the combination of indirect costs and net profit). This is currently around 17% of the retail cost of electricity and 19% of the cost of gas across the Six Large Energy Firms. We would also expect a (more limited) degree of competitive pressure on wholesale costs and obligation costs, which together comprise around 60% of the costs of electricity and gas. After the smart meter roll-out we would expect suppliers to have a greater degree of influence over wholesale costs and some limited influence over network costs.

86. We would expect competitive pressures to be such that customer service meets certain minimum required standards, notably accurate billing. We would expect some degree of innovation, around tariff design, convenience and services such as advice on improving energy efficiency. We consider that the scope for such innovation could expand significantly with the full roll-out of smart meters and greater potential for demand response.

Influence of regulation in shaping retail competition

87. The nature of price competition between the Six Large Energy Firms has evolved several times since liberalisation, due in large part to changes in the regulatory regime. We have found that, post-liberalisation, competition was initially focused on the SVT. Over the last six years, three major interventions by Ofgem have changed the nature of retail competition significantly:

   (a) The prohibition on regional price discrimination introduced in 2009.

   (b) The introduction of new licence requirements, standards of conduct and enforcement action resulting in the withdrawal of the Six Large Energy Firms from doorstep selling in 2011 and 2012.

(c) The introduction of Retail Market Review (RMR) reforms in 2014 introduced a number of obligations on suppliers, including several provisions relating to tariffs, notably restricting the number of core tariffs.

Customer activity and engagement

88. Domestic customer activity can be measured along several dimensions:

(a) Choice of tariff – notably whether the customer is on the SVT or a non-standard tariff.

(b) Choice of payment method – standard credit, direct debit or prepayment.

(c) Choice of supplier, for one or both of electricity and gas.

89. We commissioned a survey of 7,000 domestic retail energy customers. The survey provides material evidence of domestic customers' lack of understanding of, and engagement in, retail energy markets. For example:

(a) 36% of respondents either did not think it was possible or did not know if it was possible to change one (or more) of the following: tariff, payment method and supplier;

(b) 34% of respondents said they had never considered switching supplier;

(c) 56% of respondents said they had never switched supplier, did not know it was possible or did not know if they had done so; and

(d) 72% said they had never switched tariff with an existing supplier, did not know it was possible, or did not know if they had done so.

Choice of tariff

90. The SVT is the default tariff – ie the tariff energy customers will pay if they have not made an active decision to change tariff. Unlike other tariffs, the SVT has no end date – customers will be on the SVT indefinitely unless they make an active decision to change.

91. We have observed that, for the Six Large Energy Firms, gas and electricity revenues per kWh from the SVT are consistently higher than average revenue from non-standard (generally fixed-price) tariffs. Over the period 2011 to 2014, average revenue per kWh from the SVT was around 10 and 13% higher than average revenue from non-standard tariffs for electricity and gas respectively across the Six Large Energy Firms. Despite this, around 70% of the customers of the Six Large Energy Firms are currently on the SVT. We

also note that a customer on the SVT is more likely to be with the historical incumbent supplier.

Choice of payment method

92. In the mid-1990s the majority of customers paid by standard credit but since then there has been a significant shift towards payment by direct debit, with 57% of customers choosing to pay by this method in 2014 and only 28% of customers paying by standard credit. The proportion of customers on prepayment meters doubled over the period, from 7% in 1996 to 15% in 2014.

93. Most customers have a choice as to whether to pay by standard credit or direct debit. The Six Large Energy Firms have offered a variety of discounts to customers to pay by direct debit over the years. Standard Licence Condition (SLC) 27.2A, introduced by Ofgem in 2009, requires any such discounts to be cost-reflective. We understand that dual fuel SVT customers paying by standard credit currently pay about £75–£80 per year more than if they paid by direct debit, although we have not yet examined whether this is cost-reflective.

94. Prepayment, in contrast, is not generally a choice on the part of the customer: all customers on prepayment meters must pay by prepayment. Prepayment meters are generally installed where a customer has a poor payment history or in certain types of accommodation such as student accommodation. We understand that the premiums paid by dual fuel SVT prepayment customers are currently about the same as those for standard credit – about £75–£80 per year (compared with paying by direct debit). Nearly all prepayment customers are on the SVT, reflecting the limited choice of non-standard tariffs they face.

Choice of supplier

95. We have observed a steady upwards trend in switching until 2008 followed by a decline, to levels below those in 2003. There are a number of potential reasons for this, including the prohibition of regional price discrimination through SLC 25A in 2009 and the decision by suppliers (in particular, the Six Large Energy Firms) to stop doorstep selling in 2011 and 2012. There was also a very noticeable spike in switching towards the end of 2013, which may have been due to the high level of political debate surrounding energy prices at that time.

96. Between about 20 and 30% of the domestic electricity customers of the Six Large Energy Firms have been with their current supplier for more than ten years. For gas, the range is wider – between about 10 and 40% depending on

the supplier. The evidence suggest that incumbents have a higher proportion of such customers: regarding electricity supply, around 35 to 45% of the domestic customers of incumbent suppliers within each region have been with their supplier for ten years or more.

Market shares

97. Currently British Gas has the largest share of both gas and electricity customers, followed by SSE and E.ON. There has been a rapid expansion in the market shares of suppliers outside of the Six Large Energy Firms, to around 10% in gas and electricity in the first quarter of 2015. The largest of the mid-tier suppliers are First Utility, Ovo Energy and Utility Warehouse.

Nature and extent of price competition

98. The price of the SVT can in principle be changed by the supplier at any time, with the condition that, if the price is to be increased, it must give 30 calendar days' notice to customers of its intention to do so. The Six Large Energy Firms typically make public statements, in advance of implementation, of intentions to change the price of the SVT. SVT prices have generally changed once or twice a year.

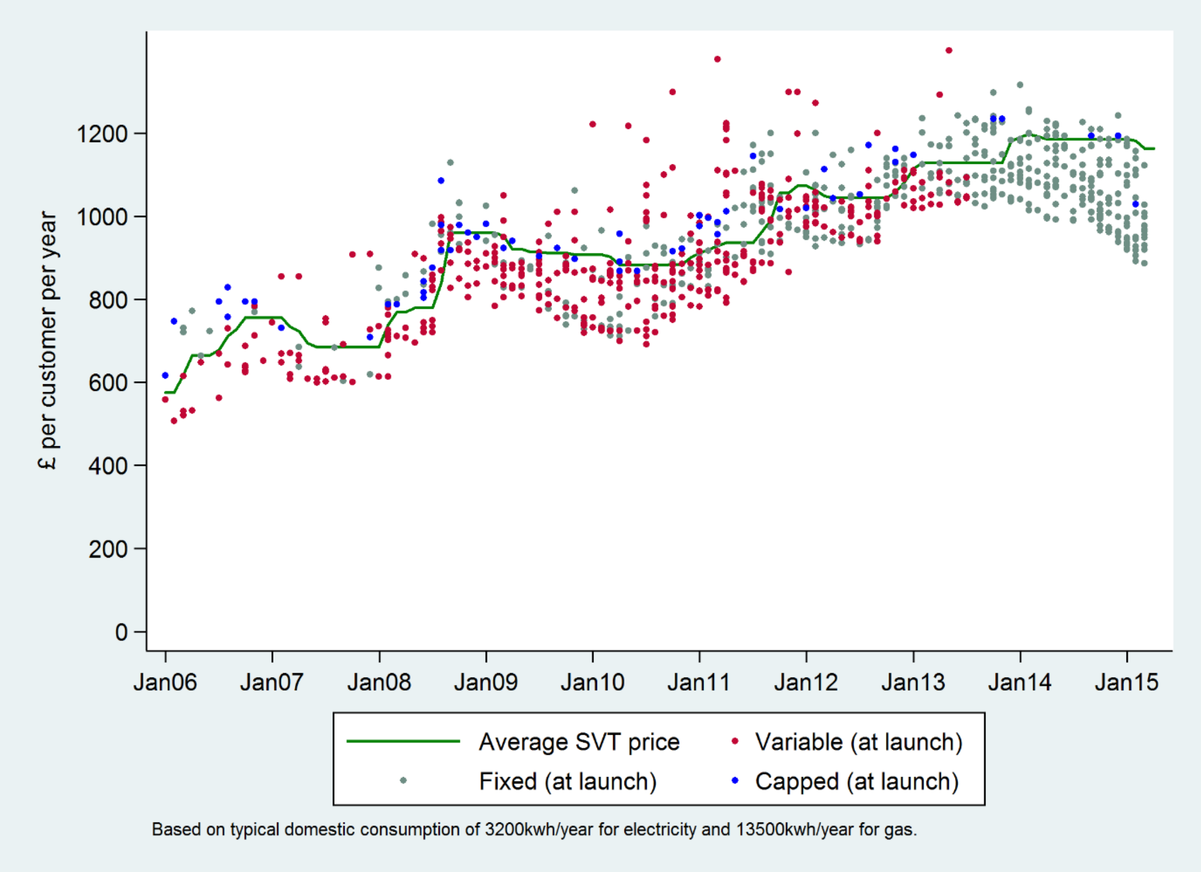
99. The SVT is an acquisition tariff for prepayment customers, who have a very restricted choice of non-standard tariffs. For non-prepayment customers, the SVT is generally no longer an active acquisition tariff.

Comparison of the SVT and non-standard tariffs

100. Non-standard tariffs come in a variety of forms, including fixed-rate and capped tariffs. One-year fixed-rate products are currently the most popular form of non-standard tariff. In contrast to the SVT, non-standard tariffs are acquisition tariffs. The majority are priced at significant discounts to the SVT, with a strategy of ensuring that they achieve a good position on price comparison websites (PCWs). There are, however, some non-standard tariffs such as longer-term price fixes, which are more expensive than the SVT.

101. The chart below compares the non-standard tariffs launched by the Six Large Energy Firms and the mid-tier suppliers with the flat average SVT across each of the Six Large Energy Firms.

Figure 2: SVT and non-standard tariffs offered by the Six Large Energy firms and the mid-tier suppliers (based on an annual bill for a dual fuel, direct debit, typical consumption customer)



Source: CMA analysis of data collected from the Six Large Energy Firms, the mid-tier suppliers and Ofgem.

102. For the majority of this period, up to the end of 2012, there were many non-standard variable tariffs, which offered some of the cheapest rates. Fixed-rate and capped products were often sold at a premium – as might be expected, given the fact that they reduce the risk to which the customer is exposed. With the introduction of RMR, discounts on the SVT were banned and fixed products have taken their place as the cheap acquisition product. Over the last year, the disparity between the SVT and the cheapest non-standard products has increased substantially.

103. We have also observed that the SVT has risen over the last three years, despite that fact that forward-looking measures of direct costs have on average fallen over the period, particularly over the last 12 months. In contrast, the cheapest non-standard tariffs have tracked changes in expected direct costs more closely.

104. Several of the Six Large Energy Firms have told us that there is an inter-relationship between their pricing of the SVT and of non-standard products. For example, in setting the price of a cheap non-standard product, they told us that they assume that a certain proportion of customers will revert to the

SVT (for which there is a bigger margin) at the end of the product's fixed term. They have argued that it is only because this happens that they can offer the cheapest of their non-standard products.

Competition in the devolved nations and regional competition

105. Our survey suggests that there are some differences in levels of activity and engagement between customers in Scotland, Wales and England. In general, we found that customers in Scotland and Wales were somewhat less likely to have been active in the market than those in England. We also found that in Scotland and Wales, customers were somewhat more likely to express satisfaction with their current supplier and to trust it.

106. A relatively high proportion of customers in both Scotland and Wales (29%) had been with their supplier for more than ten years (compared with 21% in England). Further, in Scotland and Wales, 65% and 61%, respectively, of respondents were with an incumbent supplier (for at least one fuel) compared with 53% in England.

107. Market concentration is higher in Scotland and Wales compared with the GB average, and lower in England. We also note that the two regions in Great Britain where the electricity incumbent has a market share of over 50% are North Scotland and South Wales.

108. These results are consistent with higher degrees of incumbent brand loyalty in Scotland and Wales. Overall, our provisional view is that retail consumers in Scotland, Wales and England are likely to face a broadly similar range of issues, albeit with somewhat lower levels of market engagement in Scotland and Wales.

109. We are aware, however, of two specific constraints relating to metering that are likely to affect customers in Scotland and Wales to a greater extent than customers in the rest of Great Britain. We were told when we visited Scotland of the challenges imposed by Dynamic Teleswitched (DTS) meters, which are used to provide electric heating by homes off the mains gas grid. They are located almost entirely in three regions: North Scotland, South Scotland and East Midlands. Ofgem research suggests that the level of market engagement among DTS customers is particularly low and that DTS face particular barriers to switching. Further, incumbent suppliers have a particularly high market share of DTS customers in Scotland. We have also observed from our survey that there is a higher proportion of customers on prepayment meters in Wales (in which 18% of respondents prepaid) compared with England (where 11% of respondents prepaid).

Domestic retail: weak customer response, supplier behaviour and regulations

110. We have identified three areas in which domestic retail markets may not be working well for customers:

(a) weak customer response and lack of engagement with domestic retail energy markets;

(b) supplier behaviour; and

(c) the regulatory framework governing domestic retail market competition.

Weak customer response and lack of engagement

111. Our customer survey suggests that there are substantial numbers of customers who are disengaged from retail energy markets. We have considered further sources of evidence that shed light on the nature and extent of disengagement, including our analysis of: the gains from switching available to customers; the characteristics of customers who are disengaged; and our analysis of the barriers to engagement that customers face in domestic retail energy markets.

Gains from switching

112. We estimate that there were significant gains from switching that went un-exploited by domestic energy customers over the period Q1 2012 to Q2 2014. We calculated the savings available from the key dimensions of choice – choice of tariff; choice of payment method; and choice of supplier, for one or both of electricity and gas – considering a number of scenarios, which differ according to the extent to which they restrict the choices available to customers.

113. Bringing the above results together, the table below shows how the gains from switching differ for all the customers of the Six Large Energy Firms according to their different tariff and payment type, under the most liberal scenario for switching (in which they are allowed to change supplier, tariff and payment method).

Table 1: Average savings from switching tariff, payment type and/or supplier for customers on different tariff and payment types Q1 20212 to Q2 2014

Dual/ single fuel	*Tariff type*	*Payment type*	*% of total gas customers*	*% of total electricity customers*	*Average savings, £*	*Average savings, % of bill*
Dual	Non-standard	All	31	26	137	12
Dual	SVT	Direct debit	26	22	183	15
Dual	SVT	Standard credit	13	11	232	22
Dual	SVT	Prepay	11	10	69	8
Single gas	All	All	18	0	107	18
Single electricity	All	All	0	31	86	15

Source: CMA analysis.

114. The table shows that – considering the most liberal scenario for switching– the savings relative to the bill are highest for standard credit SVT customers and single fuel (particularly single fuel gas) customers. The gains from switching for prepayment customers are low, which reflects the restricted availability of tariffs for such customers. We also note that there appears to be a rising trend in available savings and that the most recent 12 months, which appear to be characterised by a wider disparity in tariffs, are not included in the current analysis. We will include this period in updates to our analysis before publication of the final report.

115. Overall we have not seen evidence that we have significantly overstated the gains from switching in our analysis. In particular:

(a) we have not identified characteristics of an SVT to which customers might attach substantial value; and

(b) on choice of supplier, we have seen no evidence to suggest that suppliers offering the cheapest tariffs have worse quality of service than those offering more expensive tariffs.

116. In relation to the choice of payment method, the evidence suggests that a proportion of customers who pay by standard credit are likely to be doing so by default rather than through active choice. However, there are likely to be some who do have an active preference for paying by standard credit, and are likely to assign some value to this payment method. We have therefore also calculated the gains to available to customers from switching suppliers and tariffs alone, keeping the payment method fixed. The main difference is that savings for dual fuel customers on the SVT who pay by standard credit are lower – equivalent to 14% of the bill (as opposed to 22% for those prepared to switch to direct debit).

117. Our finding of material potential savings that are persistent over time, available to a significant number of domestic customers and that go unexploited provides evidence of weak customer engagement in the domestic

retail markets for electricity and gas in Great Britain. While gains from switching are likely to be present in most markets, we attach particular significance to the fact that they are available at such levels to customers for domestic gas and electricity (which are homogenous goods and constitute a significant proportion of household expenditure).

Characteristics of disengaged customers

118. The survey results suggest that there is a material percentage of customers who are disengaged in domestic retail energy markets. The survey results also suggest that those who are have low incomes, have low qualifications, are living in rented accommodation or who are above 65 are less likely to be engaged in the domestic retail energy markets against a variety of indicators of engagement. For example, 35% of those whose household incomes were above £36,000 had switched supplier in the last three years, compared with 20% of those whose household incomes were below £18,000, and 32% of those with degree level qualifications had switched in the last three years compared with 18% of those with no qualifications.

119. We have also assessed to what extent the gains from switching are associated with demographic characteristics. Overall, we find that, excluding prepayment customers, those households who are: in rented accommodation; have incomes below £18,000; or in receipt of a Warm Home Discount rebate have higher gains from switching. By implication, such customers are on average paying a somewhat higher price for their energy than those customers who do not fall into these categories.

120. We note that the disengaged are not limited to these demographic groups: there are many households who are disengaged who do not fall into these categories. However, we consider these results to be important, as they help to shed some light on the possible reasons for inactivity and lack of engagement in the markets. Had we found that it was generally higher-income households who did not engage, we might have concluded that saving money through switching was of relatively low importance to them.

121. The fact that this is not the case – indeed, there appears to be a higher proportion of households on lower incomes who are disengaged and inactive – makes the above hypothesis more difficult to sustain, particularly given the fact that expenditure on energy constitutes a high proportion of the total expenditure for the poorest households.

Barriers to engagement

122. We have identified a number of barriers to engagement that customers face in domestic retail energy markets.

123. We consider that two fundamental characteristics of energy consumption are likely to impede customers' understanding of and engagement in energy retail markets. First, the fact that there is no quality differentiation of gas and electricity may fundamentally reduce consumers' enthusiasm for, and interest in, engaging in the domestic retail energy markets, leading to customer inertia. Second, conventional meters are not very visible or immediately informative to the customer, as a result of which customers are generally not aware of how much gas and electricity they consume, when they consume it and which uses require the most energy. Further, conventional meters are generally read infrequently by the customer or the supplier, which adds considerably to the complexity and opacity of gas and electricity bills.

124. We have also identified barriers (both actual and perceived) to accessing and assessing information, which influence the extent to which customers engage in the process of shopping around for the best deal. Our survey suggests that, while the majority of respondents who shopped around in the last three years found the process of shopping around to be very or fairly easy, others experience difficulties. For some, lack of access to the internet (or a lack of confidence in using the internet) appears to be a barrier to engagement.

125. Third party intermediaries (TPIs) such as PCWs can significantly reduce search and switching costs for domestic customers by providing an easy means to gain personalised quotes, on a comparable basis, from a range of different suppliers. However, we have found that customers on low income and with low levels of education are less likely to use PCWs. Of those who are not confident using a PCW, 43% said they did not trust or believe PCWs.

126. We have observed that there is some evidence indicating that the process of searching for an alternative supplier and successfully switching has been problematic for some consumers. Significantly, the perception of the complexity and burden of the process appears to be worse than the reality, which may further dissuade domestic customers from shopping around and/or switching.

127. We have also found that prepayment meters place technical constraints on customers from engaging fully with the markets, which contributes to such customers facing higher costs and a more limited choice of tariffs. Prepayment meters therefore reduce customers' ability and incentive to

engage in the markets and search for better deals. We expect these problems to be partly addressed with the full roll-out of smart meters.

Provisional finding on weak customer response

128. Our provisional finding is that **we have identified a combination of features of the markets for the domestic retail supply of gas and electricity in Great Britain that give rise to an AEC through an overarching feature of weak customer response**, which, in turn, gives suppliers a position of unilateral market power concerning their inactive customer base (as discussed below).

Supplier behaviour

129. We have also considered to what extent supplier behaviour may be leading to an AEC. We have considered two hypotheses:

   (a) That some suppliers have a position of unilateral market power, arising from the extent of customer lack of engagement in the market, and that these suppliers have the ability to exploit such a position, for example, through price discrimination by pricing their SVTs materially above a level that can be justified by cost differences from their non-standard tariffs and/or pricing above a level that is justified by the costs incurred with operating an efficient domestic retail supply business.

   (b) That suppliers are tacitly coordinating in the retail market through public price announcements.

Unilateral market power

130. We have observed that there are significant disparities in the tariffs charged by the Six Large Energy Firms that cannot be fully explained by differences in cost.

131. Specifically in relation to discounts on the SVTs, we have found that, over the period July 2013 to March 2015 just over 40% of non-standard tariffs were priced at a discount of more than 10% on the SVTs. The extent of discounting differs between firms. All of the Six Large Energy Firms said that the price of fixed-term tariffs is not determined by reference to the relative cost of supplying customers subscribing to standard and non-standard tariffs.

132. With regard to direct costs, we conclude that transmission and distribution charges and costs of meeting social and environmental obligations do not differ between customers subscribing to standard variable and non-standard

tariffs. In relation to energy costs, our provisional view is that there is no evidence that energy costs are systematically and materially higher for SVTs as compared with fixed-term, fixed-rate tariffs.

133. Overall, our provisional view is that the Six Large Energy Firms enjoy a position of unilateral market power over their inactive customer base and have the ability to exploit such a position through pricing their SVTs materially above a level that can be justified by cost differences from their non-standard tariffs.

134. We note that the extent of discounting differs between firms and over time and that some suppliers have argued that they can only afford to discount some non-standard tariffs in expectation that a proportion of customers will revert to the SVT at the end of that tariff's term. However, we also note that other evidence (including evidence on profitability, cost inefficiency and the prices offered by the mid-tier suppliers) suggests that the average prices offered by the Six Large Energy firms have been above those that we would expect to prevail in a well-functioning competitive market).

135. Overall, our provisional view is that **the overarching feature of weak customer response gives suppliers a position of unilateral market power concerning their inactive customer base and that suppliers have the ability to exploit such a position through their pricing policies**: through price discrimination by pricing their SVTs materially above a level that can be justified by cost differences from their non-standard tariffs; and/or by pricing above a level that is justified by the costs incurred in operating an efficient domestic retail supply business.

Tacit coordination

136. Our provisional finding is that the evidence does not suggest that there is tacit coordination between the domestic retail energy suppliers in relation to price announcements. In particular, we do not have evidence of suppliers using price announcements as a mechanism to signal their intentions in relation to the pricing of their SVT to rival suppliers. There are some characteristics of the supply of gas and electricity to domestic customers that may be conducive to tacit coordination. However, we have also identified factors that may make it more difficult for firms to reach and sustain coordination.

Regulations

137. The supply of electricity and gas is heavily regulated, and the form that regulation takes has a profound effect on the shape of competition in retail

energy markets. We have considered several elements of the regulatory regime that may have an impact on competition between suppliers.

Retail Market Review reforms

138. Ofgem launched the RMR in late 2010 due to concerns that retail energy markets were not working effectively for consumers. The stated purpose of RMR was to promote customer engagement in energy markets in order to improve the competitive constraint provided by customer switching.

139. We have analysed the impact on competition of the ‘simpler choices’ component of the RMR rules, which includes the following measures: *(a)* the ban on complex tariffs; *(b)* a maximum limit on the number of tariffs that suppliers are able to offer at any point in time; and *(c)* the simplification of cash discounts.

140. The stated purpose of RMR was to promote customer engagement in the retail energy markets in order to improve the competitive constraint provided by customer switching. However, some of the RMR measures restrict the behaviour of suppliers and constrain the choices of consumers in a way that may have distorted competition and reduced consumer welfare.

141. The RMR rules have not been in place long enough for us be able to assess with full confidence their overall impact on consumer engagement and competition. That said, the evidence in hand at this stage is not particularly encouraging. There are few, if any, signs that consumer engagement is improving materially, either in terms of direct consumer activity (eg switching, shopping around) or their experience and perception (eg views on tariff complexity). Those who were disengaged before the RMR appear to remain so. Further we have doubts that the four-tariff rule will have a benefit on engagement in the long term, since given the number of suppliers, any customer who wishes to find the cheapest tariff on the market will in practice need to use a TPI, with or without the four-tariff rule.

142. The introduction of the four-tariff rule has led to a number of the Six Large Energy Firms withdrawing a number of tariffs and discounts and changing tariff structures, which may have made some customers worse off. In particular, some innovative tariffs were withdrawn; various discounts were removed by the Six Large Energy Firms as a result of RMR rules; and RMR curtailed the ability of the Six Large Energy Firms to offer attractive tariffs for low volume users.

143. We consider that the restrictions imposed by the RMR four-tariff rule limits the ability of suppliers to innovate and provide products which may be beneficial

to customers and competition. This is of particular concern over the longer term as RMR rules could potentially stifle innovation around smart meters.

144. A further area where the impact of the RMR appears to be harmful to price competition is in relation to PCWs. PCWs can no longer compete with each other to attract customers by reducing commission – either directly by way of passing on cashbacks, or indirectly by securing exclusive tariffs from suppliers – because of the four-tariff rule.

145. The impact of the RMR rules on the intensity of price competition between suppliers is less clear. While the suppliers no longer offer discounted variable-rate tariffs, price competition now takes place in the fixed-term fixed-rate space where many tariffs are priced at a sizeable discount to SVTs.

146. Overall, **our provisional finding is that the 'simpler choices' component of the RMR rules, (including the ban on complex tariffs, the maximum limit on the number of tariffs that suppliers are able to offer at any point in time, and the simplification of cash discounts) is a feature giving rise to an AEC in the retail supply of electricity and gas to domestic customers**, through reducing retail suppliers' ability to innovate in designing tariff structures to meet customer demand, in particular, over the long term, and by softening competition between PCWs.

Prohibition on regional price discrimination

147. In 2009, Ofgem implemented SLC 25A, in an attempt to address concerns that certain groups of customers were not benefiting from competition. The prohibition lapsed in 2012. However, suppliers told us that, following a communication from Ofgem warning against 'pricing practices which are unjustified […] returning to the market', they continued to adhere to the principles of SLC 25A in their pricing of SVTs. In December 2014, Ofgem wrote to suppliers to confirm that SLC25A had lapsed and that suppliers were not bound by it in any way.

148. The decision to introduce the prohibition in 2009 has been heavily criticised by two former regulators, Stephen Littlechild and George Yarrow, both of whom argued to us in hearings that the licence change had the effect of restricting competition to the detriment of customers.

149. We note that our analysis of the relationship between the SVT and measures of direct costs is suggestive of an apparent softening of competition in SVTs from 2009 onwards (in that the gap between the average SVT and total costs appears to widen since 2009) and that this broadly coincides with the introduction of the prohibition. We also note that other important changes

have taken place over this period – notably the withdrawal of the Six Large Energy Firms from doorstep selling – which may also have contributed to the pattern observed. We also note that the gap between the average SVT and measures of direct costs was low before 2009.

150. Overall, we think it is likely, on the basis of the evidence that we have seen, that SLC 25A contributed to a softening of competition on the SVT, although other factors may also have had an impact. However, since Ofgem has confirmed that this licence condition is no longer in place, we do not consider that it currently leads to an AEC.

PCW Confidence Code

151. We have considered the likely impact on customer engagement and competition of the Confidence Code that Ofgem has developed to govern independent PCWs offering an energy comparison and switching service. The purpose of the Confidence Code is to give assurance to customers using PCWs accredited under the Code that the service they receive will meet the principles of independence, transparency, accuracy and reliability.

152. Ofgem recently amended the Confidence Code such that from the end of March 2015 Code-accredited PCWs would no longer be able to present as a default only those tariffs for which they are paid commission. Instead PCWs must present all available tariffs as a default unless a customer makes an active and informed choice to see filtered results. The wording of this choice given to site users must be clear and simple. The aim of this amendment was to promote customer trust and confidence in accredited PCWs.

153. In response to the Ofgem consultation on the Confidence Code the Six Large Energy Firms were generally in favour of PCWs being required to display as a default the whole of the market, but there was less consensus among the smaller suppliers. PCWs are concerned about the new requirement, including that it will change the relationship between PCWs and energy suppliers to favour suppliers and benefit suppliers by providing them with free advertising of tariffs, on which PCWs are not paid a commission.

154. We consider that it is too early to assess the impact of the change to the Confidence Code. It is unclear whether the requirement to display the whole of the market will result in more consumers using PCWs as trust in PCWs increases, or whether it will lead to an increasing number of suppliers not entering into commercial relationships with PCWs at all, resulting in a withdrawal of PCWs from the market. We therefore do not consider that the amended Confidence Code currently leads to an AEC. We may, however,

need to consider the appropriateness of the Confidence Code in light of other possible remedies we may consider.

Gas and electricity settlement and metering

155. Settlement is the system by which disparities between the volumes of energy covered by suppliers' contracts and the volumes their customers actually use are identified, reconciled and paid for. Accurate and timely settlement is fundamental to well-functioning retail energy markets. However, we have concerns that elements of the settlement systems of both gas and electricity lead to inaccuracies and delays that distort competition between energy suppliers.

Gas settlement

156. Domestic gas customers do not have their meter read on a daily basis so their consumption for the purposes of settlement is based on an Annual Quantity (AQ), which is the expected annual consumption of the meter based on the historical metered volumes and seasonal normal weather conditions. The AQ value can only be adjusted – at the discretion of the supplier – during a specified AQ review period and only if meter reads demonstrate that actual consumption is at least 5% higher or lower than the AQ value. Further, there is no reconciliation between estimated and actual consumption once the meter is read.

157. We consider that the inaccuracy of AQs and the lack of reconciliation do not provide the correct incentives to suppliers. In particular, they disadvantage certain types of supplier – notably those that have been particularly effective in helping their customers reduce their gas consumption – and lead to gaming opportunities (whereby a supplier may delay adjusting an AQ value if it would be to their disadvantage).

158. We note that a significant upgrade of the gas settlement system is planned, in an attempt to address some of these issues, called Project Nexus. However, Project Nexus has taken many years to develop and the most recent deadline for Nexus reforms becoming operational (October 2015) is not likely to be met. Further, we note that the incentives that shippers face to place a higher priority on adjusting AQs down and delaying adjusting AQs up will still be present after Project Nexus is implemented.

159. Overall, **our provisional finding is that the current system of gas settlement is a feature that gives rise to an AEC in the domestic retail gas market** through the inefficient allocation of costs to parties and the scope

it creates for gaming, which reduces the efficiency of domestic retail gas supply.

Electricity settlement

160. Electricity settlement takes place every half hour but the vast majority of electricity customers do not have meters capable of recording half-hourly consumption. Therefore, their consumption must be estimated on an ex ante basis. This is done by assigning customers to one of eight profile classes, which are used to estimate a profile of consumption over time and allocate energy used to each half-hour period.

161. Our main concern in relation to electricity settlement is that the current profiling system of settlement distorts supplier incentives (compared with a system of settlement based on customers' actual half-hourly consumption). The use of profiling to estimate each supplier's demand fails to charge suppliers for the true cost of their customers' consumption – costs that can differ considerably at different times of the day. This means that suppliers are not incentivised to encourage their customers to change their consumption patterns, as the supplier will be charged in accordance with the customer's profile. This in turn may distort suppliers' incentives to introduce new products such as time-of-use tariffs.

162. We have reviewed the evidence on the potential value of load shifting through time-of-use tariffs. DECC, drawing on the results from several trials, estimated that domestic peak load shifting could be expected to generate present value savings of the order of £900 million through reducing the need for investment in generation (the majority of savings) and the distribution network.

163. In principle, smart meters should remove the need for profiling in electricity, since they provide accurate half-hourly meter reads which could be used for settlement. However, there are currently no concrete proposals for using half-hourly consumption data in the settlement of domestic electricity customers, even after the full roll-out of smart meters.

164. Given the time that code modifications have taken in the past, we are concerned at the lack of concrete plans for a move to half-hourly settlement, and the fact that no code modification process on this has begun.

165. Therefore, **our provisional finding is that the absence of a plan for moving to half-hourly settlement for domestic customers is a feature that gives rise to an AEC in the domestic retail electricity market** through the distortion of suppliers' incentives to encourage their customers to change

their consumption profile, which overall reduces the efficiency and, therefore, the competitiveness of domestic retail electricity supply.

Small supplier exemptions

166. Some government policies to deliver social and environmental objectives are delivered through energy suppliers. These policies put obligations on suppliers to carry out a range of activities such as: installing energy efficiency measures in customers' homes (Energy Company Obligation); and providing support, primarily direct energy bill reductions, to vulnerable customers (Warm Home Discount). The costs of such obligations are recovered from their customers through energy bills. The Energy Company Obligation represents the largest cost. The Six Large Energy Firms as well as three of the mid-tier suppliers currently fully comply with these initiatives but exemptions exist for smaller energy suppliers.

167. We have considered whether the exemptions regime distorts competition by: giving smaller suppliers a distortionary subsidy (as the Six Large Energy Firms have argued); and/or creating a barrier to expansion (through dulling incentives to acquire customers as the smaller suppliers near the obligation exemption thresholds).

168. Overall, our provisional view is that there is a legitimate rationale for providing some degree of exemption. Without these exemptions, the cost of delivering any scheme would fall disproportionately on small suppliers due to the fixed costs of compliance and therefore make entry into the market more difficult. We also note the benefits that entry has brought to the sector in terms of increased competition. Given the relative strength of firms above the exemptions thresholds compared with new entrants, due for instance to the existence of an established customer base and experience in dealing with regulatory requirements, we do not believe that the impact of the current exemptions is likely to be market distorting. Our provisional conclusion is, therefore, that we do not believe that the small supplier exemption causes an AEC.

Microbusinesses

169. The terms of reference for this market investigation cover the supply of energy to microbusinesses, applying Ofgem's definition of a microbusiness (based on employees, turnover and energy consumption). Some microbusinesses are much larger than domestic customers – the upper threshold of Ofgem's microbusiness volume definition for electricity is around 30 times typical domestic consumption – while others spend similar amounts to domestic customers.

170. In relation to customer engagement, we note that some microbusinesses do engage in choosing their energy contracts. We also note positive signs of a recent increase in switching between suppliers. However, we are concerned that many microbusinesses appear to show limited engagement and that they have limited interest in their ability to switch energy supplier. For example, in 2013 45% of microbusinesses were on default electricity tariffs (ie had been placed on tariff that the customer had not actively negotiated).

171. In relation to transparency, our provisional view is that there is a general lack of price transparency concerning the tariffs that are available to microbusinesses, which results from many microbusiness tariffs not being published, and a substantial proportion of microbusiness tariffs being individually negotiated between customer and supplier. In particular, the limited availability and low usage of PCWs makes it more difficult for SMEs to get a view of prices across each market. Suppliers have recently made it easier for SME customers to get quotes, although we do not know if customers are widely aware of this development.

172. TPIs have the potential to help microbusiness customers engage with retail energy markets and reach good outcomes. However, we note that a number of complaints have been made to various official bodies concerning alleged TPI malpractice, which may have reduced the level of trust in all TPIs and discouraged engagement more generally. We also note that some TPIs may not have the right incentives to give non-domestic customers the best possible deal. We are concerned that customers are not aware of this and therefore do not take steps to mitigate it (for example, by consulting more than one TPI or seeking other benchmark prices).

173. We have also found that a substantial number of microbusinesses appear to be achieving poor outcomes in their energy supply. EBIT margins were generally higher in the SME markets than other markets (8% rather than 3% in domestic markets and 2% in I&C markets) and beyond what appears to be justified by risk. We observed that average revenues are substantially higher on the default tariff types that less engaged microbusiness customers end up on, compared with acquisition or retention tariffs, which require an active choice by customers. These differences in revenues between tariffs go beyond what is justified by costs.

174. We therefore have concerns that the less engaged customers on these tariffs are not exerting sufficient competitive constraints on energy suppliers. Our concerns are particularly about the various types of default tariffs that customers can be automatically moved on to if they have not actively engaged with their energy supply (auto-rollovers and replacement contracts),

or if they are receiving energy supply in circumstances where they have not agreed a contract (deemed and out of contract tariffs).

175. Overall, our provisional finding is that **we have identified a combination of features of the markets for the retail supply of gas and electricity to SMEs in Great Britain that give rise to an AEC through an overarching feature of weak customer response from microbusinesses**, which, in turn, give suppliers a position of unilateral market power concerning their inactive microbusiness customer base which they are able to exploit through their pricing policies. These features act in combination to deter microbusiness customers from engaging in the SME retail gas and electricity markets, to impede their ability to do so effectively and successfully, and to discourage them from considering and/or selecting a new supplier that offers a lower price for effectively the same product.

Analysis of profitability and competitive price benchmarks

176. We have considered whether there is evidence that the overall average prices paid by customers of the Six Large Energy Firms have been higher over the past few years than they would have been under a well-functioning competitive market in which costs and profits are competed down to efficient levels.

Analysis of profitability and efficiency

177. We have assessed the profitability of the supply businesses of the Six Large Energy Firms by comparing the return on capital they earned on sales across all customer segments with their cost of capital. In a well-functioning competitive market we would generally expect to see returns broadly in line with the cost of capital over the long term.

178. The results of our analysis are that on a combined basis the supply businesses of the Six Large Energy Firms earned a return on capital of 28% on average across the five-year period from 2009 to 2013. We estimated that the cost of capital was around 10%. Therefore, the return on capital employed was substantially above the cost of capital over the period 2009 to 2013. Profits in excess of the cost of capital amounted to about £900 million per year, equivalent to about 2% of revenues from the sales of the Six Large Energy Firms to the domestic, SME and I&C segments over the period.

179. There was considerable variability in the returns earned by the Six Large Energy Firms:

(a) Four of the Six Large Energy Firms earned returns of 44% on average across the five-year period – substantially in excess of the cost of capital. We note that these profits are unevenly distributed between the firms.

(b) One of the Six Large Energy Firms earned average returns below the cost of capital, and one of them made losses in each of the five years.

180. There were several factors behind the observed differences in profitability between the Six Large Energy Firms, such as differences in average price levels and differences in costs (including wholesale energy costs and indirect costs). In particular, we have observed differences in unit costs between the Six Large Energy Firms – including wholesale energy costs per MWh, and indirect costs per customer – which suggest that some firms may not have operated efficiently

181. We have attempted to control for these differences in cost to estimate a competitive benchmark price level that would have allowed firms to recover efficient levels of costs and earn a fair rate of return on capital employed. The initial results of this analysis suggest that average prices offered by the Six Large Energy Firms over the period 2009 to 2013 were around 5% above the competitive level in the domestic segment, and around 14% in the SME segment. This equates to domestic customers paying around £1.2 billion and SME customers paying around £0.5 billion more on an annual basis than would have been the case had competition functioned more effectively.

182. This suggests that the results of our profitability analysis, set out above, may be an underestimate of the extent to which prices have been above competitive levels.

Analysis of average prices offered by suppliers to domestic customers

183. We have noted that there is a substantial variation in the prices paid by domestic customers, which provides evidence of significant degrees of disengagement. We also note that some of the Six Large Energy Firms have said that they can only afford to offer the cheapest non-standard tariffs if a proportion of customers revert to the more expensive SVT at the end of the tariff's term. An important further question for this investigation is therefore whether the **average** domestic prices offered by the Six Large Energy Firms are above those that would prevail in a well-functioning competitive market. In addition to the analysis set out above, we have compared the average domestic prices offered by different suppliers, notably those offered by the Six Large Energy Firms and the mid-tier suppliers. We have reviewed the evidence on average revenues earned by suppliers on their sales to domestic customers, comparing in particular revenues earned by the Six Large Energy

Firms and the mid-tier suppliers. We have noted that the average price offered by one of the mid-tier suppliers has been below that offered by the Six Large Energy Firms over the last few years. In 2014, its domestic average electricity and gas prices were 11% and 12% respectively below the average of the Six Large Energy Firms.

184. For another of the mid-tier suppliers, average gas prices have been consistently cheaper than those of the Six Large Energy Firms and in 2014, the average price for gas was 20% below the average for the Six Large Energy Firms. The same supplier's average electricity prices were above those of the Six Large Energy Firms in 2012, but below the average for the Six Large Energy Firms in 2014.

185. We note that these results may in part reflect regional differences and differences in customer mix (including the proportion of customers on direct debit as opposed to standard credit and prepayment). Using tariff data and controlling for factors such as customer payment methods and regions, we have calculated that the average prices offered by the cheapest of the Six Large Energy Firms were on average around £95 cheaper (about 8%) than the average prices of the most expensive of the Six Large Energy Firms over the period 2012 to Q2 2014.

186. While we do not yet have the data to include the mid-tier suppliers within this analysis, we note that:

(a) the cheapest tariff offered by the mid-tier suppliers was around £30–£40 cheaper than the cheapest tariff offered by the Six Large Energy Firms over the period 2012 to Q2 2014; and

(b) the evidence from our survey suggests that in Q2 2014, the customers of two of the mid-tier suppliers were paying around 8% less than the customers of the cheapest of the Six Large Energy Firms, and around 4% less controlling for both payment method and tariff type.

187. Overall, the evidence suggests that:

(a) the average domestic prices offered by the Six Large Energy Firms are above the competitive benchmark level as estimated using cost and profit benchmarks; and that

(b) there are significant disparities in the average domestic prices offered by the Six Large Energy Firms, and some evidence that two of the mid-tier suppliers offer cheaper prices than those of the Six Large Energy Firms.

188. We will look to develop this analysis further in the next phase of our investigation.

Provisional views on profitability and competitive price benchmarks

189. Overall, our provisional view is that there is a range of evidence that suggests that average prices paid by domestic customers have been above the levels we would expect to see in a well-functioning competitive market. For SMEs, the evidence suggests that average prices have been substantially above the levels we would expect to see in a well-functioning competitive market.

190. We note the challenges involved in conducting this type of analysis but gain assurance that different sources of evidence on profitability and prices give broadly consistent results. We consider that the preponderance of evidence discussed above is suggestive of weak competitive conditions in the retail energy market. It is consistent with our provisional finding that suppliers have the incentives and ability to raise prices above costs to a significant segment of their customer bases who are disengaged or only periodically engaged in retail energy markets.

Governance of the regulatory framework

191. We have considered whether aspects of the structure and governance of the regulatory framework – including the roles and responsibilities of institutions, the design of decision-making processes and the availability of appropriate information – are likely to increase the risk of policies being developed in the future that are not in consumers' interests or to inhibit the development of policies that are in their interests. We have also considered whether elements of this framework have contributed to the lack of trust in the sector that many parties have highlighted in the course of our investigation.

Framework for financial reporting

192. We have observed that there is a lack of shared understanding of the factors that have led to price increases, in particular the relative contribution of wholesale costs, network costs, policy costs and profit.

193. Trusted and transparent information on the costs incurred, and the profits earned, by energy companies may help to inform the public debate and reduce the risk of errors in policymaking, by providing clearer information about whether and where intervention is required. It may also help to improve confidence in the regulatory system on the part of policymakers and the general public, which itself may improve the stability of the regulatory regime.

194. The absence of such trusted and transparent information is a potentially material problem, undermining regulatory stability. Parliamentary committees, consumer groups, policy think tanks, Ofgem and political parties, among others, have all expressed their dissatisfaction with the status quo concerning the transparency of financial reporting. This is a particular concern given the importance of these bodies in contributing to the general perception of the industry and policy relating to it.

195. Based on our experience, we consider that the Six Large Energy Firms' current reporting systems are unable readily to provide all the market-orientated financial information that regulators and policymakers require. Our provisional view is that improvements could be made to the regulatory framework for financial reporting that would improve the robustness of information available to Ofgem, and hence overall transparency of costs, profits and profitability.

Effective communication on the impact of policies and policy trade-offs

196. Climate and energy policies have to balance the competing objectives of: reducing emissions; ensuring security of energy supply; and ensuring energy prices are affordable. We have considered whether a lack of independent scrutiny of such policies – and the policy trade-offs within them – might be one of the factors that increases the risks of inefficient policy design in the future.

197. There are several institutions already providing independent analyses of energy sector impacts. We note, however, that these analyses could be communicated more effectively to a wider audience, in particular interactions between policies and policy trade-offs within policies. Clearer communication around these issues may increase the transparency of the information already available and improve the quality of the public debate and policy decision-making.

Ofgem's duties and objectives and independence

198. We have noted that Ofgem has taken some decisions that we consider have not had the effect of promoting effective competition, including: the decision not to approve introduction of locational charging of transmission losses; the decision to prohibit regional price discrimination; and the decision to introduce the simpler choices component of the RMR reforms.

199. In relation to its duties, Ofgem stated that the competition duty had been progressively downrated relative to other duties over the last ten years. It expressed concern that, if we suggested it should change its policies towards

improving competition, our conclusions and remedies might be difficult to reconcile with the current structure of its duties.

200. We regard it as a significant cause for concern that Ofgem considers that these duties impose a constraint in practice on its ability to pursue competition-based policies (for example, through placing a priority on approaches that do not promote competition).

201. We have also considered whether: Ofgem's role overlaps excessively with DECC's role, leading to suboptimal decision-making; and whether the coincidence of DECC's and Ofgem's roles risks undermining Ofgem's independence.

202. We note that Ofgem's decisions to implement both SLC 25A and RMR were taken against a backdrop of DECC taking powers to implement changes in primary legislation (or stating its readiness to do so) in the event that Ofgem did not act. We do not know how material this context was in influencing Ofgem, but it is possible that institutional pressure from DECC was one of the factors behind one or both of these decisions. Further, the coincidence of DECC and Ofgem's actions risks creating the perception of a lack of independence on the part of Ofgem.

203. DECC has a number of tools that it can use to influence Ofgem's action. However, short of regulating a particular area by way of statutory instruments, there are no formal powers for DECC to direct Ofgem to implement a specific change, nor clear formal processes for Ofgem and DECC to discuss transparently a strategy for the implementation of DECC's policies.

204. It would not be realistic for DECC to refrain from exercising its discretion over elements of policy and we note that it is always possible that DECC and Ofgem will disagree on a particular area of policy. However, where this is the case, we think that the absence of a mechanism through which such disagreements can be surfaced transparently, so that stakeholders can understand why a particular decision is being made, leads to a lack of transparency in regulatory decision-making. We believe that the introduction of such mechanisms – in particular allowing Ofgem to set out its views on particular DECC policy proposals and seek formal direction from DECC to pursue certain regulatory activities – may facilitate rational debate and promote regulatory stability.

205. **We have provisionally found that a combination of features of the wholesale and retail energy markets in Great Britain give rise to an AEC through an overarching feature of a lack of robustness and transparency in regulatory decision-making** which, in turn, increases the

risk of policy decisions that have an adverse impact on competition. More particularly, these features are as follows:

(a) the lack of a regulatory requirement for clear and relevant financial reporting concerning generation and retail profitability;

(b) the lack of effective communication on the forecast and actual impacts of policies over energy prices and bills;

(c) Ofgem's statutory objectives and duties which, in certain circumstances, may constrain its ability to promote effective competition; and

(d) the absence of a formal mechanism through which disagreements between DECC and Ofgem over policy decision-making and implementation can be addressed transparently.

Industry codes

206. Regulation of a number of technical and commercial aspects of the energy markets is governed by industry codes, which are managed by industry participants. We have considered whether the current system of code governance delivers timely change that is needed to support competition, innovation and wider policy objectives.

207. We have seen evidence that the existing governance and modification arrangements can lead to inconsistent or delayed outcomes, and create material burdens on parties, in particular smaller ones, which could undermine their incentives to promote changes. We believe that Ofgem has taken important steps to prevent or mitigate these risks through its Code Governance Review and other measures. However, despite Ofgem's reforms, there are still circumstances where the current model does not allow code modifications to be developed and/or implemented efficiently. This is the case in particular where a proposed change has significant and unevenly distributed impacts on market participants. We have identified a number of examples of this in our case studies.

208. Our central concern is that the limited ability of Ofgem to influence development and implementation processes might cause certain changes that are in consumers' interest not to be delivered in a timely and efficient way. Consumer detriment is likely to be particularly acute where a change is needed to achieve policy objectives or to support competition and innovation (eg Project Nexus, which facilitates the development of tariffs that rely on smart meters).

209. We have provisionally found **a combination of features of the wholesale and retail gas and electricity markets in Great Britain that are related to industry code governance and which give rise to an AEC** through limiting innovation and causing the energy markets to fail to keep pace with regulatory developments and other policy objectives. These features are as follows:

(a) parties' conflicting interests and/or limited incentives to promote and deliver policy changes; and

(b) Ofgem's insufficient ability to influence the development and implementation phases of a code modification process.