

# ENERGY MARKET INVESTIGATION

## Statement of issues

### Introduction

1. On 27 June 2014 Ofgem, in exercise of its powers under sections 131 and 133 of the Enterprise Act 2002 (the Act)), made a reference to the Chair of the Competition and Markets Authority (CMA) for an investigation into the supply and acquisition of energy in Great Britain.
2. The CMA, acting through a group of independent members selected from its panel, is required to determine 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 UK or a part of the UK.<sup>1</sup> If the CMA decides that there is such a prevention, restriction or distortion of competition, it will have found an ‘adverse effect on competition’ (AEC).<sup>2</sup>
3. This issues statement is based on the evidence we have reviewed to date<sup>3</sup> with respect to the supply and acquisition of electricity and gas in Great Britain and sets out our initial theories of what might be adversely affecting competition and what might be the adverse outcomes. This will provide a framework for our investigation. In drawing up these points we have been mindful of the complexity and size of the markets involved and the time we have available to carry out our investigation. The points in this document should be seen only as topics for investigation rather than views, let alone findings or conclusions.
4. We are publishing this statement now to assist those submitting evidence to focus on the issues we envisage being relevant to this investigation. We invite parties to tell us, with reasons, if they believe either that (a) the issues we have identified should not be within the scope of our investigation or are mischaracterised, or (b) there are further issues not identified or issues which

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<sup>1</sup> See [section 134\(1\)](#) of the Act.

<sup>2</sup> As defined in [section 134\(2\)](#) of the Act.

<sup>3</sup> The principal evidence we have drawn on is: Decision to make a market investigation reference in respect of the supply and acquisition of energy in Great Britain published by Ofgem on 26 June 2014; the State of the Market Assessment published by Ofgem, OFT and the CMA on 27 March 2014; Ofgem’s 2010 Retail Market Review; Ofgem’s 2010 Liquidity Proposals for the Great Britain wholesale electricity market; and academic research.

we have indicated we are not minded to pursue which we should consider. We ask parties to support their views with relevant evidence (including original documentation and analysis).

5. We plan to hold hearings with a number of interested parties in due course. As our thinking develops, we expect to issue further documents prior to the publication of provisional findings. If we were to find provisionally that there was an AEC, we would then consult on possible remedies.
6. To submit evidence, please email [EnergyMarket@cma.gsi.gov.uk](mailto:EnergyMarket@cma.gsi.gov.uk) or write to:

Project Manager  
Energy market investigation  
Competition and Markets Authority  
Victoria House  
Southampton Row  
London  
WC1B 4AD

By 14 August 2014.

7. The remainder of the document is structured as follows:
  - (a) We set out the background to this investigation, explain some of the guiding principles that will inform our approach and set out our understanding of the key characteristics of gas and electricity markets in Great Britain.
  - (b) We suggest four candidate theories of harm that may explain how certain market characteristics or combinations of characteristics may be adversely affecting competition and leading to possible adverse outcomes.
  - (c) We set out issues and parts of the market that we are not minded to investigate at this stage, explaining our reasoning.

### **Background and market characteristics**

8. This is a particularly high-profile market investigation, into markets that are vital to the economy and fundamental to the wellbeing and prosperity of households and businesses alike.
9. Both gas and electricity markets currently face considerable challenges, including substantial regulatory change, political uncertainty and a notable lack of trust between operators and customers. There are broad public

concerns about rising energy prices and the perceived levels of profitability of gas and electricity companies. Complaints to the Energy Ombudsman more than doubled in 2013/14 compared with the previous year, with the significant majority of these complaints concerning billing.<sup>4</sup>

10. There was broad support for a reference of these markets to the CMA, with many respondents to the consultation process expressing the hope that an independent, authoritative market investigation, in addition to addressing discrete problems within gas and electricity markets, will help resolve key areas of disagreement and uncertainty, and begin to restore the confidence of both customers and investors.
11. 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. The retail supply of larger business customers was excluded from the reference on the basis that Ofgem found little evidence of harmful features in these markets.
12. In the rest of this section, we explain some of the guiding principles that will inform our approach to this investigation and set out our understanding of the key characteristics of gas and electricity markets that will help shape our thinking.
13. Our approach will involve defining the markets within which gas and electricity companies compete to supply customers, assessing the nature of competition in those markets and reaching a view on whether any features of the relevant markets prevent, restrict or distort competition. If we do determine that such features exist, we will have found an AEC and will have to decide whether the CMA should take action to remedy the AEC or whether we should recommend that others do so.
14. Our investigation will focus on the detrimental effects on gas and electricity customers that might result from any AEC, considering both short- and long-term impacts. Such impacts could take the form of:
  - higher prices to customers.
  - reduced service quality to customers.

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<sup>4</sup> Energy Ombudsman 2013/14 Annual Report. During 2013/14 the Ombudsman handled 26,760 energy complaints, 132% more than the previous year. 82% of energy complaints were about billing issues, which includes disputed charges, inaccurate invoices and customer service.

- reduced choices of product and supplier.
  - reduced innovation.
  - insufficient supply in the future, as a result of underinvestment, increasing the probability of energy outages.
15. Such impacts will inform our assessment both of the effect of the AEC itself (taking into account any relevant customer benefits that arise from the features that prevent, restrict or distort competition) and of the effect of any remedies we consider.
16. There are certain key characteristics of energy markets, in particular electricity markets, which we need to consider in assessing the nature of competition, formulating theories of harm, identifying any AECs and, in the event that an AEC is identified, developing potential remedies. We set out our understanding of these characteristics below and welcome observations on these and whether there are others we should consider.
- *Non-storability and the need to balance generation and demand in real time:* Electricity is very costly to store and electricity generation has to match demand at every point in time. If there is insufficient generation to meet demand, this may result in blackouts. The task of ensuring that supply and demand are balanced in real time is typically given to a centralised system operator (SO).
  - *Natural monopoly characteristics of transmission and distribution:* Transmission and distribution are natural monopolies – it is cheaper to have generators and customers connected via a single network rather than multiple networks.
  - *Volatility of demand and generation costs:* Demand for electricity depends on a number of factors, such as weather conditions, and can be volatile over a short period of time. Further, different types of generating plant have different costs and operating characteristics. In particular they have a wide spread of marginal costs of generation. Nuclear and many renewables have near-zero marginal costs, while oil-fired plants have high costs. 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. These differences in marginal cost lead to wide variations in the price of electricity over the day.
  - *Small-scale customers do not respond to short-term wholesale price changes/methods of rationing are blunt:* Traditional meters used in

households do not record when electricity is used and there has therefore been no practical way to give households and other small-scale users any reason to adjust their use of electricity in response to short-term price changes. The result is that, unlike the vast majority of markets, spikes in wholesale prices cannot provoke a demand response in residential and other small-scale demand. This can be costly both to suppliers and customers – in extreme cases, where demand exceeds available generation capacity, the SO may have to cut whole areas of customers off from the network, resulting in blackouts. We note that with the introduction of smart meters, some of these characteristics might change, as discussed below.

- *Prevalence of regulation:* Regulatory interventions are prevalent in both gas and electricity markets. Gas and electricity networks, as natural monopolies, are generally subject to price regulation, for example. Often the form of regulation in place differs considerably between jurisdictions, according, notably, to the degree of liberalisation – eg detailed market rules are required to underpin liberalised wholesale energy markets, while retail price controls are used in countries where the retail market is not liberalised. Operators in the energy sector can be exposed to a significant degree of regulatory risk, particularly those that undertake large, long-term investments, the costs of which need to be recouped through future revenues.
  - *The external costs of climate change:* The combustion of gas and the fossil fuels used for electricity generation create greenhouse gas emissions (specifically, carbon dioxide), which impose significant external costs on society through their contribution to climate change. Policies to reduce these emissions are an increasingly important form of regulation, the costs of which are largely borne by energy customers. According to the latest government projections, climate and energy policies are expected to add 33% to the price of electricity paid by households in 2020.<sup>5</sup>
17. These characteristics emphasise the need for us to take a realistic approach in developing our theories of harm, and deciding on whether an AEC exists. The benchmark against which we will assess an AEC is that of a ‘well-functioning market’, that is, one that works well for customers. For the avoidance of doubt, and as set out in our guidance, this benchmark is not based on an idealised or theoretical notion of a perfect market, but will reflect a realistic assessment of likely outcomes in the market in the absence of the

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<sup>5</sup> Department of Energy & Climate Change, *Estimated impacts of energy and climate policies on energy prices and bills*, March 2013.

AEC in question. In gas and electricity markets, given the above characteristics, a well-functioning market will generally be expected to require some form of regulatory intervention.

18. In assessing the market and considering remedies, we must also be forward thinking, recognising the changes that are currently taking place within the sector. A particular challenge that we face in conducting this investigation is presented by the fact that fundamental elements of both the regulatory framework and supply and demand characteristics will be subject to change over the next few years. Such changes include:
  - The roll-out of smart meters to all households and businesses by 2020. These meters will allow consumption to be recorded on a half-hourly basis, which could allow for time-of-use pricing, and provide for two-way communication, which could enable more price-responsive demand or better-targeted direct load control.
  - A fundamental change in the types of plants expected to be generating electricity over the next few years, as fossil fuel plants are increasingly replaced by renewable generation, with different cost and operating characteristics, and in particular a growing share of capacity and output of wind generation, which is dependent on weather conditions.
  - A significant change in the policies designed to incentivise investment in low carbon generation, notably through the introduction of Contracts for Difference (CfDs).
  - The introduction of capacity payment mechanisms to incentivise investment in the generation capacity required to meet future demand.
  - The reforms introduced by Ofgem in an attempt to improve liquidity in wholesale power markets, notably through the 'Secure and Promote' Licence Condition, and the reforms to the regime of imbalance pricing.
  - The reforms arising from Ofgem's Retail Market Review, including those relating to tariff simplification.
19. We will need to take account of these changes in assessing theories of harm and, in the event that we find AECs, in developing potential remedies. Again, we welcome views on how our analysis should take these developments into account, and whether there are other fundamental changes of which we should be aware.
20. For clarity, overarching government targets and objectives (such as targets for emissions reductions) will be treated as context for our investigation. It is not

for the CMA to take a view on the costs and benefits of such targets for energy customers. However, we may review the design of certain policies that have been put in place to meet these targets, to assess their impact on competition in energy markets and, potentially, consider alternative approaches to achieving the targets if we feel these are likely to lead to better outcomes for energy customers.

### **Hypotheses for investigation (theories of harm)**

21. To provide focus and structure to our assessment of the way that competition is working, we set out below four high-level hypotheses for investigation, which we refer to as ‘theories of harm’. To be clear, a theory of harm does not imply any prejudgement of an AEC; it is solely a hypothesis to be tested. Our investigation is at an early stage, and the purpose of identifying these hypotheses or theories of harm is to present some early thinking on these issues, to help frame our investigation. These theories of harm are not necessarily mutually exclusive, indeed some are closely related. Equally, the list may not be comprehensive, in the sense that there might be other issues that we choose to consider in the course of the investigation. As our understanding of the markets develops, we may find that some or all of these theories do not hold, and/or identify others.
22. There are many dimensions to these complex markets, and we therefore need to target our effort on those areas where an inquiry of this nature is likely to add most value. It is worth noting in this respect that a valuable outcome could take several forms, including: identifying an AEC and addressing it with a remedy that materially improves outcomes for customers; or, equally, investigating a contentious area or an issue of high public concern and explaining why there is no AEC.
23. The high level theories of harm we have identified at this stage are:
  - Theory of harm 1: Opaque prices and/or low levels of liquidity in wholesale electricity markets create barriers to entry in retail and generation, perverse incentives for generators and/or other inefficiencies in market functioning.
  - Theory of harm 2: Vertically integrated electricity companies harm the competitive position of non-integrated firms to the detriment of customers, either by increasing the costs of non-integrated energy suppliers or reducing the sales of non-integrated generating companies.
  - Theory of harm 3: Market power in electricity generation leads to higher prices.

- Theory of harm 4: Energy suppliers face weak incentives to compete on price and non-price factors in retail markets, due in particular to inactive customers, supplier behaviour and/or regulatory interventions.
24. We have brigaded the theories of harm into these four high-level categories for ease of presentation. In the following sections, we identify discrete hypotheses within these broad categories, to highlight competing or complementary explanations for a given theory. Together, the theories of harm we propose to investigate encompass the broad range of issues identified by Ofgem in its document setting out its reasons for referring gas and electricity markets to the CMA, with some additional areas of investigation.
25. There are strong interrelationships between several of the theories of harm we propose to consider. For example, barriers to entry and investment are a potential consequence of several of the theories of harm. Further, underpinning the individual theories of harm are broader public concerns about a lack of transparency in gas and electricity markets. These concerns relate in particular to the relationship between wholesale costs and retail prices and to the levels of profitability being earned in the sector. We will attempt to shed light on both of these areas in pursuing our investigation of individual theories of harm.

***Theory of harm 1: Opaque prices and low levels of liquidity in wholesale electricity markets create barriers to entry in retail and generation, perverse incentives for generators and/or other inefficiencies in market functioning***

26. A well-functioning market will produce price signals that are good guides to the decision-making of buyers, sellers, investors and potential entrants. For this to happen, prices need to be a good, true reflection of the fundamental supply and demand conditions facing the sector – now and in the future. Particularly for a homogenous product like electricity, we would expect the wholesale market to be liquid, meaning that trades in these markets can be made without causing a significant change in the price.
27. Liquid wholesale power markets that produce good price signals benefit customers by enabling the efficient provision of electricity at low cost taking into account relevant externalities (for example, environmental effects) and retaining appropriate incentives for investment.
28. The reference document identified a number of concerns about opaque prices and lack of liquidity in wholesale electricity markets, suggesting that these may arise as a result of vertical integration. Given the importance of market rules in shaping the incentives faced by operators, we feel it is relevant to

explore whether these rules and associated regulations provide an alternative (or possibly complementary) explanation for the features – low levels of liquidity, opaque prices, and barriers to entry for independent generators and suppliers – ascribed to vertical integration in the reference document. Therefore we propose to consider two related hypotheses under this theory of harm: 1a and 1b.

*Hypothesis 1a: The market rules lead to opaque prices and low liquidity in wholesale electricity markets, creating barriers to entry in retail and generation, perverse incentives for generators and/or other inefficiencies in market functioning*

*Hypothesis 1b: Vertical integration leads to opaque prices and low liquidity in wholesale electricity markets, creating barriers to entry in retail and generation, perverse incentives for generators and/or other inefficiencies in market functioning*

29. There is a close relationship between these two hypotheses. The current electricity trading rules were designed with strong incentives on generators and retailers to balance their own supply and demand portfolios, by making energy imbalances particularly expensive. Firms have responded to these incentives either through bilateral contracting or vertical integration (or both). These in turn may have led to low volumes of wholesale trading going through cleared, transparent markets, leading to poor-quality spot price signals, low liquidity in financial markets and limited availability of hedging products for vertically separated firms.
30. Given the cost structure of the electricity sector, problems with wholesale prices, whether arising as a result of market rules, vertical integration or both, may have significant impacts on customers. Such harm may arise through the following effects:
- High **transactions costs** for independent retailers and generators, creating operational inefficiencies and barriers to entry and expansion.
  - High **hedging costs** for independent retailers and generators, creating a barrier to entry and expansion.
  - Observable prices being **poor guides** to action, creating a barrier to entry and expansion.
  - Prices in thinly traded or opaque markets **possibly being subject to unilateral manipulation**, creating perverse incentives.

- A lack of transparency concerning wholesale prices possibly leading to **broader public concerns** about the activities of generators and suppliers and the factors driving retail price changes.
31. **High transactions costs.** In order to avoid the risk of imbalance, independent retailers and generators need actively to be engaged in bilateral contracting up to 1 hour before delivery. This is costly. Moreover, independent generators and retailers have fewer options available for balancing than do the vertically integrated incumbents. The market rules may therefore increase costs to non-vertically integrated entrants and ultimately reduce competition in retail markets and raise prices to customers.
  32. **High hedging costs.** The markets for electricity futures in Great Britain have been relatively illiquid (for example, compared with those in gas or in other electricity systems). This may be linked to the incentives to vertically integrate created by the market rules. Moreover, the absence of robust reference prices may have limited the development of financial instruments useful in hedging the risks intrinsic in being a retailer or generator in this market. The absence of good markets for hedging instruments has a greater impact on the costs of vertically separated companies than vertically integrated ones. The absence of good markets for hedging products may therefore raise the costs of vertically separate companies, and thus raise costs to entrants, ultimately reducing competition in retail and generation markets and raising prices to customers.
  33. **Prices as a poor guide to action.** Entrants rely on prices to guide behaviour. Generators look at futures prices to decide on investment plans and retailers look at futures prices to offer fixed-price tariffs and to lock in margins. If futures prices now are a poor guide to the future level of spot prices, then agents depending on them will be at a disadvantage, facing greater risk than those who do not. Vertically integrated firms will have less need to base their decisions on price signals in the wholesale markets. Poor quality price signals therefore create a barrier to entry for vertically separate firms by increasing their risk and therefore their costs. Generators also rely on price signals to make production decisions and it is possible that vertical integration and/or illiquid markets lead to operational inefficiencies.
  34. **Manipulability of prices in thinly traded or opaque markets.** Where prices are determined by a small volume of trades relative to the whole market, it is possible that prices could be moved for perverse reasons. For example, renewable generators will receive larger subsidies the lower the reference price in their contracts for differences (CfDs). We will wish to consider whether this reference price can be influenced at relatively low cost to a large firm,

which might benefit, for example through receiving higher payments through CfDs.

35. **A lack of transparency leading to public mistrust.** Opaque wholesale prices can lead to broader public concerns about the activities of generators and suppliers and the factors driving retail price changes. This in turn can lead to policy and regulatory instability, which can undermine incentives to invest in power sector assets in the future, to the detriment of customers in the long run, as prices rise and quality of service is reduced.
36. We are aware that, in part due to some of the above concerns, several important reforms are due to be implemented to the way in which wholesale power markets operate. These include:
  - reforms to the system of electricity imbalance pricing, or ‘cash out’ arrangements
  - the introduction of a ‘Secure and Promote’ licence condition to improve liquidity in the wholesale electricity market
  - capacity auctions introduced as part of the Department of Energy & Climate Change’s Electricity Market Reform programme and the ability for the SO to contract in advance for reserve capacity
37. We will assess the extent to which these reforms are likely to address the concerns identified above and their potential impact on competition.
38. In considering whether there is an AEC arising from the power market rules and the scope for remedies, we will need to weigh up the strengths and weaknesses of the current system against other feasible systems, including incremental changes to the current framework or potentially wider ranging reforms.
39. Similarly, in assessing whether there is an AEC arising from vertical integration and, if so, in considering remedies, we will need to consider the potential benefits of vertical integration, which may include:
  - the provision of a hedge against wholesale costs and balancing risks.
  - reduced transactions and negotiating costs.
  - reduced collateral requirements.
  - a lower cost of capital.
  - the elimination of double margins across vertically separate businesses.

40. We will look to assess the likely size of both the costs and benefits of vertical integration, the extent to which they are likely to be passed on to customers, and the extent to which they reflect the particular market rules currently in place or are likely to persist under a variety of different regulatory regimes. Again, in making this assessment, we will compare the current position with a realistic well-functioning market benchmark.

***Theory of harm 2: Vertically integrated electricity companies harm the competitive position of non-integrated firms to the detriment of customers, either by increasing the costs of non-integrated energy suppliers or reducing the sales of non-integrated generating companies***

41. This theory of harm focuses on the issue of vertical foreclosure. Vertically integrated firms may have the ability and incentive to foreclose non-integrated firms, weakening them as competitors, causing them to exit the market, or deterring them from entering. This may take the form of input foreclosure, where a vertically integrated firm increases the costs of other energy suppliers, or customer foreclosure, where a vertically integrated firm reduces the sales of other generating companies.
42. The weakening or elimination of competitors as a result of vertical integration is a problem if it leads to higher prices or poorer service to customers now or in the future. If this occurs at the retail level, it will be to the direct detriment of current customers. If this occurs at the generation level, those higher prices are likely to be passed through to customers to some extent. We will also assess whether its impact on market entry, both at the retail and generating levels of the industry, might be expected to have a detrimental effect on future customers.
43. In assessing these issues, we note that vertical integration is not a problem in many unregulated markets, as it gives rise to efficiencies that benefit customers. We will wish to consider the potential benefits of vertical integration in electricity markets, as discussed above. This assessment will take account of any additional incentives to vertically integrate that result from the regulatory framework.

***Theory of harm 3: Market power in generation leads to higher prices***

44. Competition may fail to deliver low prices for consumers if generation is too concentrated or if generators are able to coordinate outcomes. Unilateral market power arises when a generator acting alone would be able to change wholesale prices, and coordinated market power arises when this is achieved by the actions of more than one generator. In either case the actions to affect price might be immediate – for example, supplying less capacity than

available at a given price – or might operate over the longer term – for example, curtailing investment in new capacity.

45. One hypothesis relating to the exercise of unilateral market power is that certain generators may have power in the Great Britain generation market at particular times. Although market shares in generation as a whole are relatively low, the nature of demand and supply means it is possible that at certain times of high demand, one or more generators may be able unilaterally to influence the price of generation in spot markets, and possibly in other transactions. We will also consider whether the high degree of vertical integration, resulting in fewer forward market trades, could give any generator market power over forward contracts.
46. A second hypothesis is that certain generators may have local market power at particular times, created by transmission constraints. During periods of transmission constraint the SO often has a limited set of options to purchase increased/reduced generation (or demand) from a specific geographic area. Given the limited numbers of options available to the SO, the potential exists in some cases for generators to charge high prices for balancing services. We will need to understand the effects of Ofgem's introduction of a 'Transmission Constraint Licence Condition' which aims to restrict any such exercise of market power.
47. We may also consider whether there is scope for coordinated behaviour by multiple generators as well as, or instead of, unilateral behaviour by a single generator. Generators might coordinate over prices or over the level and timing of investments. We would seek to determine whether the conditions that allow coordination hold for generation only or whether they might be likely to emerge in the absence of vertical integration.
48. We would expect market power in generation to lead to higher spot market prices at certain times. We will consider whether this may also lead to higher prices in over-the-counter trades and forward contracts (for example, because being exposed to the spot market is less attractive for retailers due to the expectation of higher spot prices or because certain prices are explicitly linked to spot market prices). This behaviour may also deter entry or expansion at the retail level if it becomes more expensive or riskier for independent retailers to buy electricity.

***Theory of harm 4: Energy suppliers face weak incentives to compete on price and non-price factors in retail markets, due in particular to inactive customers, supplier behaviour and/or regulatory interventions***

49. Domestic gas and electricity supply have been open to competition for more than 14 years and yet incumbent regional electricity companies and British Gas (Centrica) continue to have high market shares. We will seek to understand the extent to which this is attributable to the behaviour and attitudes of customers, and in particular customer inertia. We will also focus on the behaviour of suppliers and seek to understand whether there are features of the market that have the effect of weakening or softening rivalry, or creating barriers to entry, including regulatory features.

*Hypothesis 4a: Inactive customers reduce the incentives of energy suppliers to compete*

50. Competition may be weak if customers do not exert pressure on suppliers. The State of the Market Assessment suggested that there appear to be large segments of the market where customers (including domestic customers and micro businesses) exert weak pressure. In particular, it found evidence that there are customers who are not switching to cheaper tariffs offered by their current supplier and/or to rival suppliers and as a result are paying higher prices for gas and electricity supplies. A weakness of customer response may be variously caused by customers' information and incentives, actions by suppliers or a structural feature of the market.

51. We will consider how such customer inertia may affect the strength of the incentives gas and electricity suppliers face to compete on price and quality, including:

- the extent to which suppliers can discriminate against the less active customers, and the effectiveness of any constraint imposed by more active customers.
- whether customer inertia (and the ability for suppliers to exploit this) weakens rivalry further by lessening an incentive for a supplier to win customers with low prices and/or creating barriers to entry and expansion.
- whether the differing regional positions of the larger suppliers, as result of their legacy of inactive customers from the regional electricity companies they acquired, affects their incentives (and how these incentives may have been affected by the non-discrimination licence condition introduced in 2009).

- how suppliers might exploit and influence the behaviour and perceptions of customers to their advantage.
  - the impact of the measures imposed to simplify tariff structures on consumer inertia and competition.
52. In exploring these issues, we will assess whether there are identifiable groups of customers (for example, from particular regions and/or socio-economic groups) who could reduce their energy bills by switching tariff and/or supplier; the materiality of the detriment taking into account the number and the savings to be realised; and the persistence of price differentials. We would also want to understand the behaviours, perceptions and attitudes driving these observations and the availability and likely impact of any remedies.

*Hypothesis 4b: Tacit coordination between energy suppliers reduces their incentives to compete*

53. Collusion involves companies reaching explicit agreements or engaging in concerted practices, for instance in relation to the prices and/or quantities of a product to be sold, and is prohibited under Chapter I of the 1998 Competition Act. In contrast, tacit coordination may arise in a stable market where firms interact repeatedly and come to be able to anticipate each other's actions, allowing them to coordinate behaviour without reaching any agreement to do so. Such coordination involves firms competing less aggressively over time, forgoing the possibility of higher individual profits in the short term (by cutting prices unilaterally), in the expectation that this will lead to higher profits in the longer term.
54. The State of the Market Review found that several characteristics of the markets for the retail supply of gas and electricity are conducive to coordinated behaviour. It also found that aspects of the behaviour of the six largest suppliers would appear to be consistent with tacit coordination between them, including the announcement of price changes around the same time and of a similar magnitude and convergence of domestic supply margins.
55. We propose to consider the evidence that retail suppliers (while not reaching agreements on their behaviour) are tacitly coordinating, in adopting strategies and behaviours to their mutual advantage. In particular, we will consider the following two possibilities:
- That the pre-announcement of price increases may facilitate tacit coordination in prices. This practice may have had the effect of reducing the uncertainty for a supplier in relation to how its rivals might respond to a

price increase, allowing suppliers to coordinate the timing and scale of price increases, and so sustaining prices at a higher level than would otherwise prevail. An increase in prices is an event that might stimulate customers to search for a better price, yet if other suppliers raise prices by similar amounts, at much the same time, the potential savings to be had from switching are likely to be reduced. Reducing customer expectation on the gains from switching might soften competition.

- That vertical integration in the supply of gas and electricity may facilitate market sharing. It has been suggested that vertically integrated suppliers are increasingly using similar strategies across their businesses, including in relation to hedging and generation portfolios. One argument is that they may try to avoid asymmetries in their hedging strategies and generation portfolios that might give any of their competitors windfalls from upstream activities that may influence their conduct in the retail market, including their incentives or ability to expand downstream. The effect might be to reduce the incentives of suppliers to compete aggressively to increase market share.

56. In investigating these hypotheses, we will consider to what extent we can further develop the quantitative analysis of the drivers of retail price changes that was conducted by the Office of Fair Trading (OFT), Ofgem and the CMA prior to the reference. In particular, we will consider to what extent such price changes seem to be associated with changes in wholesale costs. In assessing this and other evidence available to us, we will consider to what extent it is consistent with tacit coordination and/or alternative explanations.

*Hypothesis 4c: Regulatory interventions reduce the incentives for energy suppliers to compete*

57. As noted above, the supply of electricity and gas is heavily regulated. Regulations have been imposed for a variety of reasons. Some have been introduced in an attempt to bolster elements of the competitive process, while others have been introduced to meet environmental objectives (notably, tackling climate change) and social objectives (including reducing fuel poverty). We will look to assess the effect these interventions have on competition in gas and electricity markets.

58. In relation to the first category of regulation, we will look to assess the impact on competition of two recent interventions by Ofgem in retail energy markets: the non-discrimination licence condition that was introduced in 2009; and the reforms introduced this year to simplify tariffs.

59. In relation to broader social and environmental regulations, we do not propose to look comprehensively and exhaustively at all such interventions. Rather, we will focus on specific measures in so far as these appear to have a direct effect on competition. These will be examined on a case-by-case basis. One issue we will wish to investigate concerns the size threshold (250,000 accounts) below which a supplier is not required to meet these obligations. While this gives the smaller suppliers a cost advantage, the threshold may also act as a barrier to expansion.

### **Issues/parts of the market that we are not minded to investigate**

60. This is a large and complex investigation and we are mindful of the need to focus our resources on areas where they are likely to have greatest impact. In an attempt to do this, we have identified three areas that, at this stage and based on our current knowledge, we are not minded to investigate further. These are:
- wholesale gas markets.
  - gas interconnection and storage.
  - regulation of revenues from transmission and distribution.
61. We note that these are all areas in respect of which Ofgem, in its decision document, indicated that it felt further investigation was not required.

### ***Wholesale gas markets***

62. Evidence collected by the OFT, Ofgem and the CMA during the assessment leading up to the reference suggests that the wholesale gas market in Great Britain does not possess the potentially harmful features that have been identified in wholesale electricity. In particular, the market is less vertically integrated and shows higher levels of liquidity. Furthermore, the wholesale gas market is connected to other markets through import pipelines and liquefied natural gas import terminals, making it part of a wider international market for gas.
63. While not the focus of a theory of harm, wholesale gas markets will remain important to our investigation. We will, for example, wish to understand in greater detail why wholesale gas markets appear to be working better than wholesale electricity markets and why gas suppliers have felt less need to integrate vertically than electricity suppliers.

### ***Gas interconnection and gas storage***

64. The analysis leading up to the reference did not reveal evidence of harmful market features in relation to either gas interconnection or gas storage.

### ***Regulation of revenues from transmission and distribution networks***

65. The focus of this investigation is on competition in energy markets. Therefore we do not propose to review the mechanisms in place for regulating the revenue from the natural monopoly elements of the electricity system, transmission and distribution. However, the framework in place for charging for access to the transmission network and dealing with transmission constraints may have a significant impact on wholesale market competition. We will, therefore, wish to review the incentives arising from the transmission pricing regime as part of theory of harm 1 above.
66. We welcome views on our initial identification of areas that we are not minded to investigate further and note that we may revisit these areas should we uncover evidence of potential problems in the course of our investigation.

24 July 2014