

## 1. Section 1 - A Summary of SSE's Response

### 1.1 Introduction

- 1.1.1 This document sets out SSE plc's (*SSE*) formal response (the *Response*) to the Competition and Markets Authority's (*CMA*) Statement of Issues dated 24 July 2014 (the *Issues Statement*).
- 1.1.2 In the Issues Statement, the CMA articulates four theories of harm (the *Theories of Harm*). The Response first sets out an overview of SSE's role in the competitive GB energy market before addressing each Theory of Harm in turn.

### 1.2 Ensuring liquidity and transparency in wholesale electricity markets

**CMA 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"*

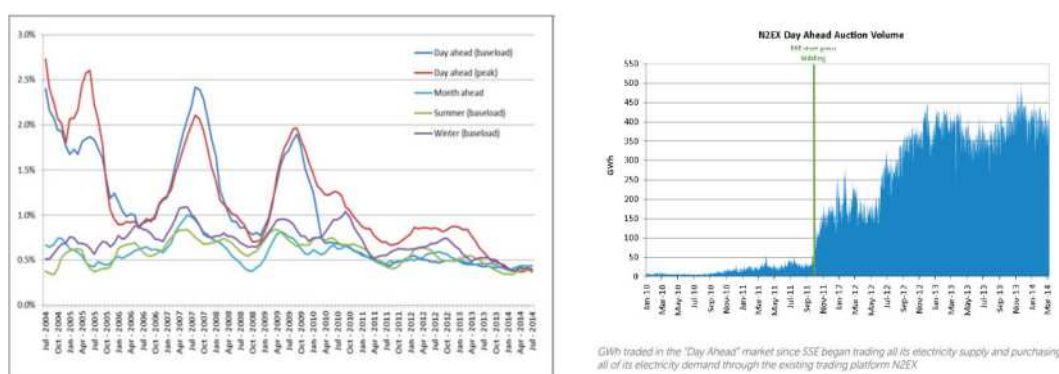
#### SSE's assessment

- 1.2.1 SSE plays an active role in the competitive GB wholesale markets—it operates over 10,000 MW of capacity for generating electricity (including investing in the largest portfolio of capacity for generating electricity from renewable sources). Nevertheless, SSE recognises that, in the past, the GB market may have had lower levels of liquidity than was desirable for retailers and generators.
- 1.2.2 However, in recent years much work has gone into promoting liquidity in GB electricity markets with the result that liquidity for many products now matches the levels achieved in markets (such as in Germany) which are widely recognised as highly liquid. The main drivers of the increased liquidity have been industry and SSE-specific initiatives, reflecting the interests that all participants in a market have in establishing liquid trading to manage risks. This applies equally to vertically integrated businesses and stand-alone generators and retailers. The principle drivers have been:
  - (a) **Industry initiatives:** The 'N2EX' trading platform was set up by industry participants in January 2010 aiming to establish a liquid and transparent UK power market providing a robust index price for electricity trading. Since 2010 volumes traded have grown rapidly with record volumes recorded.
  - (b) **SSE initiatives:** SSE has a strong need for and interest in developing and maintaining liquid markets. In August 2012, SSE began to routinely place 100% of its available generation and 100% of its demand requirement in the N2EX 'day-ahead' auction. This benefits both the day-ahead and forward markets. For each of the last five years, SSE has traded more than four times its customer demand volume in the market. In 2013/14, this ratio was 6.7. This has helped all participants, by allowing them to buy electricity easily. SSE also introduced its own small supplier commitment in 2012, which has proved very successful. In general, SSE is one of the most active players in the power market and was effectively 'market making' in advance of Ofgem's reforms.

- (c) **Regulatory measures:** In March 2014, Ofgem introduced the ‘Supplier Market Access’ and ‘Market Making’ licence conditions on the largest electricity generating companies. These conditions require the companies to follow a set of rules when trading with small independent suppliers to ensure fair access and to develop liquidity by playing a ‘market maker’ role (where suppliers must post the prices at which they will buy and sell 15 forward products on power trading platforms and are restricted in the bid-ask spreads they can offer). It is too early to judge the effect of these measures, but SSE’s experience is that take up of these products has been low, supporting SSE’s view that there is limited unmet demand for liquidity as a result of the initiatives described above.

1.2.3 The impact that these initiatives have had in transforming the market can be seen starkly in the two charts below. The ‘bid-ask spread’ (the price gap between buying and selling a product) on core electricity products has fallen markedly since 2009 and is now low and consistent with what is being achieved in other global electricity markets commonly acknowledged as being highly liquid (see below left which shows the convergence of the bid-ask spread). Record volumes are now being traded on the N2EX platform (see below right which shows volumes of electricity increasing in the day-ahead market).

**Figure 1.1: Bid-ask spreads and trading volumes in the wholesale electricity market**



Source: ICIS Heren.

Notes: See Figure 3.1 below for further explanation.

1.2.4 SSE believes that liquidity is now sufficient for independent retailers to manage risks and does not represent a material barrier to entry or expansion. Ultimately, there are a wide range of products available for different participants’ needs. While there are some products, for example further forward peak products, for which liquidity is lower, the CMA should look to the role played by policy uncertainty in contributing to this rather than vertical integration. Political and regulatory interventions and policies have an impact on market operations and this investigation is an opportunity to consider the impact and the uncertainty around these on long-term liquidity. In particular, the Carbon Price Floor (*CPF*) has had a negative impact on long-term liquidity due to uncertainty around future levels, which can be changed at every budget.

- 1.2.5 Consistent with this, SSE presents evidence to show that small suppliers do not face material additional costs resulting from any lack of liquidity and that smaller non-vertically integrated retailers do not face disproportionately higher costs than vertically integrated suppliers. Indeed, this would be inconsistent with the success of entrants in recent years.

### Looking ahead

- 1.2.6 SSE benefits from liquid markets and has shown over the years its commitment to improving wholesale market liquidity. The evidence points to reasonable levels of liquidity across most parts of the market and we can expect liquidity to improve further as a result of the Secure and Promote Licence Condition (*SPLC*) which only came into force on 31 March 2014.
- 1.2.7 Over the coming months, SSE will be developing its thinking around the following areas as there may be the potential for positive reforms linked to this Theory of Harm:
- (a) monitor the impact of the most recent Ofgem ‘Secure and Promote’ changes to liquidity;
  - (b) monitor the impact from recent reforms in Europe (e.g. the European Market Infrastructure Regulation (*EMIR*), Markets in Financial Instruments Directive (*MiFID*) and Regulation on Energy Market Integrity and Transparency (*REMIT*)) and those resulting from the Electricity Market Reform (*EMR*) process;
  - (c) seek to reform the CPF which has an impact on longer term liquidity. There may be merit in exploring how to ensure its bankability, such as by legislating for its future trajectory in primary legislation;
  - (d) SSE would support additional requirements for companies to buy and sell 100% of their power via open exchanges as SSE does or additional market making incentives on companies; and
  - (e) all market participants should be obliged to treat small suppliers fairly and small suppliers themselves and independent generators should participate with the new Ofgem rules.

## 1.3 Demonstrating the benefits of vertical integration for customers

**CMA 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”*

### SSE’s assessment

- 1.3.1 SSE’s view is that vertical integration has provided it with an efficient way of operating over the last decade. Both Ofgem and the CMA have highlighted particular benefits that vertical integration may bring. SSE believes that the benefits include:
- (a) having ‘a natural hedge’ which, in the past, has been most beneficial to generators seeking to manage the risks of operating in a volatile market. This

supports long-term investment, and reduces the extent to which retailers need to pass volatility in wholesale costs through to consumers, and

- (b) assisting in trading as it lowers the amount of collateral that SSE must post. However, a part of this benefit is related to the fact that it is a large, financially-prudent company which is replicable under many other business models.

1.3.2 SSE does not believe that the extent of these benefits is such that they represent a barrier to entry. There are a variety of business models in the energy market. Not all energy players are vertically integrated with both supply and generation assets—there are some large generators who have no retail operations, a few companies with no generation and, of the vertically integrated companies, there are significant differences in the scale of their supply and generation arms.

1.3.3 Indeed, both the generation and retail markets for electricity in GB are among the most diverse and competitive in Europe. This lack of concentration, and a lack of market power or ‘must-trade’ status of any individual generator or retailer, means that foreclosure in either the generation or retail market would not be feasible.

1.3.4 It is not possible for vertically integrated companies to harm the competitive position of competitors for the following reasons:

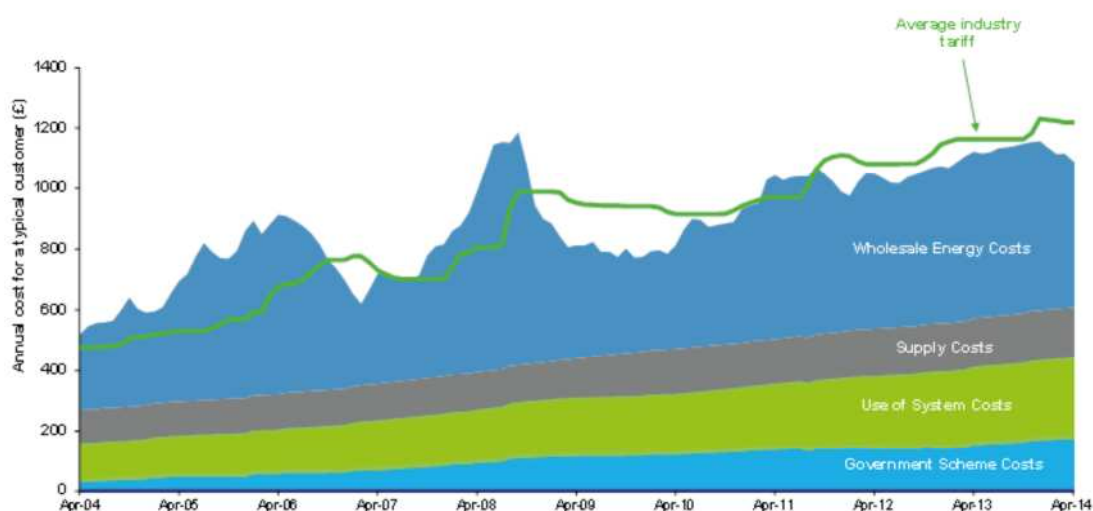
- (a) A combination of a lack of market power in the generation market, plus existing liquidity and regulatory constraints show that the vertically integrated energy companies have no ability to harm downstream rivals in supply. Independent retailers have multiple alternative generators from which they can purchase. Moreover, SSE and other vertically integrated generators have clear incentives to be active participants in trading wholesale products as this activity offers the opportunity to reduce costs and risks.
- (b) Equally, a lack of market power in the retail market, plus existing liquidity and regulatory constraints, mean that the vertically integrated energy companies have no ability to harm upstream rivals in generation. Independent generators have multiple alternative suppliers to whom they can sell. In addition, many independent generators serve industrial and commercial customers directly.

1.3.5 End prices are cost reflective of the inputs that have gone into them. Although suppliers hedge and buy in advance, trends in customers’ prices have reflected underlying costs resulting from government policies, network charges and wholesale energy prices. This can be seen from the simplified chart below, which provides a high-level generalised indication of how industry costs and average tariffs across the six largest suppliers have evolved over the last ten years (but which does not capture short run cost or tariff impacts or factors such as short-term wholesale energy costs that are influenced by supplier-specific hedging strategies on the energy futures market). As Figure 1.2 below illustrates:

- (a) the long-run trend in average industry tariffs closely tracks the long-run trend in the costs faced by suppliers; and

- (b) suppliers' cost increases—and hence price increases—reflect external factors over which suppliers can exert little control—namely growing cost pressures resulting from: (i) government schemes and interventions in the market; (ii) increases in network charges; and (iii) long-run increases in wholesale energy prices.

**Figure 1.2: Evolution of tariffs and costs for a typical customer**



Source: SSE.

Notes: The above is calculated from public data sources for a representative domestic dual fuel customer with an annual level of gas and electricity consumption in line with Ofgem's standard industry assumptions. See Annex 4.1 for a description and explanation of the data sources and methodology used to construct each of the components of this chart.

- 1.3.6 Finally, SSE believes EMR measures will bring further changes which need to be considered when looking at vertical integration. Regardless of the firms' business model, the impact of EMR is to make generation income more dependent on centrally administered capacity payments or contracts for difference (*CfDs*) reducing the generators' risk to wholesale markets. Recovering these costs in this way, via a Supplier Levy, will reduce the benefits of the 'natural hedge' for vertically integrated firms described above.

### Looking ahead

- 1.3.7 SSE believes that vertical integration provides an efficient way of organising generation and retail activities in GB energy supply given the inherent risks and uncertainties involved. Its existence does not prevent other models and clearly has benefits to customers.
- 1.3.8 Over the coming months, SSE will be developing its thinking around the following areas as there may be the potential for positive reforms linked to this Theory of Harm and in relation to improving transparency more generally:

- (a) mandating the process SSE has already begun of reorganising its companies to allow separately auditable accounts for its energy supply (retail), electricity generation and energy portfolio management (wholesale) activities; and
- (b) continuing to develop Ofgem's work around the Consolidated Segmental Statements (CSSs) and additional transparency measures.

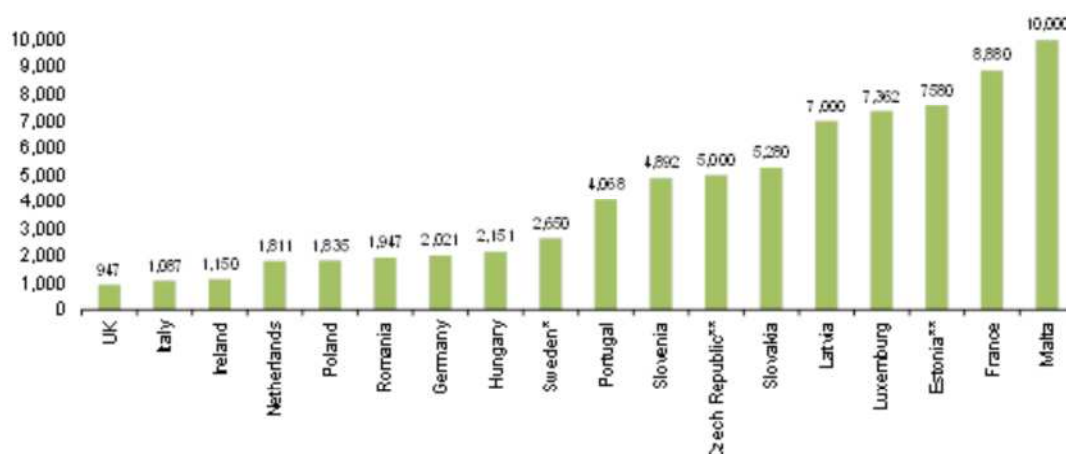
## 1.4 A competitive and evolving generation market

### CMA Theory of Harm 3: "Market power in generation leads to higher prices"

#### SSE's assessment

1.4.1 The GB generation market is one of the most diverse and competitive markets in Europe. Ofgem's 2014 assessment found that there were seven companies with market shares exceeding 5% and the largest three companies generated around half of all electricity consumed in GB. Following a Europe-wide review by the European Commission, looking at the standard economic measure of concentration, i.e. the Herfindahl-Hirschman Index (*HHI*), the UK came out as the least concentrated market (see Figure 1.3 below).

**Figure 1.3: Electricity generation HHI ratio in 2011**



Source: European Commission (2012) *Energy Market 2011*.

Notes: See Figure 5.1 below for further explanation.

1.4.2 There are also some other very important features of the market worth noting:

- (a) No generation company has the ability to exercise material market power at specific points in time. If a generator were to raise its price above the level at which the next plant could profitably supply the market, the generator's plant will not run as it would be out-bid. In contrast, a situation where any individual generator is 'pivotal' to meeting total demand in the market is rare. Even, when such conditions arise, only a small fraction of the pivotal generator's capacity might be needed to meet demand, giving no incentive to exploit that position given the revenue that would need to be forgone.

Furthermore, it would also be difficult for a firm to predict when it would be ‘pivotal’.

- (b) There is also no ability to exercise local market power in the balancing market and there are specific regulations to prevent this. The ‘Transmission Constraint Licence Condition’ (*TCLC*) was introduced in July 2012 to regulate behaviour by electricity generators during periods of local grid constraints. The licence condition specifically prohibits generators from obtaining any excessive benefit from electricity generation in relation to a period of transmission constraint.
- (c) The market would not support coordinated outcomes between generators. There is a lack of market concentration; a volatility of prices; a diversity of different trading and business models; and an asymmetry of incentives, market shares, cost structures and technologies, such that successful coordination could neither be reached nor be sustained. Strong sanctions exist and there is no history or evidence of such practices in this industry. There are already civil and pending criminal sanctions to prevent energy market manipulation.

### Looking ahead

- 1.4.3 There is no evidence of any adverse behaviour and all the indicators point towards current market conditions working well. An assessment of market rules and plant operations will allow the CMA to see that there are already sufficient regulatory safeguards in place. The conditions simply do not exist for market power and no additional action is necessary. It is extremely important that any design interventions in this area are carefully considered in order to ensure there are no unintended consequences to this well-functioning market.

## 1.5 Engaging customers in the energy market

**CMA 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”*

### SSE’s assessment

- 1.5.1 SSE does not believe the CMA’s Theory of Harm 4 accurately reflects the situation in the GB energy market:
  - (a) Customer inactivity (CMA Hypothesis 4(a)): the methods employed by Ofgem in the SMA to measure customer activity are imperfect.
  - (b) Tacit coordination (CMA Hypothesis 4(b)): there are neither the conditions required nor any observed behaviour between the largest suppliers, which would allow tacit coordination to either occur or to be sustained.
  - (c) Regulatory intervention (CMA Hypothesis 4(c)): some of the recent regulations implemented have had, and will continue to have, positive effects, but others have been less effective for customers and competition.

1.5.2 SSE is operating in a very competitive and well-functioning energy retail market evidenced by:

- (a) fluctuating market shares—SSE has grown from the fifth to the second largest GB energy supplier over the last ten years, serving around 4.8 million domestic customers;
- (b) the entry and growth of new suppliers has led to SSE's market share declining and the shares of the eighteen smaller suppliers growing steadily. Four of the suppliers outside the six largest now have over 250,000 customers and in April 2014, 47% of switching was to companies other than the six largest suppliers;
- (c) the relatively low measures of market concentration seen in the market—the UK retail supply market is becoming less concentrated and has amongst the lowest concentration of any supply market in the EU;
- (d) the fact that prices within the GB energy market are low compared with many international comparators. The European Commission reported earlier this year that UK domestic gas and electricity end prices were the cheapest and fifth cheapest respectively in the EU15 in 2012; and
- (e) the fact that retail margins are low. SSE's retail margin between 2009/10 and 2013/14 has varied between 2.7% and 5.0%, with an average margin of 3.7%. Industry retail margins have varied between 1.8% and 3.8%, with an average of 3.1%. A review of relevant benchmarks for energy retail margins, conducted by Frontier Economics on SSE's behalf, suggests that a reasonable margin should lie between 3.0% and 8.9%.

1.5.3 Within this highly competitive framework, SSE has in fact observed substantial engagement from its customers. If we look at switching (which is not the only metric for measuring customer engagement), 70% of SSE's customers have switched to SSE from another supplier over the last ten years (including many customers who switched away from SSE and then switched back). Of the remaining 30%, the majority have proactively engaged in the market by switching their tariff or engaging with SSE in other ways.

1.5.4 In addition to this, there are further issues overlooked in the Issues Statement, including:

- (a) customers choosing not to switch – SSE's experience is that customers who choose not to switch are not necessarily disengaged with the market—according to recent survey evidence, 55% of those who have never switched supplier are happy with their current supplier;
- (b) customer engagement other than external switching – these forms include browsing (but not buying) on internet comparison sites and meter change requests; and
- (c) the loss of traditional routes to market – the decrease in external switching rates is related to the cessation of doorstep selling and Ofgem's regulatory reforms.



- 1.5.5 Throughout this investigation, SSE hopes that the CMA will dispel some myths surrounding the GB energy market, for example around regional variations in prices. SSE does not charge less competitive tariffs to its ‘in area’ customers and regional differences in SSE prices simply reflect the differences in network costs.
- 1.5.6 This is particularly important in relation to ‘tacit coordination’. SSE is not involved in ‘coordination’ or ‘collusion’, tacit or otherwise, between energy companies. Ofgem’s assertion of ‘tacit coordination’ in the GB energy market is neither valid nor well-evidenced. The GB energy market is not characterised by conditions conducive to tacit coordination: concentration levels are low; new market entrants are disruptive; products are differentiated by value added services and broader products metrics; and cost structures differ from supplier to supplier, meaning that cost shocks would have a highly disruptive impact on any coordination. The recent activities of suppliers further demonstrate an absence of tacit coordination. For instance, SSE is the only supplier to have announced a price freeze until January 2016. If there was tacit coordination in the energy market, it is unlikely that SSE would be alone in the market following this strategy several months after the announcement.
- 1.5.7 In recent years there have been many Ofgem reforms which have delivered better outcomes for customers and stimulated further competition in the retail market. Reforms such as Personal Projection (an estimate of what a customer will spend per year, based on their own usage) and the concept of the Tariff Information Label (a standardised way of presenting key information about each tariff) have a direct, practical benefit for customers. However, certain aspects of these interventions have had unintended adverse effects:
- (a) Ofgem’s drive for tariff simplicity and non-discrimination is curtailing suppliers’ ability to innovate and tailor products to customers’ personal needs and circumstances while leading to a prohibition of previously popular choices such as fixed discount tariffs and prompt payment discounts.
  - (b) One of the key touch points for SSE’s customers is their bill. The current regulatory requirements make the bills lengthy and complex (3-4 pages on average), which can confuse customers.
  - (c) The customer journey through the sales process and the process for switching tariff within a supplier is also lengthy and involves the provision of a considerable amount of information. There is a balance to be struck between providing strong consumer protection and five star customer service, and the current regulations which frustrate customers.
- 1.5.8 In addition, whilst SSE remains supportive of the principles behind the mandatory social and environmental schemes that are paid for through energy bills, SSE has called for a clear commitment to reduce the costs of supplying electricity and gas in order to achieve sustainable reductions in the trajectory of prices. Building on the announcement of changes to the Energy Companies Obligation (*ECO*) and the CPF, a solution to reduce energy prices still further and ensure government policies are funded in the fairest possible way is to take more of these policy costs off energy bill payers and fund them in a fairer and more progressive way, such as taxation.

## **Looking ahead**

1.5.9 Whilst the market is well-functioning, over the coming months SSE will be developing its thinking around the following areas as there may be the potential for positive reforms linked to this theory of harm. These include:

- (a) a wider and more inclusive view or benchmark of customer engagement, including switching rates not only between but also within suppliers, and other measures of engagement such as surveys of customers' views and customers' engagement with price comparison websites;
- (b) working with and listening to customers' views about the access, design and delivery for their bills and other parts of the customer experience;
- (c) a review of the appropriateness of interventions around restricting certain tariffs, whilst ensuring that tariff proliferation does not occur;
- (d) a review of the role that price comparison sites can and could play in the market, including the information that these sites provide to customers and whether suppliers could provide better information to these sites to facilitate better informed decisions;
- (e) lowering and simplifying customer bills by paying for government policy through taxation; and
- (f) examining whether the different regional costs of transporting electricity could be passed on to suppliers as one national charge, allowing for fewer tariffs, a simpler understanding of regional differences and ultimately making price comparisons easier.

## **2. Section 2 - SSE's role in the competitive energy market**

### **2.1 Introduction**

2.1.1 In this section, we provide some brief background to SSE and its generation and supply businesses over time. We then go on to address the characteristics of the market outlined in the Issues Statement and the key developments facing energy generation and supply over the coming years, a fundamental context for the CMA's assessment of the market. We have also commented on the wholesale gas market, which we believe should be considered in the investigation to the extent it has a bearing and influence on the retail market.

2.1.2 SSE notes that Ofgem has already provided the CMA with a useful summary of the history of the energy market as well as the statutory and regulatory framework. The GB markets for generation and supply have evolved continuously since privatisation. Trading arrangements have also changed in that time, with direct implications for the business models of market participants. SSE believes that this background provides the correct context in which the CMA should consider the market over the course of this investigation.

### **2.2 Background to SSE**

2.2.1 SSE was formed in 1998 through the merger of Scottish Hydro Electric and Southern Electric. Scottish Hydro Electric was formed in 1991 when the North of Scotland Hydro Electric Board was privatised. The North of Scotland Hydro Electric Board was founded as a vertically integrated utility in 1943 and at privatisation was one of the smaller utilities to be privatised. Between privatisation and the merger it had expanded its interests to include sales to large customers in England and Wales and had developed new power stations (with JV partners) at Fellside, Keadby and Seabank. Southern Electric was one of the larger regional electricity companies and had sought to expand by developing gas fired generating assets (with JV partners) at Barking, Medway and Derwent as well as some smaller wholly-owned generating assets.

2.2.2 Following the merger, SSE increased its customer base through the acquisition of SWALEC from British Energy and the acquisition of Atlantic Energy. SSE's generation asset base also expanded with the purchase of the remaining equity in Medway, increasing its stake in Barking and acquiring new generation assets at Fiddlers Ferry and Ferrybridge (which gave SSE diversity in its fuelling options), Uskmouth, Fife and Slough. In addition new gas fired plant was developed at Marchwood and a second CCGT built at Seabank.

2.2.3 In recognition of the requirement to reduce carbon emissions, SSE acquired Airtricity (a renewable energy development company) in 2008. Since this time, SSE has built just under 2GW of renewable energy capacity including the construction of the Glendoe hydro-electric scheme as well as the Greater Gabbard offshore wind farm and the Clyde onshore wind farm, two of the largest wind farm developments in the UK. Having invested in excess of £3.5 billion on renewable generation since 2008, SSE now produces more renewable energy than anyone else in the UK from the most

diverse range of sources. Furthermore, SSE has committed to reducing the carbon intensity of generation by 50% (compared with 2006 levels) by 2020.

- 2.2.4 Another significant factor in SSE's development is that SSE's activity is exclusively in the UK and Ireland. This narrow geographic focus means that competing successfully in the GB supply market is of fundamental importance to SSE. Between 2004 and 2008, SSE increased its domestic supply business from under 5 million customer accounts to nearly 10 million accounts (rising from fifth to second biggest supplier). SSE's market share has subsequently eroded, a result of losses to other large suppliers (broadly in proportion to their market share) and, more recently, to newer market entrants (generally out of proportion with their market share). SSE would argue that this evolution of market share is evidence of healthy competition in energy supply.
- 2.2.5 The rate of growth of 'smaller' suppliers (outside the six largest) in the last 12-18 months is significant in SSE's view and demonstrates the changing market dynamics. It is noteworthy that the sustained growth of these suppliers (and new entrants) means they have doubled their market share in slightly over a year. There is no reason to expect that the current market structure in any way precludes such continued growth, with ten suppliers in total now each having more than 250,000 customers.
- 2.2.6 Over recent years, SSE has had to respond to increasingly tough competitive and economic market conditions and has had to take a number of decisions of late, including scaling back some of its capital investment projects as well as closing or mothballing some of its generation assets.<sup>1</sup> Moreover, SSE has embraced market reforms where they can lead to more effective competition and result in benefits for customers, from changing the way it sells energy to customers and simplifying bills, to introducing measures which improve liquidity in the market and increasing the transparency of its activities. Nevertheless, the changing regulatory and political landscape has placed a significant burden on energy companies and SSE welcomes the CMA's acknowledgement of these challenges.
- 2.2.7 SSE is also pleased to see that the CMA has recognised some of the unique characteristics of the energy markets which need to be considered in assessing the nature of competition, the potential Theories of Harm and the root cause of the alleged adverse effects on competition. SSE comments below first on vertical integration and then on the other specific characteristics identified in the Issues Statement.<sup>2</sup>

## **2.3 SSE and vertical integration**

- 2.3.1 One of the most significant factors in terms of SSE's development is that the privatisation of Electricity Boards resulted in Scottish Hydro Electric being vertically

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<sup>1</sup> The decision to mothball plant depends on a number of factors including: (i) the likely future technical life of the plant; (ii) restrictions on operation due to environmental legislation; and (iii) the economics of future operation. The papers provided in response to Annex B3 of the FDL cover reviews of these factors associated with the closure of Ferrybridge units 1 and 2, the closure of Uskmouth, the mothballing of Keadby, the release of transmission entry capacity at Peterhead and the future investments at Slough.

<sup>2</sup> Paragraph 16 of the Issues Statement.

integrated from the outset. The merger between Scottish Hydro Electric and Southern Electric in 1998 created a larger company which retained that vertically integrated structure. For the bulk of its history, SSE has operated its generation and supply activities as one integrated business.

- 2.3.2 As Ofgem reported in its initial submission to the CMA, suppliers owned a significant share of generation capacity in 2000, prior to the move away from the pool with the introduction of the New Electricity Trading Arrangements (*NETA*) in 2001. The ‘cash-out’ arrangements under *NETA*, at the time, provided a greater incentive for suppliers to acquire generation assets and for generation companies to acquire a retail business, in order to better manage imbalance risk. The extension of *NETA* as the British Electricity Trading and Transmission Arrangements (*BETTA*) in 2005 retained this feature.
- 2.3.3 Also of note during the period 2000 to 2005 is the number of companies which exited the market. The exit of various independent retailers is well documented; of potentially greater significance is the failure and exit of TXU Europe in 2002. TXU was a vertically integrated business operating a diverse generation portfolio (including thermal power stations and long-term contracts with generators) and supplying around 5.5 million customers. This experience demonstrates that, whilst vertical integration may provide the most efficient structure for an electricity provider, it is not sufficient to guarantee success in the market. In addition, several other (mainly US-based) generators also exited the market, including Edison Mission, AEP and AES. These exits provided SSE the opportunity of acquiring the coal assets at Fiddlers Ferry and Ferrybridge at a time when no other generators were interested in owning and operating these stations.
- 2.3.4 Up to 2010, vertical integration was accepted as the norm within the industry and had:
- (a) in the case of SSE, provided a platform for a highly competitive price offering;<sup>3</sup>
  - (b) encouraged new entrants into the generation market—Intergen, BGI and ESB—by providing power purchase agreements to new ventures; and
  - (c) reduced the market position of the two main generation companies formed at privatisation.
- 2.3.5 From 2010 onwards, SSE adapted its business model in response to the changing energy market and to improve transparency and liquidity:
- (a) reporting in line with the requirements of the Consolidated Segmental Statement (*CSS*);
  - (b) reporting supply as a separate business segment from 2012;
  - (c) contributing to, and benefitting from, increasing market liquidity (see Sections 3.4 to 3.15 below);

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<sup>3</sup> SSE’s standard dual fuel direct debit tariff was the cheapest on average for each of the five years up to and including 2009 when compared to the other major suppliers.

- (d) providing advantageous credit terms for new suppliers which went beyond normal business practice (see paragraph 3.5.4 below);
- (e) moving toward separation of Supply from other business segments by March 2015; and
- (f) investing in IT systems to improve the auditability of trades between businesses resulting in improved transparency of transfer pricing.

## **2.4 Non-storability of electricity and the need to balance generation and demand in real time**

- 2.4.1 We agree with the CMA that this overriding requirement is a special feature of the electricity market (with gas being storable). Current arrangements which give National Grid, as the system operator, clear responsibility for balancing the system in real time have been successful in terms of meeting this basic requirement. Market participants are incentivised to manage their own individual half-hourly positions to be close to balance and again this seems to be generally successful. Nonetheless, we are open to proposals which may help to improve or simplify arrangements (such as the currently proposed cash-out reform) as long as the essential need to maintain system balance is not compromised.

## **2.5 Natural monopoly characteristics of transmission and distribution**

- 2.5.1 SSE agrees that the natural monopoly characteristics of electricity and gas transmission and distribution networks are a key feature of the energy market. The GB energy networks have, since privatisation, been subject to intensive regulatory scrutiny, including the setting of incentive-based price controls. Recent regulatory developments, not least the outcome of Ofgem's RPI-X@20 review in 2008, have significantly increased the transparency of network activities, services and information. Notably, reforms to code governance arrangements and regulatory policy on tariff predictability and volatility have enabled energy suppliers to better understand the basis for, and future levels of, networks charges. Most recently this has been demonstrated with Ofgem's confirmation on 30 July 2014 that 2015/16 tariffs for electricity distribution will be based on its RIIO-ED1 Draft Determinations.
- 2.5.2 As energy networks are natural monopolies, a single price-regulated network provides a more cost effective and better service to consumers than a competitive market model would. Across all of the GB electricity and gas distribution and transmission networks, the robust customer-focused approach to regulation adopted by Ofgem has driven substantial improvements in customer service and cost efficiency year-on-year since 1990. For example, between 2001/02 and 2010/11, the number and duration of power cuts experienced by electricity customers has reduced by 21% and 17% respectively.<sup>4</sup> In gas and electricity transmission, the four network licensees achieved £700 million in cost savings between 2007/08 and 2012/13, and customers now benefit from these savings during the RIIO-T1 price control.<sup>5</sup> Economic regulation has also supported the extension of energy networks as a social

<sup>4</sup> Ofgem (30 March 2012), *Electricity Distribution Annual Report for 2010-2011*, Ref 46/12.

<sup>5</sup> Ofgem (21 March 2014), *Transmission networks: Report on the performance of Transmission Owners during the regulatory periods TPCR4 and TPCR4RO 2007-08 to 2012-13*.

good through, for example, the gas distribution network extensions scheme for the fuel poor, which benefited 44,000 households between 2008/09 and 2012/13.<sup>6</sup>

- 2.5.3 Accordingly, SSE supports the CMA's general position that it is not minded to investigate further the regulation of revenues from transmission and distribution networks.

## **2.6 Volatility of demand and generation costs**

- 2.6.1 The recognition in the Issues Statement of the volatile nature of the demand and costs of generation is welcomed. In particular it is worth noting that GB is now a net importer of fuel. One of the main cost components of electricity is the wholesale gas price. The performance of the GB gas market in terms of liquidity, volatility, and security of supply is therefore a key influence on the liquidity and volatility of electricity prices and the long-term security of power supplies.
- 2.6.2 It is important that the CMA considers the full extent of the factors which lead to volatility (which are often outside of the control of the supplier) and the benefits of a business model which helps protect customers from being overly exposed to wholesale price risk and facilitates investment decisions by companies and lowers the financing costs of those investments. This is considered in greater detail in Section 3.15 below.

## **2.7 Other sources of risk and variation**

- 2.7.1 The risks presented by changes in wholesale fuel costs discussed above are unavoidable, short-term features of electricity markets which must be managed by suppliers.
- 2.7.2 In addition, suppliers face considerable short-term uncertainty over costs as a result of the weather, which can move energy demand substantially and have a large impact on costs. To the extent that costs in supply are fixed, mild winters, for example, can have a material effect on retailers' ability to cover their costs. Similarly, suppliers are exposed to other medium-term factors that affect customer numbers, customer usage and/or customer mix (for example, by tariff type).
- 2.7.3 The mechanism by which changes in total usage and other factors affect SSE's costs are much more complicated than can be fully covered from a risk perspective by a relatively simple tariff structure comprised of a unit rate and standing charge. Concepts of 'fixed' costs and 'pass-through' can be misleading simplifications which lead to an understatement of the risks associated with financing the supply business.
- 2.7.4 In particular, obligations such as the ECO have complex arrangements for setting the liability so that the market share of usage in a previous year determines the share of the overall obligation apportioned to a supplier in the current year.

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<sup>6</sup> Ofgem (21 March 2014), *End of Period Review of the First Gas Distribution Price Control (GDPCR1)*.

## **2.8 Small-scale customers do not respond to short-term wholesale price changes / methods of rationing are blunt**

- 2.8.1 The limited scope for short-term responses by small-scale customers noted by the CMA is something which may change in the future. Certainly there are a number of technologies emerging which should allow demand response with minimal disruption to customer lifestyle. In the future, smart meters should enable the benefits of such initiatives to be properly measured and rewarded. The challenge is to ensure that commercial arrangements in the market do not operate as a barrier to the introduction of such technologies. There is an Ofgem work stream in the Smarter Markets Programme taking this forward.

## **2.9 Prevalence of regulation**

- 2.9.1 The Issues Statement rightly points out that regulatory and policy interventions are prevalent in both the gas and electricity markets. There has been a general increase in the number of separate regulatory initiatives and their complexity over time. Whilst SSE has welcomed many of these interventions, this has nevertheless meant that the costs of understanding, interpreting and complying with regulation have increased.
- 2.9.2 All market participants have had to operate in a market which has an increasingly complex and onerous set of regulatory obligations. For example, in 2007, the gas and electricity supply licences were 65 and 63 pages long respectively. By 2011, they had increased by 45% to 238 pages and in 2014, following the implementation of RMR, the supply licences combined constitute 777 pages, an increase of over 500% since 2007. In addition to this, suppliers must meet a plethora of environmental and social policy obligations as well as other market participation requirements. SSE believes that this increased regulatory burden over recent years may well act to constrain competition and these concerns are set out in more detail in our response to Hypothesis 4(c) in Section 6.5 below.
- 2.9.3 Suppliers have some scope to control these costs by implementing efficient systems. However, the challenging timelines allowed by Ofgem and the government to implement some of its measures has inhibited this. Often, manual solutions have been needed in the short-term to meet implementation deadlines, adding further (avoidable) costs since enduring IT changes also had to be implemented in order to provide robust, long-term solutions.
- 2.9.4 Far more significant, however, than the financial cost of such regulatory changes is the opportunity cost. Implementing the Retail Market Review (**RMR**) and other regulatory requirements in 2013 occupied a significant part of SSE's available IT resources and greatly reduced SSE's ability to implement business changes which might otherwise have benefitted customers and conferred a competitive advantage.
- 2.9.5 One of the major costs for suppliers is that of implementing new billing systems or amending existing (live) systems to address new regulatory requirements. Billing is one of the most important points of contact between suppliers and customers, yet the content of the bill is dominated by regulatory requirements. The complexity of bills is often a source of negative feedback from SSE's customers and SSE is keen that current regulations are examined to allow it to simplify bills as far as possible.

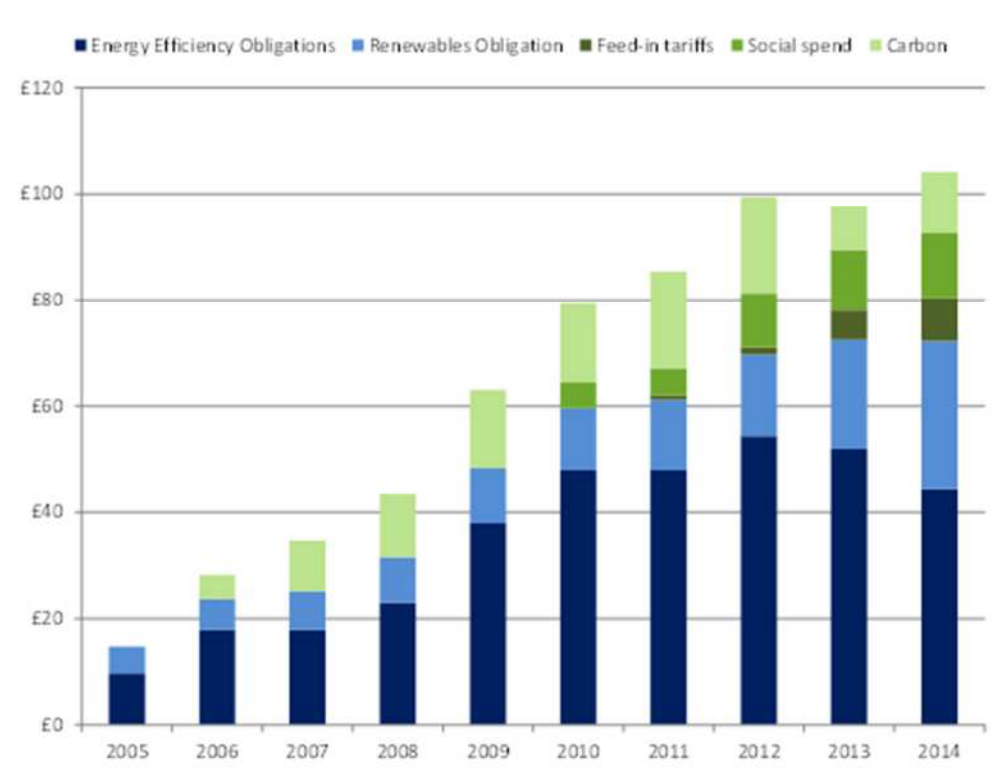


2.9.6 Furthermore, a number of other regulatory interventions have had unintended consequences, particularly with regards to customer engagement, and these are further explored at Section 6.5 below. That section also includes SSE's view of where changes are required to the current regulations in the interest of customers.

## 2.10 The external costs of climate change

2.10.1 SSE welcomes the acknowledgement in the Issues Statement on the increasing costs of tackling climate change. Whilst SSE fully supports the initiatives to address climate change (and is the largest generator of renewable energy in the UK), the current investigation needs to take into account the unpredictability of costs associated with the various government schemes which are funded by suppliers. The number and complexity of these schemes have grown substantially over the past decade and SSE has set out a summary of the main policies in Annex 2.1. The overall costs of these schemes for a typical domestic dual fuel customer have risen from around £16 in 2005 to over £100 in 2014.<sup>7</sup> These costs will continue to rise as the cost of existing schemes increases and new schemes are introduced.<sup>8</sup> As a result, SSE has consistently called for these costs to be removed from customers' bills (which means all customers pay the same regardless of ability to pay) and to be paid for in a more progressive way, such as through general taxation.

**Figure 2.1: Costs of government schemes for a typical dual fuel customer**



Source: SSE price tracker.

Notes: These data represent SSE's estimates of the costs attributable to a typical dual fuel customer. Years denote financial years, e.g. 2014 = April 2013 - March 2014.

<sup>7</sup> Based on SSE's internal price tracker.

<sup>8</sup> Such as CfDs and the Capacity Mechanism.

- 2.10.2 The costs of some of these schemes can also be volatile and unpredictable at the point customers' tariffs are set, for example the CfD supplier obligation. The costs associated with complying with schemes such as energy efficiency obligations and Feed in Tariffs (*FiTs*) are set out in more detail in Annex 2.1. This introduces additional financial risk into the retail business and is ultimately reflected in the associated cost of financing the business. As the number and size of the schemes have grown, the level of risk has also grown.
- 2.10.3 The latest breakdown of costs for an SSE domestic customer is available from the CSS for the year to March 2014. This shows that the trend towards an increasing burden from government schemes has continued to the point where they account for some 11% of a typical dual fuel bill. As well as accounting for a large proportion of the bill, these costs are also uncertain, in part because the rules of the schemes have often been amended at short notice. This introduces significant risk to the business as the variability in a cost category this big can clearly have a material impact on profitability.
- 2.10.4 The complexity and cost of these schemes can act as a barrier to expansion for suppliers. The schemes vary in the extent to which suppliers are able to control and manage costs, but in general the main cost drivers (e.g. level of obligation or subsidy) are exogenous and therefore common across suppliers. In particular, suppliers with fewer than 250,000 customers are completely exempt from some of the obligations (in particular ECO), leading to approximately a 7-8% distortion in prices. Once such suppliers exceed 250,000 customers, their level of obligation steps up until they reach 500,000 customers, at which point they must comply in full. This exemption and taper system creates a barrier to expansion as suppliers see their costs and administrative burden rise rapidly as they grow. Accordingly, SSE suggests that the arbitrary 250,000 threshold should be reconsidered or removed.

## **2.11 Wholesale gas**

- 2.11.1 The Issues Statement suggests that the CMA does not intend to review competitive conditions in the wholesale gas market. SSE believes that this could lead to an asymmetric review, with the CMA looking at vertical integration in the electricity market, but not considering vertical integration issues in connection with wholesale gas. Any asymmetric review would be undesirable given the presence and importance of dual fuel retail offerings (i.e. electricity and gas combined retail offerings). Accordingly, as the CMA has done in relation to electricity, SSE considers that the CMA should review wholesale gas elements to the extent they have a bearing and influence on the retail market (including any dual fuel offerings). This approach would be consistent with that taken for electricity and would be within the terms of reference.
- 2.11.2 SSE also notes that others have voiced similar concerns about the exclusion of the wholesale gas market from the investigation. Most recently, Tim Yeo (Chair of the Energy Committee) expressed concern in his letter to the CMA that the investigation

would not cover “the dominant fuel powering our electricity system” and the “prime driver of recent increases in retail energy prices”.<sup>9</sup>

## **2.12 SSE’s view is that the market is, taking into account recent reforms, functioning efficiently and serving consumers well**

2.12.1 As SSE previously set out in its Response to the Consultation, SSE believes the GB energy market is competitive and has brought significant benefits for the customers. For example:

- (a) concentration in electricity generation is low and amongst the lowest across the EU;
- (b) concentration in the electricity retail market is also comparatively low when compared with other markets in equivalent jurisdictions, with ten large suppliers currently operating and 15 smaller players;
- (c) the European Commission has reported that the UK domestic gas and electricity end prices were the cheapest and fifth cheapest, respectively, in the EU. This is especially striking given the UK is a net importer of fuel and therefore faces the same underlying fuel costs as other countries. Moreover, climate change measures are recovered in the UK through customers’ bills rather than through general taxation as happens elsewhere in the EU; and
- (d) the profits SSE earns from its generation and supply business are not excessive.

2.12.2 Against that background, the market does not evidently exhibit structural features consistent with an adverse effect on competition. Nevertheless, SSE recognises that the operation of the market has become increasingly contentious with the result that there is a need to improve public understanding of the sector and to restore trust.

2.12.3 The key political and public concern has been the increase of energy prices over time. As shown in Figure 4.1 below, average dual fuel tariffs across the six largest suppliers have more than doubled in nominal terms since 2004. However, that increase was almost entirely driven by external cost pressures that were largely beyond the control of suppliers—namely (i) wholesale price increases (driven in the main by changes in international energy prices); (ii) increases in transmission and distribution network costs under Ofgem’s price control regime; and (iii) climate change and other government initiatives. By contrast, the available evidence suggests that industry supply costs—which were the one cost component that was largely under the control of suppliers—remained largely unchanged over the period.

2.12.4 It is against this important background that the CMA should consider the four Theories of Harm set out in the Issues Statement.

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<sup>9</sup> Letter from Tim Yeo to the CMA dated 30 July 2014, available at <http://www.parliament.uk/documents/commons-committees/energy-and-climate-change/Lord-Currie-300714.pdf>.

### 3. Response to 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**

#### 3.1 Introduction

- 3.1.1 SSE recognises that, in the past, the GB market may have had lower levels of liquidity than was considered desirable for retailers and generators. However, as a result of the recent attention that has been paid to liquidity and the measures introduced, concerns are now greatly reduced. This attention has focused liquidity in the core markets that suppliers need to hedge their risks appropriately, in particular ‘day-ahead’ and ‘month-ahead’ products.
- 3.1.2 Liquidity is likely to improve further as a result of the SPLC which came into force on 31 March 2014 (see paragraphs 3.4.2 to 3.4.5 below). SSE believes that these measures will initiate (and in some products have already initiated) a virtuous cycle whereby increases in liquidity stimulate trading resulting in greater levels of liquidity. SSE would argue that the GB market is well-functioning on any reasonable measure.
- 3.1.3 SSE believes that, once it has assessed the available evidence relating to liquidity levels in the market, the CMA will find that:
- (a) liquidity for the most important products has increased consistently over the last five years, with stand-alone retailers able to access sufficient products and liquidity to build a cost-effective hedging strategy;
  - (b) the evidence on liquidity and balancing costs does not support the view that there are material costs that follow from low liquidity and/or opaque prices;
  - (c) market rules are likely to have created benefits to vertical integration but this does not necessarily create a barrier to liquidity;
  - (d) however, to the extent that the CMA is concerned about liquidity (which, for the reasons set out below, SSE argues it should not be), the CMA should consider the role of certain government policies, in particular the impact of the Carbon Floor Price (*CFP*), on liquidity for longer term products; and
  - (e) vertical integration does not in and of itself limit liquidity in the wholesale market, in particular given the importance of liquidity to all firms in the market, and brings benefits to customers through a more stable investment environment and reduced retail price volatility.
- 3.1.4 The CMA no doubt appreciates that electricity prices are inherently volatile and subject to unpredictable demand and supply shocks driven by a wide range of factors (for example, weather, economic activity and geopolitical developments that affect international markets for primary fuels). Therefore, regardless of liquidity levels, forward prices can only represent the market’s best estimate of the perceived value of traded products taking account of all currently known factors. Market prices therefore evolve over time right up until delivery: it is simply an expression of an inherent

feature of all liquid markets to observe that forward (or futures) prices are not the same as spot prices. Measures introduced by the Department of Energy & Climate Change (*DECC*) through the EMR will usefully provide investors in generation greater certainty through reducing their exposure to wholesale prices.

### **3.2 Liquidity in wholesale electricity markets**

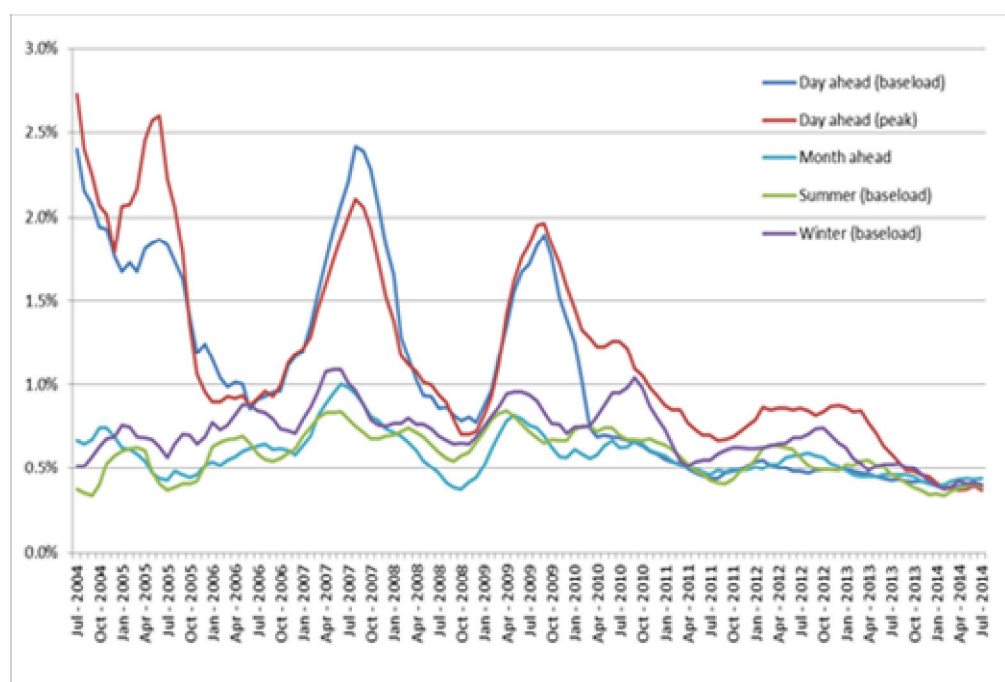
- 3.2.1 The Issues Statement describes five mechanisms through which low levels of liquidity and opaque prices could be having a detrimental effect on consumers. The CMA states at paragraph 37 that it will assess the extent to which three recent reforms (electricity imbalance pricing, SPLC and EMR capacity auctions) are likely to address these concerns.
- 3.2.2 However, before turning to this theory, SSE considers it vital that the CMA first makes an independent assessment of the degree to which liquidity is in fact “*too low*” in the GB market and can be expected to remain so in the medium term. It would not be sufficient simply to accept the picture painted in the SMA or the Decision. In SSE’s view, the CMA will find that liquidity has been improving continuously over the last five years with the most important products (those required to build a hedging strategy) available at well-informed prices (that is, where the bid-ask spread is relatively narrow).
- 3.2.3 In making this assessment, the CMA must recognise certain specific characteristics of electricity supply, namely that electricity is largely non-storable and demand must be matched with supply in real time. As a result, the market is set up to trade electricity for delivery in short, half-hour, blocks resulting in a large number of separate electricity products defined according to: (i) the delivery date/time; (ii) how far forward the electricity is traded; and (iii) the volume and shape of the product (for example, peak or baseload). In addition, there is diversity in the products that market participants wish to trade. For example, retailers may want to trade in different shapes and clip sizes depending on the size, type and mix of their customers. Contrary to the statement at paragraph 26 of the Issues Statement, electricity is not a homogenous product when viewed in the context of the multiple products available.
- 3.2.4 Given the range of available products, it is unrealistic to expect all wholesale electricity products to be frequently traded and have high liquidity. Indeed, it is necessary and preferable for participants to concentrate liquidity in relatively few products, which can, for the most part, meet the needs of participants.
- 3.2.5 It also follows that comparison with other markets, such as gas and oil, where the products are more homogenous and storable, are not necessarily meaningful for the purpose of assessing liquidity in the electricity market. In addition, there are further important differences between electricity and gas that mean that the latter should not be used as a comparator. First, there is a global market for wholesale gas and therefore a far greater number of market participants and potential for trading. Second, the gas market is less exposed to regulatory uncertainty than electricity, making it a more natural choice for speculators wishing to trade. Related to this, the high correlation between gas and power prices in recent years has meant some market players could have used gas contracts as a proxy for power hedging. Third, the tax regime that applies to the gas market in the UK (in which a number of producers have

their tax liabilities measured with reference to the day-ahead gas price) results in gas producers hedging the majority of their volumes at day-ahead stage, which could boost liquidity for that product.

- 3.2.6 The question for electricity markets is whether there is sufficient liquidity across enough products to enable retailers (including both vertically integrated and non-vertically integrated) to manage their risks appropriately. For the reasons set out below, SSE believes that recent developments mean this is now the case.

### **3.3 Factual description of liquidity in forward wholesale markets**

- 3.3.1 Liquidity is essential to the effective management of risks associated with power generation and the uncertainty around customer requirements. For example, unexpected failures of power plant or sudden changes in production from intermittent wind production can result in a requirement to buy or sell energy at short notice.
- 3.3.2 There has been a considerable amount of work already undertaken in recent years (i) to understand the extent to which liquidity is a concern in the GB electricity market; and (ii) to launch measures to increase liquidity, including measures that have been implemented voluntarily by some companies. Measures to improve liquidity have been effective in increasing the incentive of market participants to trade, particularly with respect to certain products, leading to further improvements in liquidity. SSE's view is that liquidity is now at a level that is self-perpetuating.
- 3.3.3 Figure 3.1 below shows the marked increases in liquidity in five core wholesale electricity products over time and most notably since late 2009. This is in contrast to the reductions in liquidity that have been experienced in many other major commodity markets. As is standard when considering trading in electricity products, liquidity is proxied by the size of the bid-ask spread, with lower bid-ask spreads arising in markets where liquidity is higher. A bid-ask spread of around 0.5% is consistent with the spreads seen in electricity markets in other countries. For example, in Germany, which is widely considered to be a liquid market, spreads over the last year (July 2013 to June 2014) have been 0.62% for 'annual' power and 0.34% for 'day-ahead' power.

**Figure 3.1: Bid-ask spreads (6 month rolling average)**

Source: ICIS Heren.

Notes: Data is collected from OTC trades of these products. Note that the extent of falling spreads is the same when alternatively measured on an absolute (£) basis.

- 3.3.4 The spreads shown in Figure 3.1 are for the most frequently traded products, which are also those that are likely to form the core of a supplier's hedging strategy.
- 3.3.5 The set of products shown in the chart is limited by data availability. The data source, Heren, is widely recognised as having the most robust data on bid-ask spreads. For the reason given above, SSE believes that these are important products for suppliers, but notes that the market is not limited to these five products.
- 3.3.6 There are some products (for example, further forward peak products) for which liquidity is lower, but there are good reasons for this besides the need to concentrate liquidity. For some of these products, there is not a great need for trading: for example, retailers have a limited requirement to trade more than two years ahead due to uncertainty around customer volumes and because retail prices can be adjusted over this period.
- 3.3.7 For other shaped or option contracts, the prices at which products can be offered may make them unattractive to retailers. These products are typically complex, often bespoke (unique to the circumstances of the counterparty's existing assets, other contracts and customer base) and, owing to the management time necessary to quantify the risks entailed, associated with substantial transaction costs for a generator. These products are often designed to require generators to take on risks that would otherwise fall to be managed by the retail supplier, and the transfer of these risks to another party will inevitably only be commercially viable at a price premium. Owing to the uniqueness of the specifications of such contracts according

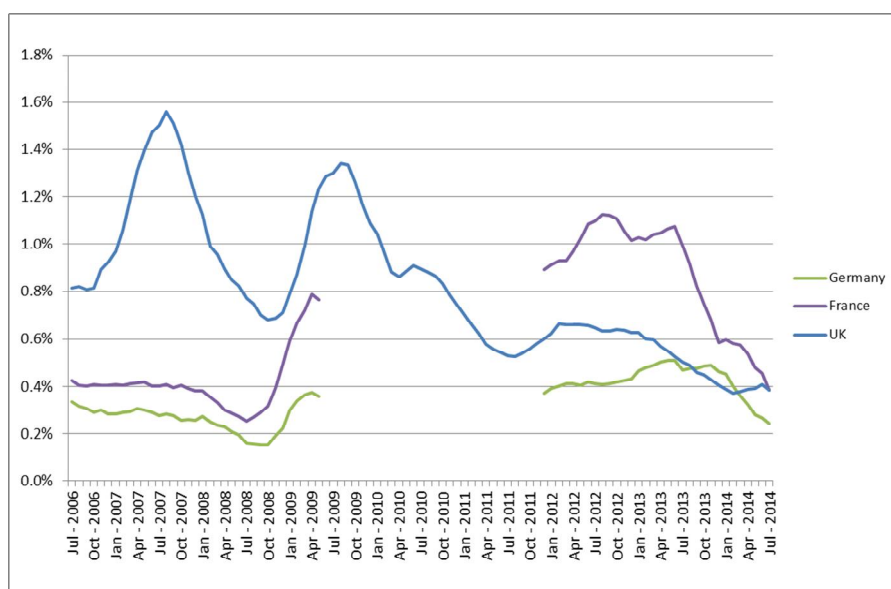
to the needs of each counterparty and the small number of parties capable of offering such contracts, it is also inevitable that such products will be thinly traded. High levels of liquidity for these products should therefore not form part of a “*realistic market benchmark*”.

3.3.8 It is also the case that there has been some reduction in the volume of trades occurring in longer term products (e.g. greater than one year ahead). SSE’s view is that this results from:

- (a) policy and regulatory uncertainty (for example around the CFP, EMR and the CMA reference), which has created uncertainty around forward prices—the effect of government climate change policies on liquidity is discussed further in paragraph 3.14.3 below;
- (b) lower volatility in the gas market has reduced the opportunity to trade ‘spark spreads’. In addition, low profit margins for gas plants have reduced plants’ incentives to trade their output further ahead (since this would effectively mean locking in spreads that are insufficient to cover fixed costs); and
- (c) increased financial regulation following the introduction of EMIR and MiFID (and the Dodd Frank Act in the US), which has led to banks ceasing to trade in energy markets and the GB power market over the last two years.

3.3.9 Despite this, evidence suggests that the GB market now compares favourably with other European markets in terms of the liquidity of core products. Figure 3.2 shows the trends in bid-ask spreads in GB, Germany and France for ‘seasonal’ and ‘annual’ products since 2006. Figure 3.3 shows trade volumes in the GB day-ahead auctions compared to those in Germany, France and Netherlands since April 2011.

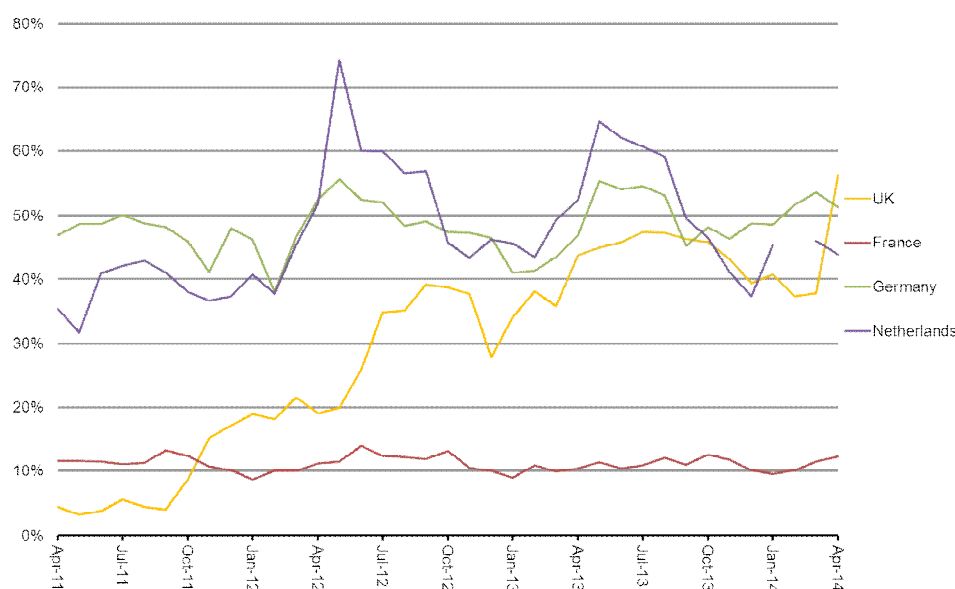
**Figure 3.2. Bid-ask spreads for ‘annual’ power (6 month rolling average)**



Source: ICIS Heren.

Notes: Data is collected from OTC trades. For UK data, the average of the Winter and Summer spread was used to approximate the equivalent spread for an annual product.



**Figure 3.3: Day-ahead auction volumes as a percentage of total generation**

Sources: Platts, N2EX, APX, Eurostat.

3.3.10 Finally, SSE notes that the evidence it presents on liquidity above is consistent with that presented most recently by Ofgem in its paper on liquidity supporting the introduction of SPLC.<sup>10</sup> The Ofgem evidence shows that:

- (a) there is growing liquidity in the summer and winter baseload products—Ofgem has used the same source of data that SSE has presented above, to which SSE has added data for ‘month-ahead’ and ‘day-ahead’ (peak and baseload) products;
- (b) there has been a dramatic increase in the volumes traded on N2EX since its launch, only part of which can be explained by SSE’s strategy to place all of its generation on the exchange and all of its retail requirements;
- (c) Ofgem notes that the proportion of trading accounted for by longer term products has fallen in recent years, with which SSE would agree; and
- (d) Ofgem reports that churn in the market increased to 2009 but appears to have declined until 2013.<sup>11</sup> SSE would argue that churn is a relatively blunt measure of liquidity, however, since it takes no account of the effect that concentrating trading in key products has on liquidity in those products. Rather, it is preferable to look at a range of evidence, in particular on volumes and bid-ask spreads to inform liquidity, as SSE has done above. In any event, in SSE’s view, the UK churn rate compares favourably with those in other European countries, where trading opportunities are greater due to the considerably higher degree of interconnection.

<sup>10</sup> Ofgem (12 June 2013), *Wholesale power market liquidity: final proposals for a ‘Secure and Promote’ licence condition*, Ref 88/13.

<sup>11</sup> Churn measures the number of times a unit of generation is traded before it is delivered to the final customer.

- 3.3.11 For ease of reference, Annex 3.1 reproduces the charts contained in Appendix 2 of Ofgem's 2013 *Wholesale power market liquidity: final proposals for a 'Secure and Promote' licence condition*.

### 3.4 Drivers of increased liquidity and predictions for the medium term

- 3.4.1 Improvements in liquidity that have been achieved to date have been driven by a combination of industry initiatives, SSE specific initiatives and regulatory measures. The contribution of measures initiated by the industry and individual firms reflects the interest that all participants have in more liquid markets. As discussed at paragraphs 3.14.3 to 3.14.5 below, the generation portfolios of vertically integrated suppliers (and retail portfolios of generators) are such that all retailers and generators are reliant on the market to a considerable degree.

- 3.4.2 The specific drivers of increased liquidity are as follows:

- (a) **Industry initiatives.** The N2EX trading platform was set up by industry participants in January 2010 with the aim of establishing a liquid and transparent UK power market providing a robust index price for power. Since 2010, volumes traded have grown rapidly with 139.4 TWh of power traded on the 'day-ahead' auction in 2013 (see Figure 3.3 above).
  - (b) **SSE initiatives.** SSE has a strong interest in developing and maintaining liquid markets. To this end, SSE has introduced a number of initiatives:
    - (i) since August 2012, SSE has placed 100% of its available generation and 100% of its demand requirement in the N2EX day ahead auction;
    - (ii) SSE has publicised its commitment to trade with any party, including smaller suppliers, by introducing its own small supplier commitment in 2012 and writing to small suppliers when it introduced this measure (see paragraphs 3.5.4 to 3.5.5 below for more detail); and
    - (iii) SSE's small supplier commitment was superseded by Ofgem's 'Supplier Market Access' condition in March 2014, although SSE continues to provide bespoke trading agreements to a number of small suppliers with [§] actively trading with a cumulative volume of [§] TWh since April 2013.
  - (c) **Regulatory measures.** On 31 March 2014, Ofgem introduced the 'Supplier Market Access' licence condition, on the eight largest generators, and 'Market Making' licence condition, on the six largest vertically integrated companies—collectively, the SPLC. These conditions require the companies (i) to follow a set of rules when trading with small independent suppliers to ensure fair access; and (ii) to develop liquidity by playing a 'market maker' role (where suppliers must post the prices at which they will buy and sell specific wholesale electricity on power trading platforms, and where these prices are bounded by a maximum bid-ask spread).
- 3.4.3 The effect of the market maker requirement under SPLC will now give small suppliers access to a wider range of products at well-informed prices that, in theory, they have not had access to previously. However, since SPLC was launched, there has

been limited take up of the products available. Only [X] suppliers have approached SSE about the service in the last four months and, in the first three months, only [X] suppliers had traded in total around [X] GWh, with some of the longer-dated products not traded at all.

- 3.4.4 This low uptake may partly reflect the immaturity of the scheme but, in SSE's view, it also suggests that there has not been unmet demand for the products, consistent with SSE's view that concerns about liquidity are overstated.
- 3.4.5 Nevertheless, the measures provided for under the SPLC, plus the continued efforts of the industry to raise liquidity, mean that the GB market should be considered to be well functioning in terms of the liquidity in the market.

### **3.5 Liquidity sufficient for independent suppliers to manage risks**

- 3.5.1 Given the discussion above, it is clear that there is now a relatively high degree of liquidity associated with the trading, particularly for near-term products but also for some forward products. SSE's view is that this degree of liquidity across core products (and the availability of products in smaller clips sizes) now gives smaller retailers an ability to match, in broad terms, the hedging strategy that can be achieved by a vertically integrated retailer (which may use the physical hedge of its generation assets in combination with trading of power). Further, the increase in liquidity (and lowering of liquidity costs) means that a smaller retailer can do this in a way that is cost-effective such that it can be competitive in the retail market.
- 3.5.2 The increased ability of smaller retailers to develop effective hedging strategies derives not only from the increased liquidity in core products but also from the fact that prices in the more thinly traded markets are at least guided by reference to the liquid products. Further, the market maker condition under SPLC limits the bid-ask spread on 15 products that the largest six generators are required to sell. This implies that, even in the absence of a high degree of liquidity for those products today, the products are still available to retailers with low bid-ask spreads.
- 3.5.3 Figure 3.4 below shows the list of products that are covered by the market maker condition and the allowed bid-ask spread. As noted at paragraph 3.4.3 above, the low uptake of suppliers to the SPLC market maker condition also suggests that there has been no unmet demand for the products.

**Figure 3.4: Products and maximum spreads under the market making obligation**

Baseload		Peak	
Month+1	0.3%	Month+1	0.7%
Month+2		Month+2	
Quarter+1		Quarter+1	
Season+1		Season+1	
Season+2		Season+2	
Season+3	0.5%	Season+3	1%
Season+4			

Source: Ofgem.

- 3.5.4 Although not connected with liquidity *per se*, SSE's own small supplier commitment lowered costs of trading for smaller suppliers through offering up advantageous credit terms to small suppliers. This was achieved by not requiring the collateral for trades with SSE up to a certain value. SSE believes that this was a unique proposition which encouraged new smaller suppliers to grow their business at a lower cost than would otherwise have been the case.
- 3.5.5 SSE's small supplier commitment also has other favourable terms:
- (a) any 'normal' contract volume is offered (including no minimum clip size);
  - (b) benchmarked market prices for that volume are offered (the mid-point of the prevailing bid-ask spread for that product); and
  - (c) suppliers can trade in and out of the position as many times as they like.
- 3.5.6 In considering the ability of smaller suppliers to develop cost-effective hedging strategies to manage their risk, it is also important to recognise that not all small suppliers are entirely reliant on the wholesale market. Many smaller retailers in the market either own generation technology or have long term contracts or arrangements in place for energy supply. For example:
- (a) Utility Warehouse has a 20-year contract with Npower for the supply of its wholesale gas and electricity requirements; and
  - (b) First Utility has an energy-buying deal with Shell, under which Shell supplies wholesale energy to First Utility and also has an equity stake in that entity.
- 3.5.7 The fact that the market contains 18 smaller suppliers, with four growing particularly strongly, suggests that liquidity is not acting as a barrier. The growing strength of the smaller suppliers, and evidence of their ability to compete, is discussed further in paragraphs 6.2.5 to 6.2.8.

### 3.6 No evidence of material costs associated with low liquidity or opaque prices

3.6.1 The Issues Statement refers to five potential costs associated with low liquidity or opaque prices that could be acting to the detriment of end consumers. These are:

- (a) **High transaction costs** associated with managing balancing risk, which could be felt disproportionately by smaller retailers that have fewer options for managing balancing risk. The concern expressed in the Issues Statement is that higher transaction costs for smaller retailers limit their ability to compete, reducing competition in retail markets.
- (b) **High hedging costs** associated with thinly traded markets and a lack of financial instruments. The CMA hypothesises that associated costs are more keenly felt by non-vertically integrated retailers due to their higher need to trade to manage their positions. Again the concern is expressed that smaller retailers face higher costs and so are less able to compete.
- (c) **Prices provide a poor guide to action** since they do not accurately reflect the future value of spot prices in the market and retailers and/or generators that are reliant on the price signals are consequently more reluctant to act due to the higher risk that they bear relative to those not reliant on price signals. The concern expressed is that a barrier to entry arises, however it is also hypothesised that vertical integration could result in “*operational efficiencies*”.
- (d) **Manipulability of prices** in thinly traded or opaque markets. The concern is that in such markets, where prices are determined by few trades, the prices can be influenced by larger firms. The specific theory of harm appears to be that larger firms could influence prices to their own benefit.
- (e) **A lack of transparency** leading to public mistrust. If there are opaque wholesale prices, this could feed into broader public concerns about the activities of generators and suppliers. The concern is that the resulting lack of trust can lead to policy and/or regulatory instability that undermines the incentive to invest.

3.6.2 As is clear from the discussion of these issues below, when the CMA investigates the extent to which these hypotheses are borne out in practice, it will find that the evidence does not support concerns flowing from low liquidity or opaque prices.

3.6.3 The focus of the discussion below is on low liquidity. However, it follows that, if there is a high volume of trading in products and high liquidity, prices will be well-informed and not opaque. Thus, SSE interprets the CMA’s hypothetical concerns relating to low liquidity and opaque prices as being one and the same thing, and in dealing with liquidity concerns below SSE also responds to the CMA’s concerns relating to opaque prices. However, as noted in paragraph 3.1.4 above, even where liquidity is high for future products and prices are well-informed, there will inevitably be a considerable degree of uncertainty in those prices given the inherently volatile nature of electricity markets. This point is discussed further in paragraph 3.9.1 below.

### 3.7 High transaction costs

- 3.7.1 The CMA suggests that the market rules, which require generators and suppliers to manage their positions, result in a requirement to trade up to one hour before delivery and that this can be expensive. It is not clear whether the CMA suggests that this is of concern in and of itself. The need to trade is unavoidable given the unpredictability of demand in the very near term, and this applies to both vertically integrated and non-vertically integrated firms alike. The bilateral market was set up to provide incentives for generators and retailers to balance supply and demand for electricity efficiently, and to compete on their ability to do so.
- 3.7.2 The CMA goes on to say that non-vertically integrated suppliers are likely to have fewer options to manage their positions close to real-time than vertically integrated suppliers and that this could result in greater balancing costs. There may, in the past, have been some value in having an option to self-supply as an alternative to trading, but in an increasingly liquid and competitive market the decision to self-supply is likely to reflect the long term strategic position of the company rather than a specific concern about liquidity or balancing costs.
- 3.7.3 In SSE's view, smaller retailers do not appear to bear materially higher balancing costs than the larger suppliers.
- (a) **First**, many of the smaller retailers are vertically integrated to a degree and/or have long term supply arrangements.
  - (b) **Second**, an analysis of balancing positions for 11 suppliers between May 2012 and April 2014 shows that non-vertically integrated firms are not, on average, materially worse at managing their balancing positions than vertically integrated firms. The average error for the largest six vertically integrated firms was 2.23% compared to 3.37% for the five smaller retailers for which data is available.

This small difference is likely to be due to some of the major factors in managing balancing risk (in particular, accuracy in demand forecasting and historic understanding of the impact of weather on customer demand) which are not related to whether a firm is vertically integrated. Factors such as technical forecasting skills and the nature of customer base are likely to be more important (smaller retailers often have a greater proportion of domestic customers and demand uncertainty may be greater for these customers compared to industrial and commercial customers but this is not universally true).

- (c) **Third**, this analysis shows that the costs associated with the above balancing errors constitute only a negligible proportion of an average household's electricity bill for any supplier. For example, SSE estimate that its balancing costs in 2013/14 represented [X] % of the overall bill per customer compared to 0.24% per customer for a leading independent supplier.
- (d) **Fourth**, while it is possible that some suppliers may be incurring higher trading costs in managing balancing risk, they would only choose to do so if costs of this were lower than the cost of being out of balance. Thus the cash-

out price places a limit on the costs that a smaller retailer could face. However, in reality, SSE does not expect costs to be disproportionate since much of the trading required to balance a position close to real-time can be done on the day ahead exchange since there is typically limited need to reforecast and adjust positions within the day. As discussed above, N2EX is heavily traded and offers participants the opportunity to purchase hourly quantities of energy more accurately to match their requirements.

### **3.8 High hedging costs**

- 3.8.1 The premise behind the hypothesised theory of harm is that smaller retailers (or those not vertically integrated) have a greater need to trade than the larger vertically integrated retailers and therefore have greater exposure to illiquid markets and consequently have higher trading costs.
- 3.8.2 Given the range of products over which material volumes of trades now occur, SSE's view is that it would be feasible for smaller retailers to construct robust hedging strategies to manage their risk without needing to trade in illiquid markets and without incurring high "*liquidity costs*" (which we take to mean trading where there is a wide bid-ask spread). This point is discussed at length in paragraphs 3.5.1 to 3.5.7 above and the arguments are not repeated here.
- 3.8.3 However, SSE would further add that its own practice of trading considerable volumes in the market, across a wide variety of products, is inconsistent with there being high hedging costs. For each of the last five years SSE has traded more than four times its customer demand volume in the market. In 2013/14 this ratio was 6.7. As discussed at paragraphs 3.14.3 to 3.14.5 below, SSE has a strong interest in the development of a liquid market and a strong incentive to trade. Moreover, the bespoke products SSE has offered to small suppliers (see paragraphs 3.5.4 to 3.5.5) are products that were not available to SSE itself.

### **3.9 Prices as a poor guide to action**

- 3.9.1 Forward prices are rarely a good signal of future out turn prices since spot prices can be heavily influenced day-to-day and year-to-year by factors such as the weather, new investment, plant closures, economic activity, global fuel markets and regulatory instability. In recent years, changes in power prices have been driven largely by movements in gas prices (rather than any movements in spark spreads), which in turn have been influenced in unpredictable ways by geopolitical events. The uncertainty that might result from a relatively wide bid-ask spread for a 24 month electricity price hedge, say, would be dwarfed by the swings that could result in the swing in the underlying prices as a result of these other fundamental factors. Forward markets can only capture today's expectations of these factors and there is major inherent uncertainty around these.
- 3.9.2 If SSE has understood the theory of harm correctly, it is alleged that SSE is able to avoid relying on forward prices (such as the price of a 24 month hedging product) and instead draw on information held within its generation arm as to what might happen to wholesale prices in the future. In practice, this is not the case.

- 3.9.3 SSE does not make its predictions for future wholesale price movements in this way nor decisions about future retail offers. Instead, when assessing forward wholesale prices, SSE uses information on wholesale prices provided by the major reporting agencies (e.g. Bloomberg or Heren) as well as reports by market commentators such as Eclipse and PIRA. The resultant forward price curves then constitute one of a number of factors which are accounted for when setting retail tariffs. Consequently, SSE is at no informational advantage to any of the smaller retailers and the evidence does not support a barrier to entry arising from this hypothetical economy of scope.
- 3.9.4 SSE does not recognise the hypothesis that the CMA is seeking to test when it refers to “*vertical integration and/or illiquid markets lead[ing] to operational inefficiencies*” in the context of inappropriate production decisions taken by generators.<sup>12</sup>
- 3.9.5 First, as a general rule, and subject to outages, the on load plant is in line with what one would expect to be running given their likely marginal costs, start costs and other operating constraints. Second, longer term investment or closure decisions are typically taken with reference to expected prices beyond a 24 month product hedging window and so the traded value of products is not relevant to such decisions. Rather, these decisions are based on a broader market view of the long-term need (or not) for additional capacity. Third, even if a 24 month time horizon for market prices were deemed relevant, the inherent volatility in the price level discussed above means that there is considerable uncertainty in those prices (absent any effect of low liquidity). This volatility is a natural feature of the market (and indeed of many commodity markets), unrelated to vertical integration and instead reflects a number of factors including the volatility of fuel prices. The EMR reforms are partly intended to reduce generators’ exposure to the level of wholesale prices.

### 3.10 Manipulability of prices

- 3.10.1 In SSE’s view, the structure of wholesale markets means that market players do not have the ability to manipulate prices. Further detail on the structure of the market is provided in response to Theory of Harm 3 in Sections 5.2 to 5.5 below.
- 3.10.2 In addition, there are regulatory safeguards to monitor, prevent and punish any instances or potential for market manipulation. Trading within the energy market is subject to regulation through Ofgem and the FCA within the UK, and there are already civil and pending criminal sanctions to prevent market manipulation. Trading is also subject to regulations and directives laid down by the European Union such as the Market Abuse Directive and the REMIT. Requirements of REMIT include:
- (a) information on plant outages must be published to the market; and
  - (b) market participants need to report trades in wholesale energy market contracts to the Agency for the Co-operation of Energy Regulators (**ACER**)—this ensures greater transparency in wholesale energy markets by allowing regulators to monitor for any instances of market manipulation.

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<sup>12</sup> Paragraph 33 of the Issues Statement.



- 3.10.3 All market participants must trade through an entity which is authorised by the Financial Conduct Authority for this purpose. SSE Trading Limited (*SSETL*) provides this service to SSE Energy Supply Limited (*SSEESL*).

### **3.11 A lack of transparency**

- 3.11.1 SSE considers that the GB energy market is already transparent and, as explained below, increasingly so. However, the market is inherently complex and *full* transparency regarding suppliers' costs will not necessarily make it clearer for customers as to why price changes have arisen. This stems from the inherent volatility in the wholesale market, the different strategies that suppliers have for managing risks, the different costs that they consequently face, and their different exposure to cost and/or demand shocks. Suppliers will therefore have periods where they face higher costs than other suppliers, which cannot be passed on to customers due to competitive pressure from others, and periods where their costs rise more slowly than others.
- 3.11.2 Transparency in this market has nevertheless increased recently in response to key regulatory steps, such as Ofgem publishing the Consolidated Segmental Statements (*CSS*) and measures in the RMR that require suppliers to report information on costs as part of customer bills.
- 3.11.3 Moreover, SSE is unilaterally taking steps to increase transparency:
- (a) SSE is undertaking the legal separation of its generation and retail supply businesses;
  - (b) SSE has recommended that the costs of the government's climate change measures and policies are recovered through general taxation to reduce both the complexity and size of customer bills; and
  - (c) SSE has suggested socialising distribution and transmission network charges for domestic customers—this would remove regional price variations and so promote engagement by facilitating market comparisons on a nationwide basis.

### **3.12 The costs and benefits of current market rules**

- 3.12.1 It is commonly accepted that the market rules place the risk of being out of balance firmly and squarely with each individual participant in the market (generators and suppliers alike). As acknowledged at paragraph 29 of the Issues Statement, the market rules were designed with this as one of their key objectives.
- 3.12.2 There is a considerable amount of work required to manage this risk, which is one of the core functions of energy companies, including suppliers in the downstream market. The particular risk they face results from volatile wholesale prices in the face of a customer base that strongly favours some stability in prices. It is rare for retail price changes to happen more than once a year, with more regular changes usually only happening in response to major, and unpredicted, policy changes.

- 3.12.3 Vertical integration has been one mechanism that some companies have chosen to manage the risk. Others have chosen to enter into long term contracts (or a combination of both short and long term contracts).
- 3.12.4 Nevertheless, this has not undermined the strong incentives that vertically integrated firms have to trade to realise value from the assets they have invested in. In the last five years, SSE has traded more than four times its customer volume in the market. The markets in GB are now liquid, providing a wide range of products with well-informed prices. Moreover, several measures affecting liquidity have yet to take effect fully. In particular, SPLC was only introduced on 31 March this year. The evidence does not suggest that low liquidity and/or opaque prices are generating material incremental costs for smaller suppliers compared to the larger vertically integrated suppliers such that the former cannot compete effectively.
- 3.12.5 In SSE's view, there are certain regulations in place that have likely led to reduced liquidity relative to what might otherwise be achievable and these should be considered by the CMA. These include the uncertainties inherent in the current design of the CFP. The level of the floor price can be changed at every budget (in a way which is difficult to predict) which reduces the willingness of traders to offer long-term contracts, since this can have major impact on power prices and cannot be hedged. Setting a trajectory for the CFP into primary legislation would give greater confidence to the market to trade long-term contracts.
- 3.12.6 Similarly, liquidity has likely been harmed by uncertainty around the timing, scale and design of other policies such as SPLC and National Grid's strategic balancing. SSE would welcome investigation into the effect of these regulations on liquidity and reform.

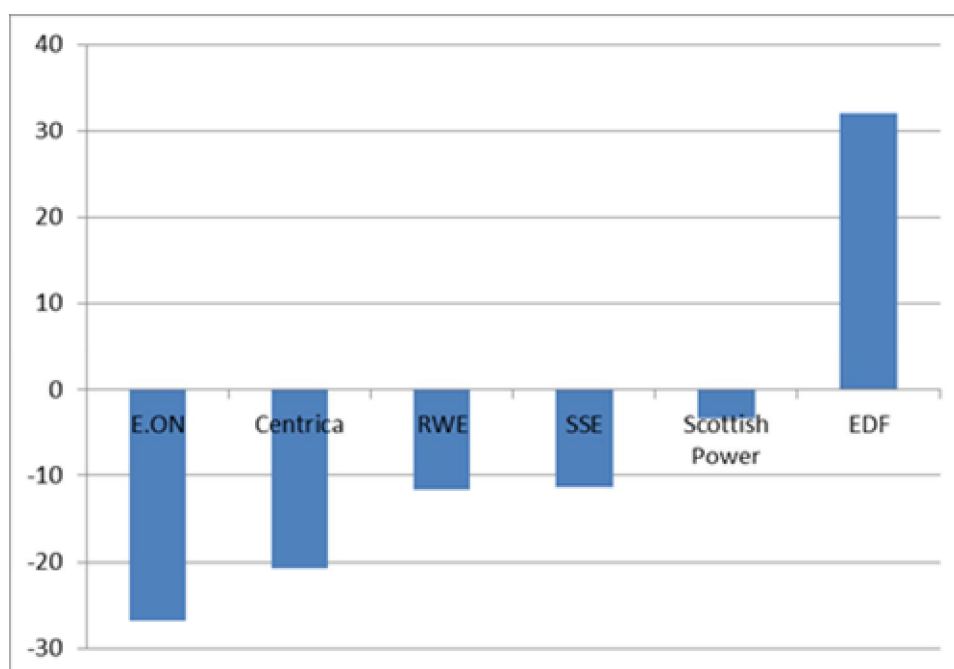
### **3.13 The costs and benefits of vertical integration**

- 3.13.1 As noted above, since the evidence points to reasonable levels of liquidity across the market and an absence of material costs to smaller suppliers, it should also not be a priority for the CMA to undertake a full cost benefit analysis of vertical integration. However, for completeness, we provide SSE's view on the costs and benefits of vertical integration below.
- 3.13.2 As discussed in Section 2.3 above, SSE's view is that vertical integration has provided it with an efficient way of operating over the last decade. Being vertically integrated has enabled it to (i) offer stable retail prices; (ii) invest in generation to secure future supply and meet UK environmental obligations; and (iii) reduce uncertainty in cash flow and profits. In addition, there are certain transaction costs that can be avoided as a result of being vertically integrated (other than those discussed above in the context of low liquidity).
- 3.13.3 In contrast to these benefits, it follows from the discussion below that the costs associated with vertical integration are low.

### 3.14 Costs associated with vertical integration

- 3.14.1 The only cost that has been identified as potentially associated with vertical integration in the context of Theory of Harm 1 is the hypothesis that vertical integration could result in low levels of liquidity.
- 3.14.2 As discussed in Sections 3.2 to 3.8 above, the evidence suggests that (i) liquidity is not as low as implied in the Decision; and (ii) is not sufficiently low to generate observable, material costs for non-vertically integrated or smaller suppliers in the market. This puts a cap on the extent to which liquidity costs can arise from vertical integration.
- 3.14.3 However, to the extent that the CMA reaches the view that liquidity is “*too low*”, SSE’s view is that this is more likely to be associated with market rules and the government’s climate change policies than due to vertical integration. SSE and other vertically integrated generators have clear incentives to be active participants in trading wholesale products. Most fundamentally, this is because trading offers the opportunity to reduce costs and risks. Liquidity gives SSE’s retail business greater access to generation, which in many situations will be cheaper than its own generation. Liquidity is also essential for SSE to effectively manage risks associated with power generation and the uncertainty around customer demand. This includes unexpected outages of power plants and changes in production from intermittent wind that result in a requirement to buy or sell energy at short notice.
- 3.14.4 In addition, vertically integrated generators must trade, as their generation and retail positions are not matched. This is shown in Figure 3.5 below. In SSE’s case it is short of peak generation relative to its overall supply requirement and is therefore a net buyer of generation. EdF is a net seller. This chart understates the need to trade as in practice the vertically integrated retailers have different generation mixes (e.g. EdF has more inflexible nuclear) meaning they are mismatched between the shape of their generation and customer demand.

**Figure 3.5. Generation versus retail positions for vertically integrated retailers (2012, TWh)**



Source: Based on 2012 CSS.

Notes: Total UK supply in 2012 was 376 TWh, while the total imbalance in positions across the 6 firms was 106 TWh.

- 3.14.5 It is for this reason that SSE has been fully supportive of Ofgem's initiatives to increase liquidity and has also introduced its own voluntary measures as described above.
- 3.14.6 In SSE's view, the CMA should conclude that the contribution of vertical integration, in and of itself, to costs associated with low liquidity (to the extent that they exist) is negligible.

### 3.15 Benefits of vertical integration

- 3.15.1 In SSE's experience, a vertically integrated company benefits from each of the potential benefits that the CMA identifies in paragraph 39 of the Issues Statement to a greater or lesser extent. As Ofgem indicates, these benefits result in lower costs (and risks) for customers and help support the required investment in generation. In particular:
- (a) Benefits associated with '**a natural hedge**' are potentially the most material of the benefits obtained, where these benefits are arguably most beneficial to generators seeking to manage the risks of operating in a volatile market. As noted in Section 2.3 above, the move towards vertical integration in the late 1990s was motivated in part by a desire of the generators to vertically integrate into retail in anticipation of NETA. This hedge reduces risks for SSE, lowering the cost of capital and supporting long-term investment, and

reduces the extent to which volatility in wholesale costs must be passed through to consumers.

- (b) Given the evidence presented above, the benefits of being better able to manage **balancing risk** are small if they exist at all. Equally benefits flowing from reduced **transaction costs** and **negotiating costs** are viewed as relatively small. Since SSE (and other vertically integrated companies) need to trade in order to balance their positions, there are not many costs that can be avoided as a result of being vertically integrated. In any event, these costs are small.
- (c) Reduced **collateral requirements** provide a more significant benefit, which is achieved through the netting-off of collateral required on trades on a given platform (and potentially through trades avoided where self-supply can be used). This benefit may help explain why some independent generators have developed arrangements where they can directly sell to large customers (as these do not typically require any collateral to be posted by the generator). Drax's development of its Haven retail arm is an example of this.

SSE also benefits from a strong credit rating which lowers the amount of collateral that it must post. However, this benefit is only in small part likely to be related to it being a vertically integrated company (and the benefits of this in reducing risk of financial distress). Rather it is more likely related to the fact that it is a large, financially-prudent company.

- (d) Being vertically integrated can provide an incentive for a retailer to set a lower price in the retail market than a stand-alone retailer would (due to the so-called "*elimination of the double margin*"). This incentive exists to the extent that the retail arm considers that additional sales it makes to customers will also result in additional sales by its wholesale arm (an added benefit not available to stand alone retailers). Because SSE's retail business, however, does not source most of its electricity from its own upstream generation business, additional sales by the retail business would benefit the upstream business only to a relatively small extent.

3.15.2 SSE does not believe that the extent of these benefits is such that they preclude smaller suppliers from competing. Smaller suppliers may have alternative business models that give them other cost or revenue advantages, and there may be ways to achieve similar efficiencies through alternative routes. The evidence on entry and expansion by independent suppliers supports this (see paragraphs 6.2.5 to 6.2.8 below).

3.15.3 Notwithstanding this, however, if vertical integration was removed from the market, it is unambiguously the case that costs and risks of supplying customers with electricity would increase due to the loss of benefits as set out above. In SSE's view, the likely consequences would be a higher cost of capital required for vertically integrated firms to operate, reducing investments due to a higher hurdle rate of return required on investments relative to the current situation. Such a move would run entirely counter to the government's and Ofgem's desire to encourage more investment in the market.

- 3.15.4 To conclude, SSE believes that vertical integration is an efficient way to operate. The evidence does not support the view that it contributes to a lack of liquidity in the wholesale market, disproportionately raising costs to smaller retailers. Rather, the evidence shows trading by all vertically integrated suppliers in the market, liquidity growing in key products and small retailers growing successfully.
- 3.15.5 Further, vertical integration brings benefits to customers as a result of providing an efficient way to manage the risks inherent in energy supply. These benefits include a more stable environment to allow for necessary generation investment decisions to be taken, including a lowered cost of capital, and improved risk management for the retail business and consequently smoother retail prices for customers.
- 3.15.6 Finally, SSE believes that EMR measures will bring further changes which need to be considered when looking at vertical integration. Regardless of the firms' business models, the impact of EMR is to make generation income more dependent on centrally administered capacity payments or CfDs reducing the generator's risk to wholesale markets. Recovering these costs in this way, via a Supplier Levy, will reduce the benefits of the 'natural hedge' for vertically integrated firms described above.

#### **4. Response to 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**

##### **4.1 Introduction**

- 4.1.1 There is a considerable overlap between the propositions advanced under this Theory of Harm and those in Theories of Harm 1 and 3.
- 4.1.2 Whilst we have not sought to reiterate in detail our position on the true extent of competition in the GB energy generation market and our views on vertical integration and barriers to entry in this section, the comments below should be read in conjunction with what we say elsewhere in this Response.
- 4.1.3 This section therefore considers the role of vertical integration in the context of the CMA's Theory of Harm 2, and then demonstrates how SSE has neither the ability nor the incentive to foreclose suppliers or generators.

##### **4.2 Vertical integration must be considered in the context of this market**

- 4.2.1 Under this Theory of Harm, the CMA considers how vertically integrated players in this market could foreclose either or both other suppliers and generators.
- 4.2.2 SSE considers this Theory of Harm to be implausible for the reasons briefly outlined below.
- 4.2.3 In particular:
  - (a) generation companies have no ability to exercise material market power in the GB electricity generation market;
  - (b) there are limited costs of vertical integration associated with liquidity and wider benefits (as considered in Section 3.14);
  - (c) there is no evidence that vertical integration and lack of liquidity constitute a barrier to entry; and
  - (d) supply companies have no ability to exercise material market power in the GB retail supply market.

##### **No market power in generation**

- 4.2.4 In Sections 5.3 to 5.5 below, SSE details why the CMA should not be concerned about either the existence of unilateral market power or coordination in the GB electricity generation market. The market, with an HHI of 1,593 for energy generation and below 1,000 for generation capacity,<sup>13</sup> is not concentrated and there are many generators both supplying forward products and actively trading in the spot market.

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<sup>13</sup> See paragraphs 5.2.1 to 5.2.2 below.

### **Limited costs of vertical integration**

- 4.2.5 In Sections 3.3 to 3.4, SSE sets out its view on the dramatic improvements to liquidity in the supply of wholesale electricity products in recent years. These developments are such that liquidity is self-perpetuating with liquidity improvements encouraging greater trading and hence greater liquidity. Vertical integration delivers significant benefits for the reasons outlined in the Issues Statement.

### **Vertical integration is not a barrier to entry for smaller retailers**

- 4.2.6 In addition, SSE does not believe that vertical integration should be characterised, as in the Decision, as a potential barrier to entry and expansion. SSE welcomes the CMA's approach not to consider it as such, other than through its potential effect on liquidity (which, for the reasons set out above, is negligible in the context of recent market changes). SSE believes vertical integration is not a barrier to entry as illustrated by the strong growth of smaller suppliers in the market.
- 4.2.7 In addition to the points set out in Sections 3.3 and 3.11 in relation to liquidity and transparency, SSE believes the CMA should focus on the regulatory framework and costs and how they affect entry and expansion in the supply market. In paragraph 3.12.5, for example, SSE raises concerns about the uncertainty created in forward markets by the Government's CFP policy.

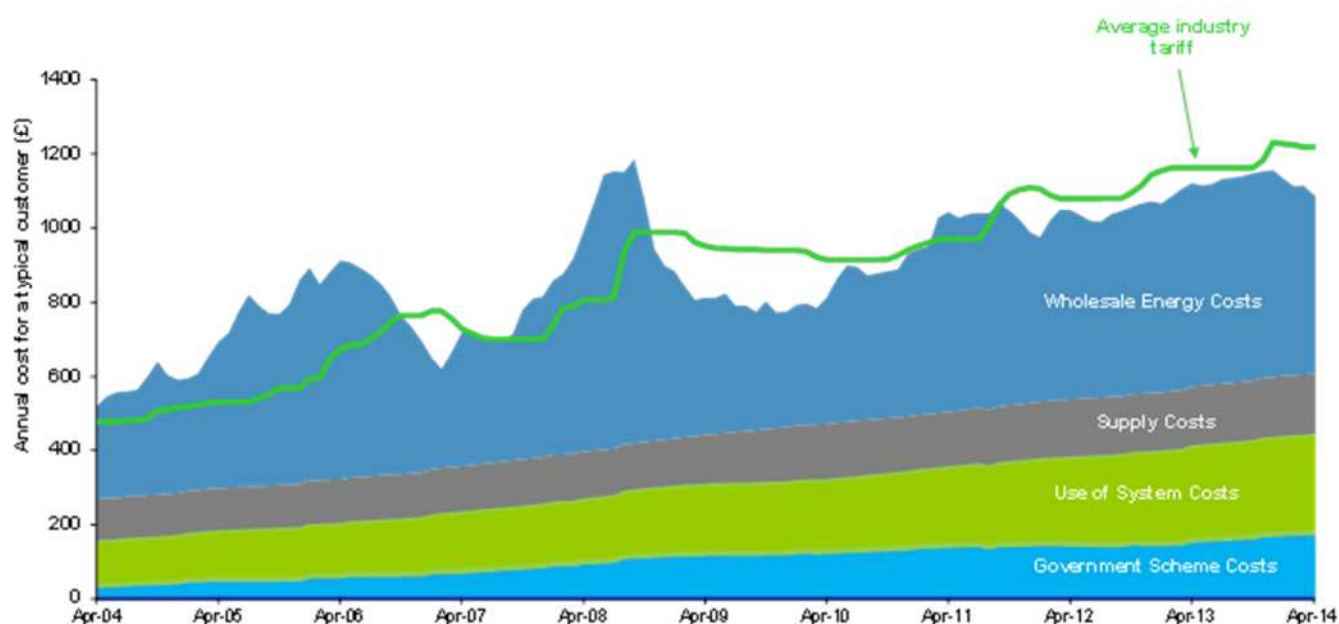
### **Vertical integration does not lead to higher prices or worse services for customers**

- 4.2.8 SSE also disputes any suggestion that customers are paying higher prices as a result of vertical integration. SSE's prices are cost reflective and the available evidence would suggest that this is true of SSE's vertically integrated rivals as well. This can be seen from Figure 4.1 below, which provides a high-level indication of how industry costs and average tariffs across the six largest suppliers have evolved over the last ten years (calculated from public data sources for a representative domestic dual fuel customer with an annual level of gas and electricity consumption in line with Ofgem's standard industry assumptions). It should be emphasised that this chart is only intended to provide a high-level overview of long-run trends in these cost pressures and tariffs. It does not capture the full richness of factors that can influence these costs and tariffs over the short run—for example, in the short term, wholesale energy costs are influenced by hedging strategies on the energy futures market, which vary from supplier to supplier and are not captured in this chart. Nonetheless the chart provides a useful indication of how costs and tariffs have evolved over decade as a whole. As the chart clearly illustrates:
- (a) the long-run trend in average industry tariffs closely tracks the long-run trend in the costs faced by suppliers; and
  - (b) suppliers' cost increases—and hence price increases—have been driven primarily by external factors over which suppliers can exert little control—namely growing cost pressures resulting from: (i) government schemes and interventions in the market, (ii) increases in network charges; and (iii) long-run increases in wholesale energy prices.



Please refer to Annex 4.1 for a description and explanation of the data sources and methodology used to construct each of the components of this chart.

**Figure 4.1: Evolution of tariffs and costs for a typical customer**



Source: SSE.

Notes: Please refer to Annex 4.1 for further information.

- 4.2.9 It is also worth noting that prices within the GB energy market are low compared with many international comparators (see paragraph 2.12.1(c) above). The European Commission reported earlier this year that UK domestic gas and electricity end prices were the cheapest and fifth cheapest respectively in the EU15 in 2012. This is particularly striking given that the UK is a net importer of fuel and therefore faces the same underlying fuel costs as other countries.
- 4.2.10 Moreover, many social policy costs are added to the country's energy bills (rather than paid for by general taxation, as is the case in many other European countries).
- 4.2.11 With regards to the suggestion that vertical integration leads to poorer service for customers, SSE refers the CMA to its comments in paragraphs 6.3.19 to 6.3.24 below which demonstrates the lengths to which SSE goes to order to improve the customer experience. SSE has achieved a best in class customer service position due to its focus on and continuous analysis of customer feedback to ensure improvements to service.
- 4.2.12 An important benefit from vertical integration is the increased stability that it provides to generation companies that allows greater certainty for investment decisions to be made (see paragraphs 3.15.3 to 3.15.5).

### 4.3 Input foreclosure for energy suppliers (total foreclosure)

- 4.3.1 A combination of a lack of market power in the generation market, plus existing liquidity and regulatory constraints imply that the vertically integrated energy companies have no ability or incentive to harm downstream rivals through input foreclosure. Given this, there is no scope for input foreclosure either to act as a barrier to entry for suppliers or to result in worse outcomes for consumers.
- 4.3.2 As SSE sets out in Section 5.2 below, the GB generation market comprises a large number of sizeable generation companies, with many willing to contract with suppliers for forward products and most actively trading in the spot market.
- 4.3.3 This is consistent with SSE's views on liquidity in wholesale electricity products, as set out in Section 3.3 above. Liquidity has been improving continuously over the last five years and SSE believes that the wholesale markets for gas and electricity are sufficiently liquid that access to wholesale energy does not constitute a barrier to entry for retailers. This is because of:
- (a) industry initiatives to establish a liquid and transparent UK market, including the creation of the N2EX trading platform set up in January 2010;
  - (b) SSE initiatives to develop and maintain liquid markets, including SSE's policy of placing 100% of available generation and 100% of demand in the N2EX day ahead auction and SSE's publicised small supplier commitment; and
  - (c) regulatory measures implemented in recent years, including the SPLC.
- These factors are considered in detail in Section 3.4 above.
- 4.3.4 In light of the recent developments in the wholesale markets to increase liquidity, SSE believes the current concerns around liquidity are overstated and that vertical input foreclosure is implausible (see above and Section 3.14).
- 4.3.5 Thus, a vertically integrated generator would have **no ability to foreclose a supplier**. Put simply, if a vertically integrated generation company chose to withhold supply from a stand-alone retailer, that retailer would have multiple alternative sources of generation to which it could turn without incurring higher costs. These include:
- (a) trading in the wholesale market which, as discussed in Section 3.3, offers a range of products with good liquidity;
  - (b) signing Power Purchase Agreements (**PPAs**) for direct purchase of electricity with another generator (either vertically integrated or independent); and
  - (c) using its own long term contractual relationships (for example, Utility Warehouse and First Utility source wholesale energy from RWE and Shell respectively).
- 4.3.6 In any event, for those generators constrained by the SPLC, input foreclosure is effectively directly regulated by the licence conditions. As explained in paragraphs 3.4.2 to 3.4.5, licence conditions require SSE (and the seven other largest generation companies and five other largest vertically integrated companies, respectively) to (i)

follow a set of rules when trading with small independent suppliers to ensure fair access, and (ii) develop liquidity by playing a ‘market maker’ role. SSE considers it is unreasonable for the CMA to assume that SSE (and the other largest generation companies) could conduct themselves other than in accordance with the terms of their licences, including the SPLC. On this basis, SSE would have no ability to foreclose small independent suppliers.

4.3.7 In addition to having no ability to foreclose, a vertically integrated generator would have **no incentive to foreclose a stand-alone supplier**. For there to be an incentive to foreclose, the loss of profit from forgone power sales must be outweighed by the increase in retail profit from reduced competition in the retail market. Given the low concentration of the generation market and the various routes to market for suppliers described above, such an incentive cannot credibly exist. Specifically:

- (a) withholding supply of wholesale electricity to a retailer implies a material cost to a generator in terms of a missed opportunity to contribute to fixed costs;
- (b) however, by withholding supply, no generator could materially disadvantage a downstream rival supplier, implying limited impact of any attempted foreclosure strategy on the retailer’s offering to customers;
- (c) this in turn implies few customers would be likely to switch away from the affected retailer, limiting any effect on downstream competition; and
- (d) even if a material number of customers switched from the affected retailer, these customers could be expected to scatter between the many other retailers in the market (and given current switching patterns, most likely to the other smaller retailers in the market) with **no material benefit to the generator**.

4.3.8 In any event, compliance with the SPLC is closely monitored by Ofgem and a failure to comply can result in Ofgem enforcement action, including financial penalties (up to 10% of the licensee’s applicable turnover in the preceding financial year) and consumer redress orders. This again limits any incentive for generators to foreclose suppliers.

#### **4.4 Vertically integrated firms will not foreclose suppliers through cost increases (partial foreclosure)**

4.4.1 At paragraph 41 of the Issues Statement, the CMA suggests that vertically integrated firms may increase the costs of other energy suppliers. This is a variant of the theory of harm above which considers whether vertically integrated firms could harm downstream rivals by refusing to supply them. However, in this case, the two theories can be considered as one. Whether the vertically integrated generation company attempts to withhold supply or charge a price above the market price, the result would be the same. The downstream suppliers would turn to one of the many alternative sources of generation in the wholesale market. Given the low concentration of the generation market (and various routes for a supplier to purchase generation), there is no ability for vertically integrated companies to raise the costs of downstream rivals through any route.

4.4.2 For completeness, this theory is also undermined by:

- (a) the structure of wholesale markets which means that market players do not have the ability to manipulate prices for the reasons set out in Section 3.10;
- (b) regulatory safeguards which monitor, prevent and punish any instances of market manipulation (including REMIT); and
- (c) the access all retailers have to the heavily traded N2EX, which offers opportunities for all retailers to manage balancing risk close to real-time.

#### **4.5 Customer foreclosure for independent generators**

4.5.1 The CMA also hypothesises that it might be possible for downstream retail businesses of vertically integrated firms to harm their stand-alone upstream generation rivals through reducing the sales of these generators. This could be achieved either through refusing to enter into bilateral agreements with independent generators (total foreclosure) or only entering into such agreements on terms that are less favourable to the generator (partial foreclosure).

4.5.2 Neither of these theories of harm can be considered credible given the structure of the GB retail electricity market. The GB retail market is one of the least concentrated markets in Europe. In 2011 reports for the European Commission, the HHI of the GB retail was 1,768, which is low compared other countries such as the Netherlands (2,264), Ireland (2,200), Sweden (2,650), Poland (2,000) and France (4,000). Since 2011, the GB market has become even less concentrated with an HHI for domestic supply of 1,636.<sup>14</sup>

4.5.3 In this context, no individual retailer could be considered to be a ‘must-trade’ partner for a generation company wishing to sell its generation. In particular:

- (a) no individual retailer supplies sufficient volume in the retail market that it would be necessary for an independent generator to sell at least some portion of its generation through the retailer;
- (b) independent generators trade their electricity on a GB-wide basis and so no retailer could be consider a ‘must-trade’ partner for local reasons; and
- (c) retailers are not differentiated in any other way that would be of relevance to generators wishing to sell their electricity, hence generators could always choose between the full set of retailers when considering routes to market.

4.5.4 However, the retailers in the market are not the only route to market for independent generators. In addition to entering into PPAs with individual suppliers in the market or selling into the wholesale market, independent generators can choose to set up their own supply operations—for example, Drax now supplies electricity directly to the retail market through its subsidiary Haven Power.

4.5.5 As a result, any retailer attempting to effect a customer foreclosure strategy would simply lose a trading partner (with associated costs) with no impact on the costs or

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<sup>14</sup> Ofgem (2014), *Great Britain and Northern Ireland National Reports to the European Commission*.

competitive offer of the independent generator. As a consequence, no retailer would have the ability to harm an upstream rival.

- 4.5.6 In addition, a vertically integrated retailer would have no incentive to foreclose independent generators. For there to be incentive to foreclose, there must be an increase in profit for the generation side of the business (arising from harming a competitor generator) which outweighs the negative impact on the supply side of the business from restricting the supply side's options in purchasing generation. Because independent generators have many alternative suppliers and routes through which they can sell (including anonymous exchanges), it is not possible for a vertically integrated firm to cause any harm by foreclosing purchase.
- 4.5.7 Even if it were possible to harm an independent generator, there would be no guarantee that the retailer's generation arm would benefit given the lack of concentration already in the generation market, and hence the vertically integrated firm would see no benefits to offset against the costs of not trading.
- 4.5.8 Fundamentally, the fact that both the generation market and the retail market for electricity in GB are among the least concentrated in Europe, with no individual firms with either high market share or a 'must-trade' status, should rule out vertical foreclosure theories of harm as relevant to this investigation.

## 5. Response to Theory of Harm 3

### Market power in generation leads to higher prices

#### 5.1 Introduction

- 5.1.1 The GB electricity market is one of the least concentrated in Europe, with more than 50 companies<sup>15</sup> offering wholesale electricity products to supply companies (plus a small amount of generation from outside GB imported via interconnectors). The SMA raises no concerns about market power in generation, and this is supported by an initial view that the generation sector has been making profits “*covering its cost of capital but no more*”.<sup>16</sup> SSE is therefore surprised to see the inclusion of market power in the electricity generation market among the Theories of Harm to be investigated by the CMA.
- 5.1.2 SSE strongly believes that, once it has had a chance to consider the facts relating to the generation market, the CMA will also conclude that the market is well-functioning and competitive. Specifically, SSE expects the CMA will find that:
- (a) no individual generation company has an ability to exercise material market power;
  - (b) coordination between companies to raise prices or delay/deter investments would not be feasible;
  - (c) there is no evidence that prices charged either in the spot market or for forward contracts are above the competitive level; and
  - (d) there is no evidence that conduct in the generation market creates a barrier to entry for smaller suppliers.
- 5.1.3 SSE highlights below some important considerations that the CMA will wish to take into account when reviewing the evidence on each point, with a focus on the first three bullets above. In responding to Theories of Harm 1 and 2 above, SSE has already dealt with the concern that behaviour in the generation market could act as a barrier to entry (see Sections 3.5 to 3.14 and 4.2 to 4.5 above). These arguments are not repeated here.
- 5.1.4 Before turning to the specific points raised under Theory of Harm 3, SSE provides an overview of the generation market structure as context for understanding why one would not expect market power to arise in the GB electricity generation market.

#### 5.2 The GB market is widely recognised as well-functioning

- 5.2.1 The GB generation market is one of the least concentrated markets in Europe. In a 2014 report, “*Great Britain and Northern Ireland National Reports to the European Commission*”, Ofgem reports that, in 2013, based on metered generation volumes:

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<sup>15</sup> DECC list of major power producers in GB (*DUKES*). There are also many small generators not listed on DUKES.

<sup>16</sup> Paragraph 6.79 of the SMA.

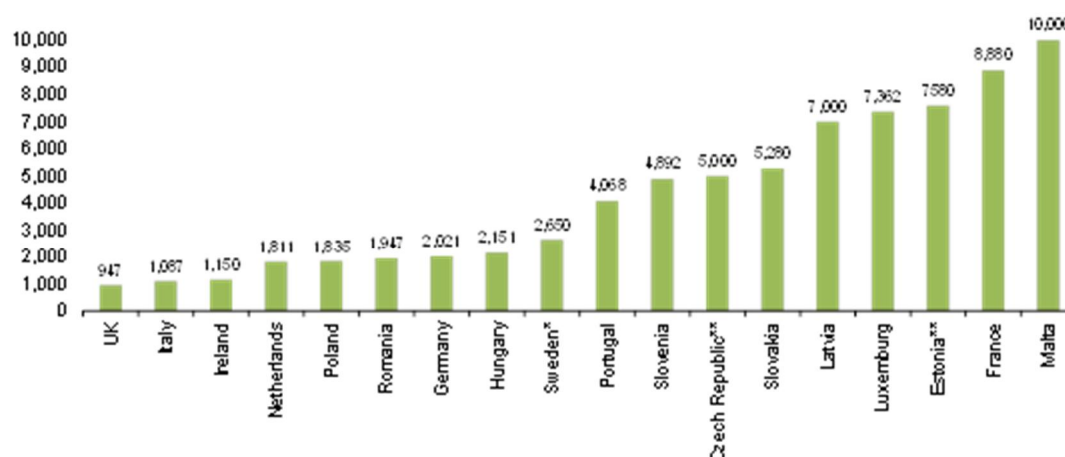
- (a) seven companies had market shares of generation output exceeding 5%;
- (b) the largest three companies generated approximately half of electricity consumed in GB; and
- (c) the total HHI for electricity generation was 1,593.

5.2.2 An analysis of market concentration based on Platts data on plant capacity shows a similar picture. Specifically, in 2014:

- (a) six companies have a share of more than 5% of capacity (eight if wind and solar capacity are excluded);
- (b) the largest three companies own 40% of capacity (44% excluding wind and solar capacity); and
- (c) the HHI by capacity is 802 (968 excluding wind and solar capacity) and this has been declining in recent years—in December 2009, the HHI by capacity was 1,037.

5.2.3 These concentration measures based on capacity and the Ofgem figures, show that the GB market compares favourably to other European generation markets. In 2011, the European Commission reviewed the HHI in electricity generation by country as shown in Figure 5.1 below.

**Figure 5.1: Electricity generation HHI ratio in 2011**



Source: European Commission (2012) Energy Market 2011.

Notes: The above is an approximation and conservative estimate – actual HHI ratios are likely to be higher than this.

- 5.2.4 The largest six vertically integrated retailers account for only around 60% of production in the generation market with the remainder accounted for by independent producers (based on 2012 CSS data).
- 5.2.5 In addition to the GB market already being one of the least concentrated in Europe, the level of interconnection in GB is growing. This will allow non-GB generators to

compete more effectively in the future; at present around 5% of GB electricity supply comes from imports through interconnectors.

### **5.3 No unilateral market power in GB electricity generation**

- 5.3.1 In paragraphs 45 and 46 of the Issues Statement, the CMA describes two hypothetical theories of harm. The first is that certain generators may have market power at specific points in time and therefore an ability to influence either the spot price or the price of forward contracts. The second is that certain generators may have local market power at specific points in time created by transmission constraints. As discussed below, neither hypothesis is supported by the available evidence.

#### **No ability to exercise material market power at specific points in time**

- 5.3.2 A well-known feature of the electricity (and other) markets is that, in periods when demand is high and capacity is scarce, prices rise above the marginal costs of the marginal generator. This reflects both the long run costs and the risks of bringing peaking plants on to the system (for example, start costs, ramping costs and risks of a plant trip) as well as the relative scarcity of generation.
- 5.3.3 It is important to recognise that ‘scarcity pricing’ is a vital feature of an energy-only competitive market in the long-term.<sup>17</sup> It allows generators to recover the fixed costs associated with running plant (for example, annual maintenance, transmission and financing costs) and stimulates new entry when this is needed. This scarcity pricing is particularly important for peaking plant, higher up to the merit order, where running hours are low and there is no scope to earn infra-marginal rents.
- 5.3.4 In recent years, there has been very little scarcity pricing in the GB market, due to over-supply of capacity. As a result, spark spreads have been very low with certain plant unable to make a sufficient contribution to fixed costs. Against this background, several plants have closed and there has been a lack of investment in new thermal plants. For example, SSE has closed 300 MW of coal plant, 120 MW of gas plant and mothballed 1,500 MW of production at gas plant, as a result of them being loss making (in addition to 1,000 MW of coal plant closed to comply with EU environmental regulations). SSE has submitted evidence to the CMA that shows the basis on which these decisions were taken.
- 5.3.5 The introduction of a capacity market by DECC, in preference to the energy-only market, was motivated in part by a desire to reduce the reliance of generators on uncertain, and sometimes non-existent, scarcity prices to bring forward investment to underpin security of supply.
- 5.3.6 Scarcity pricing should therefore not be confused with a detrimental exercise of market power. Indeed, in pricing to reflect scarcity, individual generators will be aware of the constraint on their prices provided by the next plant in the merit order. If a generator were to raise its price above the level at which the next plant could profitably supply the market, that generator’s plant would not run. Since this would remove the ability of that plant to make revenues to contribute to fixed cost recovery, the generator would not wish to pursue this strategy.

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<sup>17</sup> An energy-only market is one in which there are no explicit payments for capacity.



5.3.7 The effectiveness of this constraint on generators results in efficient dispatch in the GB market. As stated in response to Theory of Harm 1, as a general rule, the on load plant will be in line with those expected to be running given their marginal costs, start costs and other operating constraints.<sup>18</sup> This is not consistent with withholding capacity to effect price increases.

5.3.8 A situation of high market demand where individual generators have unilateral market power resulting from being a ‘pivotal’ generator (that is, a generator with capacity required to meet total demand) is rare. In the SMA, Ofgem reported that its own analysis “*found no evidence that the capacity of any of [the largest six generators] would be required to meet total demand*”.<sup>19</sup> This is consistent with SSE’s experience of the GB electricity market in recent years. Moreover, SSE would argue that, even if a generator were pivotal at a particular point in time, this would not imply that the generator would have either the incentive or ability to exercise any implied market power. The CMA will wish to consider the following in making its assessment of market power:

(a) **There are few periods when an individual generator’s capacity is pivotal.**

It is rare that any single company has material market power associated with being pivotal. SSE believes that there were few, if any, hours last year when any single generation company was pivotal to meeting market demand. SSE does not expect this position to change materially in the short to medium term.

(b) Even if a generator is pivotal, it does not follow that it would have the incentive to increase prices above the competitive level. Even if an individual firm’s capacity is needed to meet demand, it will generally only be a fraction of that generator’s capacity that is required. In this case, there may be no incentive to exploit the pivotal position since, in withholding capacity to drive price increases, the generator would be required to forgo revenue associated with removing capacity from the market.

Further, in the future under the Capacity Market scheme, it is likely that periods of scarcity will coincide with ‘stress’ periods. Any firm withholding capacity during these periods would suffer substantial penalties as a result in addition to the loss of energy market payments.

(c) **It is difficult for a firm to predict when it would be ‘pivotal’.** As a result of uncertainty and volatility in demand and supply of electricity (for example, as a result of variable wind generation or plant outages), it would be difficult for a firm to predict when it would be ‘pivotal’. It would therefore be difficult for a generator to enact a strategy to raise prices at the appropriate point in time to take advantage of such a situation.

5.3.9 It is clear, therefore, that generation companies in the GB market have no material unilateral market power at particular points in time and no ability or incentive to raise prices above the competitive level in the market. The current low level of spark spreads support this analysis.

<sup>18</sup> On load plant are those that are running and dispatching to the grid.

<sup>19</sup> Paragraph 5.89 of the SMA.

### No incentive or ability to exercise market power in the forward market

- 5.3.10 The arguments set out above address the concern that individual generators have market power over the *spot* price and balancing prices, where periods of market ‘tightness’ are most commonly translated into price. When trading in *forward* contracts, the ‘tightness’ of the market is less relevant, as is the concept of a pivotal generator, because there is more notice for new capacity to enter the market (or come out of mothballing or planned maintenance).
- 5.3.11 With respect to forward contracts, the CMA’s hypothesis would need to rely on a lack of sufficient generators willing to offer forward contracts to retailers. This is not consistent with the market structure described in paragraphs 5.2.1 to 5.3.9 above nor with the finding that liquidity is high in the core products needed by retailers (see paragraphs 3.3.3 to 3.3.7). As SSE has explained in response to Theory of Harm 1, it is imperative for it, and other vertically integrated retailers, to trade given their imbalanced generation and supply portfolios. As such, SSE (and other vertically integrated generators) have neither the ability nor the incentive not to offer forward contracts to retailers. SSE has consistently supported developments in improving liquidity.

### 5.4 No ability to exercise local market power

- 5.4.1 The CMA also hypothesises that individual generation companies might have local market power when the System Operator has a limited set of options to purchase either increased or reduced generation for a specific area. This concern, which in fact is a transmission concern, has been recognised in the past and specific regulations (in the form of the TCLC) developed to prevent generators from being able to exercise any local market power in the balancing market.
- 5.4.2 The TCLC was consulted on in 2011 and introduced in July 2012. It regulates behaviour by electricity generators during periods when there is insufficient capacity to transmit electricity from where it is generated to where the demand is. The licence condition specifically prohibits generators from obtaining any excessive benefit from electricity generation in relation to a period of transmission constraint.
- 5.4.3 The TCLC was introduced for five years with the possibility of a further two year extension. It is therefore due to expire in July 2017. Its finite and short life was a recognition by DECC that upgrades of the GB transmission infrastructure would “*go a long way to providing a solution to the overall problem of constraints*”.<sup>20</sup> For example, the now approved Western HVDC bootstrap will, in conjunction with the upgrades to the onshore Cheviot boundary, approximately double the capacity of the Cheviot boundary to around 6GW.
- 5.4.4 Since 2011/12, there has also been a reduction in conventional thermal plant capacity in constrained areas. Significantly improved arrangements have also been put in place between National Grid and the industry in relation to the dispatch and control of wind generation. These have had the effect of allowing better use to be made of wind generation when available, and reducing costs that have in the past constrained its use.

<sup>20</sup> DECC (2011), *Impact Assessment of the Transmission Constraint Licence Condition (TCLC)*.

- 5.4.5 As a result of the changes in local generation since 2011/12, constraints in specific local areas are already much reduced (with resulting reductions in Balancing Services Use of System charges), implying that the relevance and need for the TCLC going forward will diminish. There is therefore no concern that would be relevant for the CMA to address as part of its market investigation.

## 5.5 The market would not support coordinated outcomes between generators

- 5.5.1 The Issues Statement also considers whether there may be scope for coordinated behaviour between generators over prices or the level or timing of investments. SSE strongly suggests that this should not be a priority for the CMA to consider as part of the investigation for the following reasons:

- (a) the conditions required to support successful coordination in the market do not exist in electricity generation;
- (b) there is no history of coordination in the GB market to warrant a concern given the absence of the conditions conducive to coordination; and
- (c) there is no evidence to support the view that prices charged are above the competitive level.

- 5.5.2 The first two points are discussed in the remainder of this section. The third point is discussed in Section 5.6 below; evidence pertaining to whether prices are set at the competitive level is equally applicable to coordination and unilateral market power (discussed above).

### Conditions do not support coordination in electricity generation

- 5.5.3 When determining whether there could be conditions that facilitate coordination, the CMA will no doubt give weight to the factors in its Guidelines for Market Investigations (the *Guidelines*) as follows:<sup>21</sup>

- (a) firms need to be able to reach an understanding and monitor the terms of coordination;
- (b) coordination needs to be internally sustainable among the coordinating group; and
- (c) coordination needs to be externally sustainable.

- 5.5.4 As set out below, it is implausible that conditions in the GB market for electricity generation would allow for all three conditions to hold.

- 5.5.5 First, the structure of the market and the nature of electricity generation as a process would **preclude firms from reaching an understanding and monitoring the terms of coordination**. In particular:

- (a) As noted in paragraphs 5.2.1 to 5.2.5 above, the GB generation market is one of the least concentrated in Europe and there are many generating firms—to

<sup>21</sup> Paragraph 250 of Competition Commission (April 2013), *Guidelines for market investigations: Their role, procedures, assessment and remedies*.

achieve successful coordination, a large number of firms would need to reach agreement which will tend to suggest coordination is less likely to occur.

- (b) The CMA's Guidelines state that it is easier to coordinate on a price when demand and supply conditions are relatively stable than when they are constantly changing.<sup>22</sup> Yet the demand and supply of electricity varies constantly—on a second-by-second basis during the day and across the year due to unpredictable and changing demand (for example, as result of weather changes), in addition to plant outages and intermittent wind generation affecting supply.
- (c) Due to the impracticalities of storing electricity, this volatility leads directly to a constantly changing price. Given this volatility, it would not be practical for generators to find a simple and transparent basis on which to coordinate. Due to fundamentally volatile prices, a simple agreement on price levels would not work. Similarly, there would be no obvious price which would provide a focal point for coordination.
- (d) This is further complicated by the fact that electricity is not a homogenous product when viewed in the context of the multiple forward products available. There are multiple different products that are offered defined according to both the exact time upon which the power will be delivered, the length ahead of real time it is purchased and the nature of the energy supply (for example, whether it is peak or baseload). There is therefore no single price around which coordination could be established.
- (e) Reaching agreement on investment decisions does not offer an easy alternative. Decisions would need to be taken on which generators would be allowed to invest in new plants, which would likely be difficult to agree (absent explicit coordination) for a small group of firms and implausible given the large number of generators in the generation market. It would not be sufficient to coordinate only between the largest generators since this would simply result in the larger generators passing share to the smaller firms (as they would invest at the expense of the larger firms), with no material effect on prices achieved.
- (f) A similar effect would result from coordination over mothballing plant to remove capacity from the market. Without all market players involved, decisions to mothball plant (to such an extent as to create upward price pressure) would simply allow for the smaller firms to add incrementally to their capacity and generate more.<sup>23</sup>

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<sup>22</sup> Paragraph 252(a) of the Guidelines.

<sup>23</sup> As discussed in paragraph 2.2.6 above, in recent years market conditions in generation have led SSE to close or mothball some of its generation assets. As demonstrated by SSE's internal papers on the motivations for the decisions taken (which have been provided to the CMA in response to Annex B3 of the FDL), these decisions have been based on factors that include the likely future technical life of the plant, restrictions on operation due to environmental legislation and the economics of future operation.

- (g) Monitoring could also be a problem for coordination on pricing given the limited transparency of bidding behaviour in forward markets and the asymmetry in generators' cost structures. Even if bids and offers were fully transparent, a divergence of prices bid and offered between generators in response to a demand or cost shock, for example, could be interpreted as a deviation from coordination (to be punished) or simply a different response to the demand or cost shock intended to be adherence to coordination.
- (h) Due to the nature of the transmission system and BETTA rules, there is no need for generators to be located near to their customers. The market is traded on a GB-wide basis. This would preclude the sort of simple geographic agreements on market segmentation amongst generators to which the Guidelines allude.<sup>24</sup>

5.5.6 Second, the asymmetry between different generation companies, in particular, implies that **coordination could not realistically be sustained by common incentives among the coordinating firms** even if a coordinated agreement could be reached in the first instance. This asymmetry manifests itself in the following ways:

- (a) **Asymmetry in market shares.** There is a considerable difference in scale of operation of the larger firms in the market and the smallest. Even among the larger operators, the largest generator is over four times the size of the smallest (by generation volume). This asymmetry means that incentives for coordinating are not aligned, with the larger generators standing to gain most from continued coordination and smaller generators benefiting most from deviation.
- (b) Asymmetric cost structures between firms resulting from a differing mix, age and efficiency of generation technologies across firms. Different generation technologies have entirely different cost structures. For example, nuclear generation has an extremely low proportion of variable costs and is highly limited in the extent to which output can be varied. In contrast, generation such as a combined cycle gas turbine (*CCGT*) offers flexible supply and a higher proportion of variable costs. This also means generators have different exposures to cost shocks. For example, firms with a high proportion of renewables or nuclear generation are less exposed to fossil fuel and carbon price shocks.
- (c) **Asymmetry in the extent of vertical integration, even within the larger vertically integrated suppliers.** For example, the retail electricity arm of British Gas is around twice the size of the retail arm of Scottish Power. Further, there are differences in the mix of end customers of the retail arms of these companies, with some having a higher proportion of customers on fixed deals than others. Other generators do not have their own retail arms but some have long term contracts. These different contractual arrangements with retailers are likely to influence the extent to which higher generation prices can be recovered, resulting in potentially different incentives to coordinate or deviate.

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<sup>24</sup>

Paragraph 252(c) of the Guidelines.

- (d) **Differentiated trading and hedging patterns.** Because there are differences in how generators trade and hedge, any movement in a given market price (e.g. the spot price) would affect generators differently.
- 5.5.7 These asymmetries imply a lack of stability in coordination through coordinating on price, investment or mothballing decisions. In addition, investment decisions also suffer from a lack of any obvious, effective, retaliation mechanism, and this would further destabilise any agreement (since punishment through investing in new plant would lock in greater competition for the future).
- 5.5.8 Third, given the large number of generation companies operating on the GB market, it is unrealistic to assume that all could be party to a coordinated agreement. This would leave a large fringe of firms collectively responsible for a large proportion of GB generation (around 40% if all firms other than the largest are included in the fringe) able to undermine any coordinated agreement. This would represent a serious threat to the external stability of any coordinated agreement.
- 5.5.9 There is strong evidence of new entry and expansion in generation in recent years in the GB market. In particular, in renewables, a large number of independent wind generators have entered the market over the past decade through new build projects. Although there has been less new build in thermal generation (mainly because new plant has not been needed and, more recently, due to uncertainty around access to the Capacity Market under EMR), ESB purchased a 50% share of the Marchwood CCGT station in 2009 and is now constructing a further CCGT at Carrington. There are also a number of firms who have entered the GB generation market through acquisition of existing plant. For example, a consortia led by Macquarie Bank has over the last two years purchased over 2GW of capacity and Munich Re purchased a 50% share in Marchwood CCGT station in 2013.
- 5.5.10 The introduction of the capacity mechanism will provide further incentives for entry, when required, to avoid a situation where there is a shortfall in capacity.
- 5.5.11 Finally, SSE is not aware of any history or instances of tacit coordination under NETA or BETTA. Moreover, the new EU REMIT regulation will provide regulators with better information to monitor for any instances of market manipulation, including coordination. In particular, ACER will be notified of all trades (including OTC trades) and these will be stored in a repository (see further discussion at paragraph 3.10.2).

## **5.6 No evidence that prices charged are excessive**

- 5.6.1 In addition to considering whether conditions in the GB electricity generation market could support either unilateral market power or coordination, the CMA will wish to consider outcome measures in the market. Specifically, whether there is evidence that prices and/or profits in generation are above those that would prevail in a competitive market.
- 5.6.2 The CMA will find that this is categorically not the case from its review of generation profitability. When the CMA looks at generation profitability, SSE fully expects it to find that profits are no more than required to cover the cost of capital, consistent with the preliminary view expressed by Ofgem in the SMA. Figure 5.2 below summarises

some initial profitability metrics for generation, both for SSE and the industry. These metrics show that, on average over the period 2009/10 to 2012/13,<sup>25</sup> SSE (and most likely the rest of the industry) has been making returns in generation that are likely to be only just sufficient (and may be insufficient) to cover the weighted average cost of capital (**WACC**), depending on what level of WACC is deemed appropriate.

**Figure 5.2: Summary of key profitability metrics for generation**

<b>ROCE estimates</b>	
SSE (2009–2012) based on CSS/statutory accounts	[X]%
Industry (2009–2012) based on CSS/statutory accounts	[X]%
<b>WACC estimate</b>	
Ofgem benchmark in SMA (pre-tax, nominal)	7%
Frontier benchmark of WACC (pre-tax, nominal)	[X]%

Source: SSE and Frontier Economics.

- 5.6.3 Between 2009 and 2012, SSE’s own return on capital employed (**ROCE**) in generation has varied between [X]% and [X]%, averaging just [X]% over the period based on the CSS data and statutory accounts. The industry ROCE has ranged between [X]% and [X]%, averaging [X]% over the period.
- 5.6.4 As is standard for profitability analysis, the CMA will wish to consider measures of ROCE against a reasonable benchmark and it is standard to use the WACC. Frontier Economics, on behalf of SSE, has therefore undertaken an extensive review of benchmark studies across different jurisdictions. This study contained in Annex 5.1 shows that there is no evidence to support the pre-tax nominal WACC for energy generation businesses of 7% assumed by Ofgem in the SMA.<sup>26</sup> Ofgem acknowledges that “*further information would be required in order to estimate the WACC on a consistent basis [between firms], and to establish the appropriateness of the underlying assumptions*”. SSE agrees, in particular given the result of Frontier’s benchmarking work.
- 5.6.5 The benchmarking work instead points to an appropriate pre-tax nominal WACC range of 8.7% to 20.7%. It is not plausible that the WACC in the de-regulated generation sector in the UK should lie below this range. To put Ofgem’s assumed WACC figure in context, a pre-tax nominal WACC of 7% implies a real (vanilla) WACC of below 3%, significantly below the WACC awarded to any regulated network company in the UK.
- 5.6.6 The wide range of estimates derived from Frontier’s work reflects the differences in national markets and different generation technologies. Frontier has narrowed this initial WACC range by applying two criteria to identify the most relevant WACC estimates. The revised range includes only those WACCs that relate to: unregulated generators and conventional thermal plant. This yields a narrower WACC range of [X]% to [X]%.

<sup>25</sup> These estimates are based on data taken from CSS and statutory accounts, and draw on Ofgem’s calculations relating to working capital as set out in paragraph 6.71 of the SMA.

<sup>26</sup> Paragraph 6.76 of the SMA.

- 5.6.7 These initial findings on profitability for both SSE and the industry are inconsistent with the existence of material unilateral market power or coordination in the market.



## 6. Response to 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**

### 6.1 Introduction

6.1.1 SSE does not believe the CMA's Theory of Harm 4 accurately reflects the situation in the GB energy market:

- (a) Theory of Harm 4 is predicated on the market shares of 'incumbent' suppliers being persistently high.<sup>27</sup> This assumption disregards the evolving and dynamic nature of the GB energy market and gives a misleading picture of the market in which suppliers operate. Section 6.2 below sets out SSE's view of the true picture of the competitive and dynamic energy market.
- (b) *Customer inactivity* (4(a)): the SMA's approach to the measurement of customer activity is incomplete and misleading. First, it understates the extent of external switching between suppliers. Second, it does not put enough emphasis on internal switching within suppliers as an indicator of customer engagement. Third, the Theory of Harm assumes that 'inactive' customers are indicative of a market that is not working effectively when in fact this is not necessarily the case.
- (c) *Tacit coordination* (4(b)): SSE categorically rejects the propositions that the energy supply market is vulnerable to tacit coordination and that there is evidence that tacit coordination is occurring. Assertions in the SMA and the Decision lack any systematic, rigorous and evidenced analysis of the correct framework stipulated by the CMA's Guidance. There are neither the conditions required nor any observed behaviour between the largest suppliers, which would allow tacit coordination to either occur or subsist. SSE is not aware of any current or past tacit coordination in the GB energy market.
- (d) *Regulatory intervention* (4(c)): SSE welcomes regulations which encourage competition and benefit customers. Some of the regulations implemented have had, and will continue to have, these effects. However, other regulatory intervention has reduced the ability, not the incentive, for suppliers to compete by constraining suppliers' abilities to innovate and compete for new customers. Targeted reforms of existing elements of the regulatory regime would remove artificial barriers to entry and expansion and allow suppliers to compete and innovate more freely. SSE raises the question of whether the different regional costs of transporting electricity could be passed on to suppliers as one national charge in order to achieve this outcome (see paragraphs 6.3.16 to 6.3.18 below).

These points are addressed in turn below.

<sup>27</sup>

Paragraph 49 of the Issues Statement.

## **6.2 The GB energy market is dynamic with fluctuating market shares and new entrants**

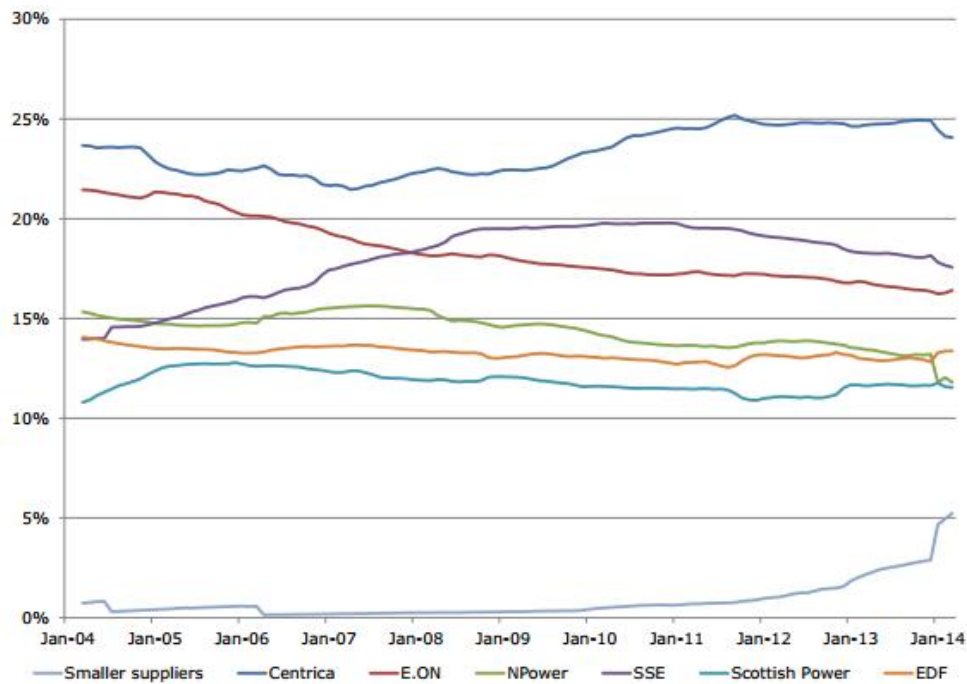
- 6.2.1 ‘Incumbency advantage’ and suggestions that the market is static are common themes throughout the Issues Statement and the Decision. However, SSE operates in a dynamic and well-functioning market. Fluctuating market shares; the entry and growth of new suppliers; and relatively low measures of market concentration seen in the market (see Section 5.2 above) all evidence this point.

### **Fluctuating market shares**

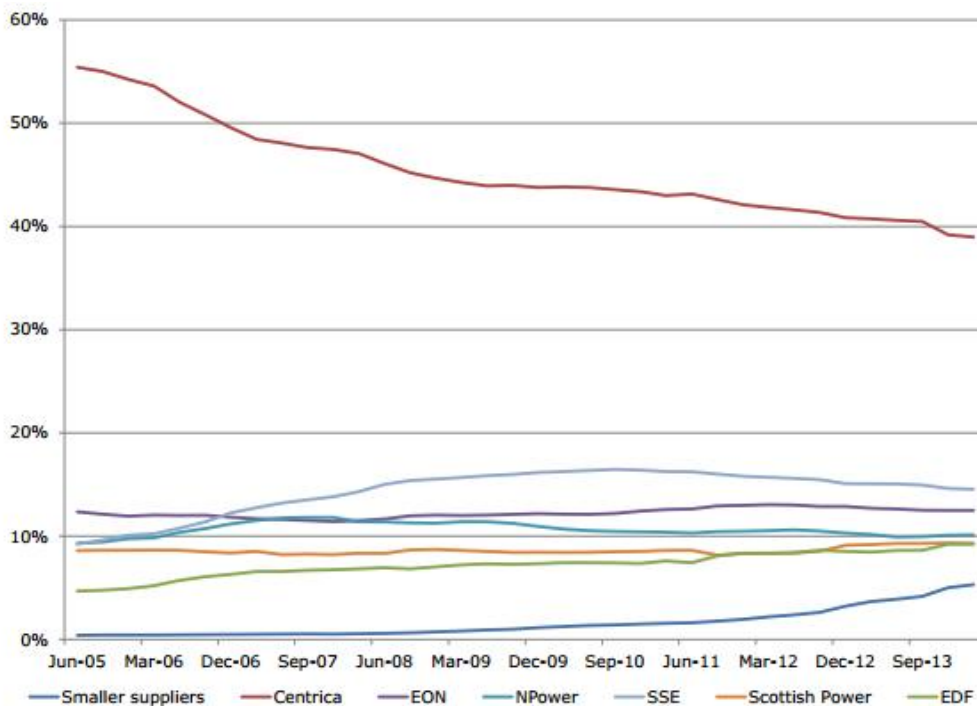
- 6.2.2 Over the past ten years, SSE has grown from the fifth to the second largest GB energy supplier. The dramatic change in SSE’s market position between 2004 and 2009 in both the electricity and gas retail markets can be observed in the SMA.<sup>28</sup> However, SSE’s market share has not remained static, as the Issues Statement would imply.
- 6.2.3 Figures 3 and 4 of the SMA, reproduced below, illustrate how SSE’s own market share, in both the electricity and gas retail markets, has steadily declined over the past four years. Both periods—of growth and decline—are indicative of the competitive pressure that exists and of the level of customer engagement in the market.

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<sup>28</sup> Figures 3 and 4 (pages 8-9) of the SMA.

**Figure 6.1: Figures 3 and 4 of the SMA**

Source: Meter Point Administration Number (MPAN) data from Distribution Network Operators (DNOs)



Source: Gas supply point data provided by Xoserve

### Competition between the largest suppliers

6.2.4 The charts reproduced above point to a dynamic retail market in which there is aggressive competition between the six largest energy suppliers, resulting in the

market shares and relative positions of these suppliers changing over time. In particular:

- (a) The experience of SSE illustrates the dynamic nature of competition between the six largest suppliers. As Figure 6.1 above shows, SSE gained market share rapidly between 2004 and 2009, growing from the fifth largest to the second largest electricity supplier. During the same period, SSE also pulled away from nPower and overtook E.ON to become the second largest gas supplier. Much of SSE's success in attracting customers during these years stemmed from the fact that it offered the cheapest tariff among the six largest suppliers for much of the period, while simultaneously developing a strong track record for customer service. More recently, SSE has seen its market share decline as rival suppliers have closed the gap in terms of price competition.
- (b) As can be seen from the top chart, British Gas (Centrica) had grown to become the largest electricity supplier in the market by 2004. Given that British Gas originally had a customer base composed entirely of gas customers, this suggests that British Gas was highly successful in competing for electricity customers in the years leading up to 2004. In recent years, British Gas has managed to sustain its market share in electricity, initially by offering the cheapest standard tariff among the six largest suppliers and more recently by investing heavily in product promotions (for example, it has now installed over 1 million smart meters in homes and businesses).
- (c) At the same time, British Gas has seen its share of gas customers decline significantly over time. By 2004 its share had already fallen to below 60%. Since 2004 its share has steadily fallen further – and now stands at less than 40%—the result of vigorous competition on price and quality of service from rival suppliers. As noted above, many of these customers switched to SSE between 2004 and 2009. In addition to this, EDF has nearly doubled its share of gas customers since 2005. It has achieved this through both being competitive on price (EDF has offered the cheapest dual fuel tariff among the six largest suppliers since mid-2011) and through tariff innovation (an example of this has been EDF's 'Blue + Price Promise' product, which offers fixed prices and the reassurance that the customer will be informed if they can save more than £1 a week).
- (d) The charts also indicate that competition between the six largest suppliers remains vigorous today. In particular, nPower saw its electricity retail market share decline markedly in late 2013 following adverse publicity about problems with its billing system.<sup>29</sup> Some of these customers are likely to have switched to small suppliers (see below), but the chart also suggests that EDF and E.ON also attracted some of this business.

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<sup>29</sup> nPower (4 December 2013), *The problems with our billing system and the action we're taking right now*, available at <https://blog.npower.com/2013/12/the-problems-with-our-billing-system/>.

## New entrants

- 6.2.5 As the charts reproduced in Figure 6.1 above show, SSE's decline in market share corresponds with a period in which new entrant suppliers have seen significant growth in their shares of the electricity supply market. The SMA itself acknowledges that the market shares of the six largest suppliers in the domestic electricity market are being eroded at an increasing rate by 18 smaller suppliers.<sup>30</sup>
- 6.2.6 Energy UK reported that independent suppliers gained 47% of all switching GB energy customers in April 2014.<sup>31</sup> Four of these suppliers now have over 250,000 customers, including:
- (a) **Utility Warehouse** – in 2013, Telecom Plus, purchased the 700,000 customers supplied by its Utility Warehouse brand (previously a partnership with nPower);
  - (b) **First Utility** – was launched in 2008 as a new privately-owned company spun out of First Telecom and has enjoyed steady growth ever since;
  - (c) **Ovo Energy** – entered the domestic market in 2009 as a new privately-owned start-up and entered the business retail market in April 2013; and
  - (d) **Co-operative Energy** – was established in 2010 as part of the Midcounties Co-operative and claims to be an 'ethical provider'.
- 6.2.7 Since the SMA was compiled, another independent supplier, Extra Energy has entered the market, bringing the total number of independent suppliers to 19. Furthermore, recent research shows that nearly a third of all the gas and electricity licence applications since 2011 occurred in the six months to 31 October 2013.<sup>32</sup> The volume of applications implies that potential suppliers do not perceive barriers to entry to be high. These points demonstrate that competition in the energy market, despite being strong before, is intensifying further.
- 6.2.8 In August 2014, DECC and Ofgem announced their action plan for encouraging independent suppliers following consultations. Proposed measures include: (i) addressing concerns about the rules and obligations with which suppliers are required to comply; (ii) market governance and infrastructure; and (iii) engagement with independent suppliers in policy design. This action plan will give independent suppliers a boost, stimulating competition further.

## Market less concentrated

- 6.2.9 A recent report by Cornwall Energy which assessed the UK energy market according to various technical indicators, including the HHI, found that the UK market is becoming less concentrated.<sup>33</sup> Between 2011 and 2014, the HHI for domestic

<sup>30</sup> Figure 3 (page 8) of the SMA.

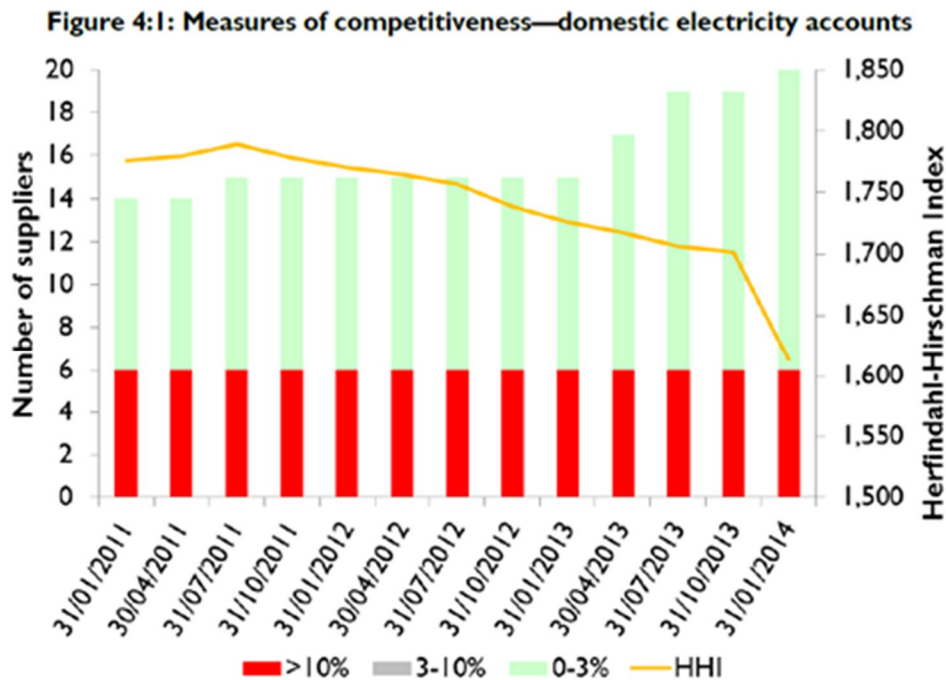
<sup>31</sup> Energy UK (April 2014), *Electricity Switching*, available at <http://www.energy-uk.org.uk/publication/finish/5-research-and-reports/1105-energy-switching-figures-april-2014.html>.

<sup>32</sup> Page 5 of Cornwall Energy (2014), *Competition in British household Energy Supply Markets*.

<sup>33</sup> Figure 4.1 (page 16) of *Competition in British household Energy Supply Markets*.

electricity services fell from around 1,800 to 1,600, with similar reductions for dual fuel services. The figure below illustrates this point, with the yellow line (representing the HHI) steadily decreasing since October 2011 with a steeper fall between October 2013 and January 2014. Research conducted for DECC by London Economics in 2013 found that the HHI of the UK electricity retail market is also relatively low when compared to the HHI of electricity retail markets in other EU countries.<sup>34</sup>

**Figure 6.2: Evolution of the HHI for UK domestic electricity services**



Source: Cornwall Energy.

- 6.2.10 SSE's experience is of a vigorously competitive market, with a number of suppliers of various sizes and with different business strategies. Competition also takes place on a variety of parameters. There has been much focus on price in this context (see paragraph 4.2.8 above). However, competition also takes place on a variety of non-price factors including (i) 'quality' factors such as ethical or green credentials; and (ii) range, including offering services in addition to electricity. These considerations provide opportunities for suppliers such as Good Energy and Ecotricity (100% renewable energy tariffs) and for ethical White Labels like Ebico to thrive. Such suppliers tend to be rated very highly for customer satisfaction.<sup>35</sup> Similarly, Utility Warehouse is able to attract customers by offering a unique product with its 'one-stop-shop' bundling of utilities including phone and broadband as well as electricity and gas. Service is also a competitive differentiator to which SSE pays particular attention (see paragraphs 6.3.19 to 6.3.24 below).

<sup>34</sup> Page 120 of London Economics (2013), *Energy Retail Markets Comparability Study*.

<sup>35</sup> The 2014 *Which? Switch Energy Satisfaction Survey* rated Good Energy, Ecotricity, Utility Warehouse and Ebico as the top four energy providers for customer satisfaction, available at <http://www.which.co.uk/switch/energy-suppliers/energy-companies-rated>.

- 6.2.11 SSE's own history demonstrates the potential for a company to increase its market share over a relatively short period. The recent decline in SSE's market share is testament to an increasingly competitive market, contrary to the portrayal in the SMA and the Issues Statement.

### 6.3 Hypothesis 4(a)

- 6.3.1 The Decision asserts that "*weak customer engagement is a harmful feature of this market... that competition is more effective in some parts of the market than others... with some [consumers] being active in the market and others being disengaged*".<sup>36</sup> Similarly, the Issues Statement suggests that customers are "*inactive*" or there is "*customer inertia*" and that this "*reduce[s] the incentives of energy suppliers to compete*". These propositions are incorrect for a number of reasons:

- (a) first, the evidence that the CMA has cited understates the extent of external switching between suppliers;
- (b) second, the evidence cited in relation to these statements does not put enough emphasis on internal switching within suppliers (for example where customers actively chooses to switch from one type of tariff to another) as an indicator of customer engagement. The evidence also overlooks wider measures of consumer engagement in the market; and
- (c) third, the CMA's theory of harm assumes that "*inactive*" customers are indicative of a market that is not working effectively when in fact this is not necessarily the case.

The picture painted of consumers' engagement in the market is thus misleading, incomplete and at odds with SSE's far more positive experience.

- 6.3.2 To illustrate this, Figure 6.3 below provides a cascading breakdown of the current SSE electricity customer base across different internal and external switching activities measured over the last ten years (it should be noted that these figures relate specifically to domestic customers—though as explained below there is clear evidence that non-domestic customers are also actively engaged in the market). The table shows a number of important ways in which a customer might demonstrate engagement by switching. It should be remembered that in the case of 'in area' customers, SSE is analysing the approximately 50% who are now with SSE out of a total 'incumbent' market of 4.5 million customers in the North of Scotland, Southern and South Wales regions combined. The 50% are with other suppliers now. Of course all of the 'out of area' customers have engaged by switching at least once from a previous supplier to be with SSE.

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<sup>36</sup>

Paragraph 3.12 of the Decision.

**Figure 6.3: SSE switching and customer engagement**

<b>Percent of Domestic Electricity Customers</b>	<b>‘In area’ customers</b>	<b>‘Out of area’ customers</b>	<b>All customers</b>
Has not switched externally to SSE from another Supplier within the last ten years	62%	8%	33%
<i>of which..</i>			
Has not signed up to other product (gas/telecoms/Home Services) within the last ten years	42%	1%	20%
<i>of which..</i>			
Has not switched internally to a fixed term contract or a reward scheme within the last ten years	39%	1%	19%
<i>of which..</i>			
Has not switched internally to direct debit within the last ten years	<b>23%</b>	<b>1%</b>	<b>11%</b>

*Source: SSE.*

6.3.3 Moving down the table, the figures indicate the residual proportion of SSE customers not taking the potential engagement opportunity. As can be seen from this table, approaching 90% of SSE’s existing electricity customer base has switched internally, switched externally or signed up to additional non-electricity services at least once in the last decade. It should be stressed that all of these measures involve customers making active decisions to engage in the market and switch supplier or product. In light of this, it would be incorrect to portray SSE’s customer base as being inactive or disengaged. SSE discusses the picture in respect of external and internal switching further in the next two sections.

#### **The evidence cited by the CMA understates the extent of external switching between suppliers**

6.3.4 Nearly two thirds of SSE’s existing domestic electricity customers have switched to SSE from another supplier in the last decade. This demonstrates that the large majority of SSE’s customer base not only prefers SSE to rival suppliers, but has acted on this preference. Moreover, nearly 40% of SSE’s existing customers based in its ‘in area’ regions (Southern, South Wales and North Scotland) is comprised of customers who have switched away from SSE and subsequently switched back.

6.3.5 Furthermore, of those customers that have not switched to SSE for their electricity supply in the last 10 years, an additional 13% of SSE’s customer base has taken up another service, be it gas, telecommunications or SSE’s Home Service offering.

6.3.6 The SMA presents evidence of a declining rate of external switching between 2008 and 2013.<sup>37</sup> However:

- (a) as the SMA acknowledges, this decline in external switching rates has been driven by the loss of routes to market resulting from the cessation of doorstep

<sup>37</sup>

Figure 9 and paragraph 3.16 of the SMA.



selling. It is also likely to be the result of the regulatory reforms instigated by Ofgem, as discussed later in this section. As such, it does not provide an indication that customers are becoming inherently more disengaged or that the switching process is becoming more onerous (indeed, the switching process has been streamlined and further progress is being made towards faster switching); and

- (b) the SMA relies on historic data without taking into account how recent reforms, the appearance and rapid growth of new entrants (see above at paragraphs 6.2.5 to 6.2.8), increased awareness due to increased media coverage, and price changes affect these external switching patterns. As mentioned above, independent suppliers' market share has doubled over the past year. The Tracking Survey 2014 notes that 2013 is the "*first time reported switching rates have stabilised since 2008, when switching for both fuels began its year-on-year decline*".<sup>38</sup> The proportion of those saying they had ever switched increased for the second year in a row for both gas and electricity customers.

### **The CMA must take account of other types of switching**

6.3.7 It is important to recognise that external switching between electricity suppliers is only one indicator of customer engagement. SSE's customers have demonstrated active engagement in the energy market in a number of other respects, including:

- (a) signing up to another SSE product—including single fuel electricity customers switching to dual fuel service provision, as well as customers electing to take up SSE's telephony and broadband services or home services (e.g. boiler maintenance and servicing);
- (b) taking an active decision to switch internally to a fixed term contract or a reward scheme; or
- (c) deciding to switch to a different payment method, such as direct debit.

6.3.8 Indeed, internal switching rates have been increasing in recent years. This increase in switching is in part attributable to the introduction and increasing use of fixed term tariffs. SSE now has [X]% of its customers on fixed tariffs. These fixed price tariffs are associated with high end-of-term switching rates, not only to new suppliers but to other tariffs with the same supplier, based on an active choice (rather than passively moving onto a default evergreen tariff). For completeness, SSE notes the additional protections for customers on default evergreen tariffs.

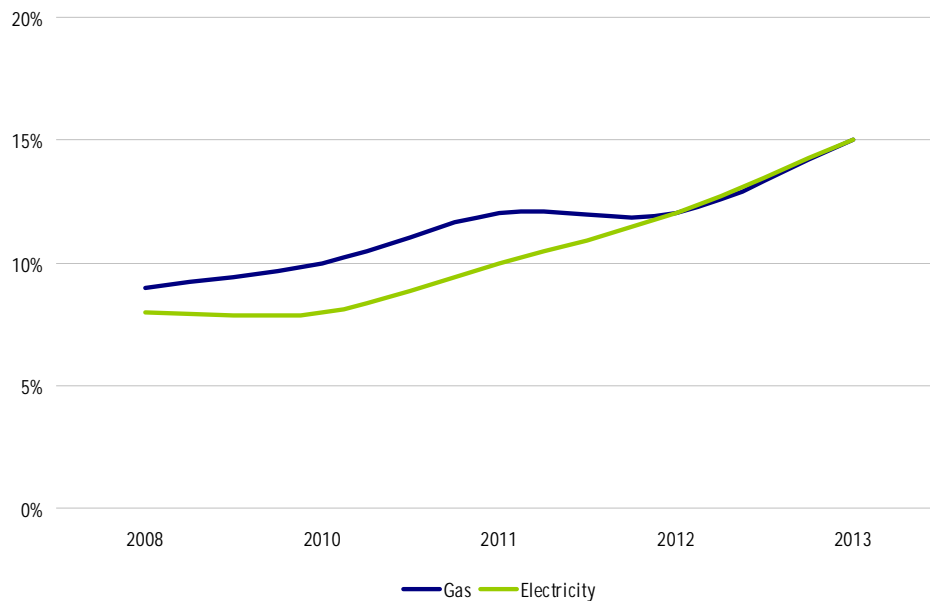
6.3.9 Overall, SSE's experience of increasing internal switching rates fits with that in the SMA, which shows a general trend of internal switching of tariff or payment method (as illustrated in Figure 6.4 below).<sup>39</sup>

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<sup>38</sup> Page 6 of Ipsos MORI prepared for Ofgem (June 2014), *Customer Engagement with the Energy Market: Tracking Survey 2014*.

<sup>39</sup> Figure 10 (page 29) of the SMA.

**Figure 6.4: Customers who reported switching tariff/payment method in the last year but not supplier**



Source: Ipsos MORI, *Customer Engagement with the Energy Market: Tracking Survey 2013*.

#### **A lack of switching does not necessarily reflect a low level of customer engagement**

6.3.10 The CMA should bear in mind that, even where customers do not switch, they may be demonstrating active engagement in the market in other ways. While the analysis set out above considers a range of internal and external switching measures, it should be emphasised that these are not the only indicators of customer engagement. For example:

- (a) research by Ofgem indicates that the use of internet comparison sites is growing rapidly (see paragraph 6.3.34 below);
- (b) more than 100,000 SSE customers request meter changes each year. In the majority of cases this is driven by a change of preferred payment type. Although smart meter rollout is still in its infancy, SSE is already seeing a 33% appointment take up in its initial areas; and
- (c) recent marketing campaigns to promote the awareness of energy use have shown higher response levels, indicating high levels of consumer engagement. In addition, over two million of SSE's customer accounts have registered for paperless billing and receive a quarterly e-bill, while direct debit payment is now at 59% of the total base. In 2012, SSE launched a programme to offer account reviews to selected customers with a 65% acceptance rate. These account reviews have resulted in the completion of almost 300,000 twenty-minute telephone reviews covering best tariff, payment method, bill type and energy efficiency checks. The customers' willingness to interact with SSE illustrates their engagement with the market and the value placed by them on this service.

- 6.3.11 Furthermore, as the SMA itself acknowledges, survey evidence from IPSOS MORI indicates that the majority of customers (55% in 2013) who have never switched supplier are happy with their current supplier.<sup>40</sup> Customers could be happy with the service provided for a number of reasons and it is not clear that this indicates a lack of engagement in the market. The same goes for the 13% of customers who indicated that they did not “*think there is any difference between the suppliers to make switching worthwhile*”. Moreover, a further 12% of customers indicated that they had checked the prices of other suppliers and believed they were on the best deal. This indicates active engagement with the market on the part of these non-switching customers. Only 27% of customers surveyed by Ipsos MORI indicated that they had never switched because it was a “*hassle*”.
- 6.3.12 SSE acknowledges that more could be done to make switching easier. In this regard, SSE notes that the perception among some customers that switching is a “*hassle*” is being addressed by Ofgem’s reforms, which will cut switching times to three days by the end of 2014. The roll-out of smart metering will create further opportunities to make switching tariff or supplier even more straightforward.

### **Customer engagement for particular groups**

- 6.3.13 The Issues Statement states that the CMA will consider the issues it raises for identifiable groups, including those from particular regions. SSE does not believe there is a problem to address in relation to identifiable groups.
- 6.3.14 Customers in remote regions have an extensive choice of tariffs. For example, on 1 August 2014 in the Scottish Hydro region, there was a choice of 53 Dual Fuel (MDD) tariffs, 49 Economy 7 tariffs and 30 gas-only tariffs.<sup>41</sup> In relation to the North of Scotland (where certain non-standard metering configurations mean that switching sites do not show the relevant tariff so customers concerned are required to make their own enquiries of suppliers in order to facilitate switching), Ofgem found that customers on ‘Total Heat Total Control’ (the main tariff of this type) have been provided with a competitive offering by SSE.<sup>42</sup>
- 6.3.15 It is not clear from the Issues Statement whether the CMA intends to analyse vulnerable customers separately. However, SSE’s own specifically targeted initiatives ensure that vulnerable customers are assisted over and above the statutory requirements, including (i) the former ‘energyplus Care’ tariff; (ii) its commitment to the Hardship and Warm Homes Discount scheme (**WHD**); and (iii) funding key organisations, such as the Citizens Advice Bureau, National Energy Action and Energy Action Scotland. These initiatives are discussed in more detail in Annex 6.1.

### **No regional price discrimination**

- 6.3.16 Contrary to the Issues Statement’s suggestions, SSE does not charge less competitive tariffs to its ‘in area’ customers. Regional differences in SSE prices simply reflect the differences in use of system costs (i.e. network costs). The following diagram shows

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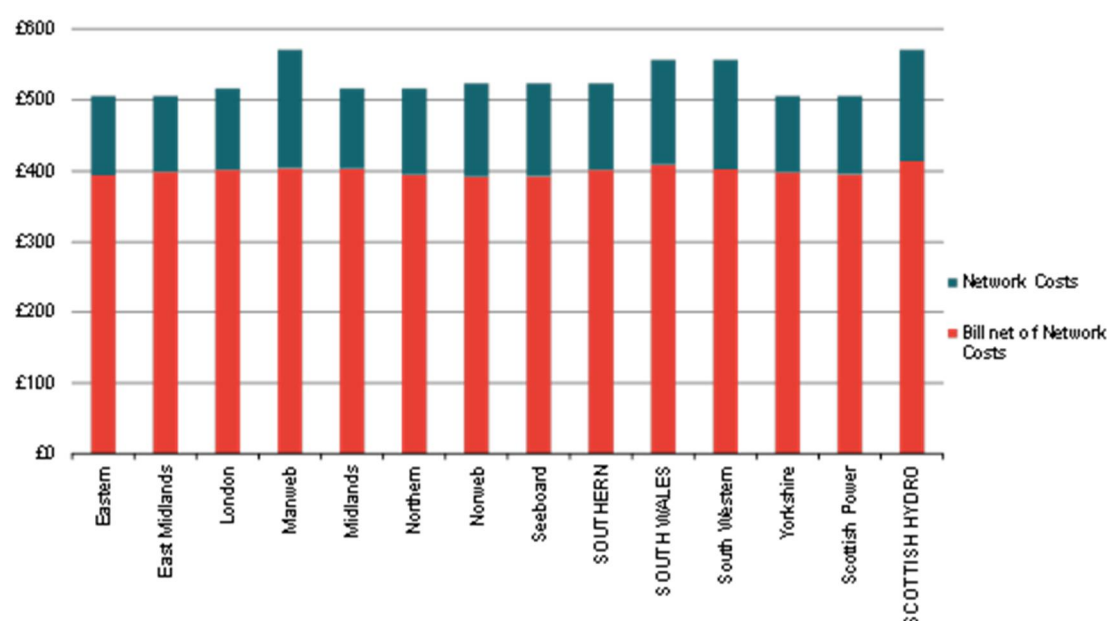
<sup>40</sup> Figure 10 and paragraph 3.23 of the SMA.

<sup>41</sup> Source: Uswitch.

<sup>42</sup> Page 4 of Ofgem (26 July 2013), *The state of the market for customers with dynamically teleswitched meters*, Ref 133/13.

that regional differences in SSE's electricity pricing are predominantly due to variations in network costs rather than to a different approach to pricing customers in SSE's incumbent regions in comparison with any other region.

**Figure 6.5: Regional differentials in electricity bills**



Source: SSE.

Notes: Annual bill is based on a quarterly, general domestic tariff at the tariff rates implemented by SSE in March 2014. Assumed annual electricity consumption is 3200 kWh.

6.3.17 In any event, if national pricing were introduced as SSE suggests, it should iron out any remaining distribution cost disparities.

6.3.18 Nor is it the case, as suggested in paragraph 4.5 of the SMA, that an incumbent is always the most expensive provider in its former PES region. In fact, as can be seen from Figure 6.5 below, this is almost never the case.

**Figure 6.6: Comparison of incumbent pricing**

Comparison of standard tariff amongst the six largest suppliers (rank out of 6, where 1 = cheapest and 6 = most expensive) (pricing as at July 2014)																
Fuel	Incumbent	Eastern	East Midlands	London	Manweb	Midlands	Northern	Norweb	Scottish Hydro	Scottish Power	Seaboard	Southern	Swalec	Sweb	Yorkshire	
Elec	Host PES	4	4	4	6	5	5	4	5	5	3	2	5	4	6	
Gas	British Gas	6	6	6	6	6	6	6	6	6	6	6	6	5	6	

Source: SSE.

*Notes: Based on a comparison of general domestic tariffs at 1 April 2014, assuming direct debit and annual consumption of 3,200 kWh on electricity and 13,500 kWh on gas. The incumbent supplier is then ranked against the other major suppliers, where a ranking of 1 indicates the cheapest and 6 indicates the most expensive.*

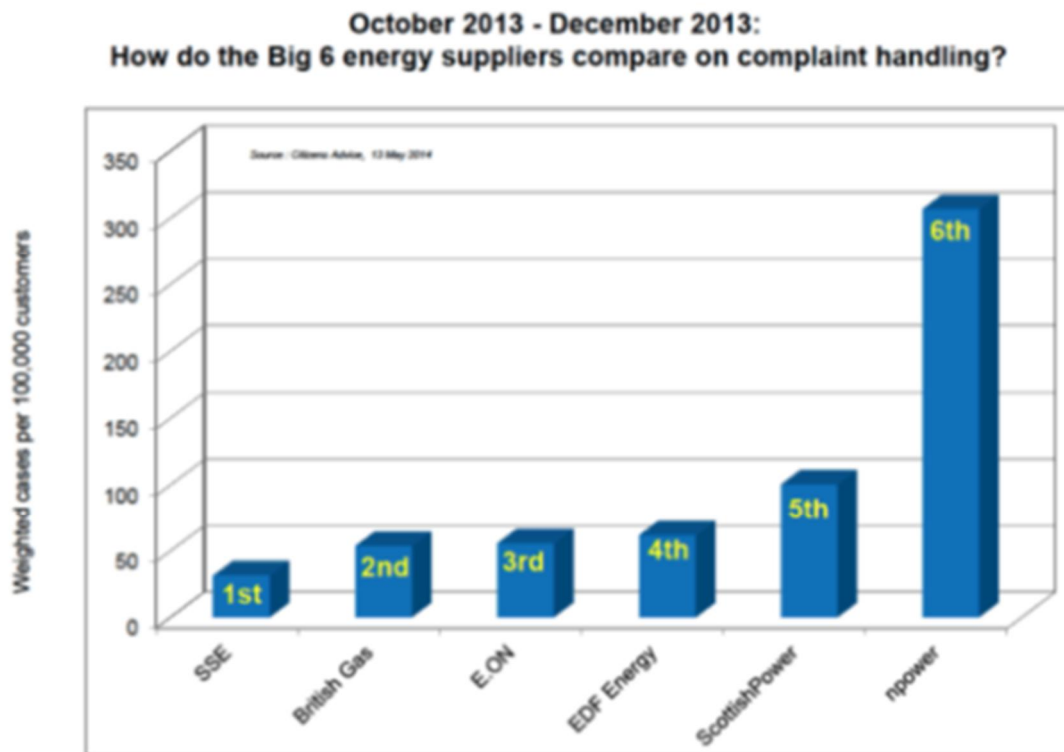
### **Engaging customers by building trust**

- 6.3.19 It is imperative that SSE conducts itself to build and enhance trust with its current and potential customers. Contrary to the suggestions made in the Issues Statement,<sup>43</sup> SSE does not “*exploit and influence the behaviour and perceptions of customers to their [its] advantage*”. It is not in SSE’s commercial interests to behave this way, since this would undermine customer trust and ultimately damage SSE’s ability to attract new customers or retain existing ones.
- 6.3.20 SSE is committed to building consumer trust and engagement in the market by ensuring that customers can readily compare tariffs and products and choose the product that is right for them. SSE’s competitive offering is based around being fair, and being seen to be fair, to its customers. Consequently, SSE has introduced a number of initiatives to foster trust including: (i) service guarantees (including one for vulnerable customers); (ii) a customer charter; (iii) sales guarantees; (iv) customer forums held regularly over the past two years; and (v) an online price comparison tool. SSE has also put an end to practices disliked by customers including cold calling (both doorstep and telephony) and disconnecting any of its domestic customers in winter (unless for safety reasons).
- 6.3.21 SSE’s objective of building consumer trust is lent greater urgency by the fact that SSE relies on high levels of customer satisfaction as one of the differentiating factors in its competitive offering.

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<sup>43</sup>

Paragraph 51 of the Issues Statement.

**Figure 6.7: Complaint handling rankings by supplier**

Source: uSwitch.

- 6.3.22 SSE has been voted Best for Customer Service every year since 2006 in the uSwitch Customer Satisfaction Reports and leads the largest six energy suppliers in terms of complaints handling (as shown in Figure 6.7 above). SSE has achieved this best in class customer service position due to its focus on service and a culture of continuous service improvement. When comparing transparency, honesty and dependability, SSE ranked higher than popular brands such as Tesco, Sky, BT and EasyJet,<sup>44</sup> and SSE's recently announced price freeze has had a strong positive impact with customers.<sup>45</sup>
- 6.3.23 Within the energy industry a 'complaint' is defined as "*an expression of dissatisfaction*". This is a very low threshold, but even against this low trigger, SSE's percentage of industry complaints, as monitored by Ofgem has decreased—with SSE contributing less than 3% of those measured. Of the complaints SSE receives, 85% are resolved within the next working day (an increase of 13% from last year). These relate in the main to issues such as customers confused by the complexity of their bills and the removal of the prompt payment discount. Many of these complaints, including those relating to bill complexity and discounts, stem from the RMR reforms (see further in Annex 6.2). The complaints that are not resolved within the next working day involve further investigation such as affordability issues and energy usage. SSE's fast resolution rate underlines SSE's exemplary conduct in this area and its commitment to building trust and ensuring customer satisfaction.

<sup>44</sup> Slide 7 of Vision Critical (26 June 2013), *SSE Loyalty Discussion Forum*.

<sup>45</sup> Vision Critical (April 2014), *SSE Price Freeze Announcement*.

- 6.3.24 SSE is the most responsive and trusted of the six larger energy companies in the GB energy market. It is committed to its customer relationships and actively seeks to improve and foster them, as its independent initiatives and resulting actions show. Any “*exploitation of customer behaviour or perception*”, as suggested by the CMA, would undermine SSE’s reputation and seriously damage its competitive offering.

### Sales and variations

- 6.3.25 The customer journeys through the sales process and the process for switching tariff within a supplier is long and involves the provision to customers of a considerable amount of information. In order to comply with all relevant regulations, SSE’s sales call is around 30 minutes long and provides customers with, arguably, more information than can reasonably be assimilated in a telephone call. It may also inadvertently convey the impression that switching energy provider is as risky and significant a decision as, say, a major financial services purchase, rather than as straightforward as, say, taking out a mobile phone contract, and thereby deters customers.
- 6.3.26 The supply licence’s approach to prioritising consumer protection over customer service may have an undesired consequence: customers may feel that they have been given too much information on the sales call and yet may still not fully comprehend their rights or the details of their tariff. It should be noted that these customer interactions are already covered by existing consumer protection regulations (including distance selling rules) and it is therefore worth revisiting the need for further prescriptive requirements through supply licence obligations. SSE believes that the resultant processes risk creating an obstacle to consumer engagement.

### Micro-business customers

- 6.3.27 Turning now to micro-business customers, SSE’s first observation is that there is a tremendous diversity of enterprises which are caught either by the consumption-based definition or by the staff numbers/annual turnover definition. It is clear that corner shops, accountancy firms, car showrooms, farms and small factories represent a far from homogenous group of customers. Only 56% of members surveyed as part of the FSB’s ‘Voice of Small Business’ Survey Panel in May 2014 procure their energy separately from domestic energy (33% are on a domestic tariff, 10% pay for energy in their rental and 1% generate their own energy). SSE therefore focuses below on that group of small businesses in the non-domestic market. SSE has identified [X] electricity and [X] gas customers as micro-businesses, some [X] of which are on contract terms.
- 6.3.28 A key feature of the non-domestic market, which is relevant for micro-business customers, is the predominance of fixed term contracts. These provide price certainty in the short and medium term, which may be particularly important in order to manage cash flow for some small businesses. Ofgem reports that 83% of micro-business customers surveyed are on fixed term contracts.<sup>46</sup> For SSE customers, the figures are [X]% of electricity and [X]% of gas contracts—although a number of

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<sup>46</sup> Ofgem (18 December 2013), *Quantitative Research into Non-domestic Consumer Engagement in the Energy Market, Element Energy and the Research Perspective*.

these are temporary (deemed) tariff arrangements covering the period between one contract ending and another starting (potentially with another supplier). Ofgem also reported that 78% of customers who stay with their existing supplier at the end of their contract negotiate a renewal rather than allowing the contract to rollover.

- 6.3.29 Indeed, automatic rollover contracts are increasingly rare—in response to stakeholder engagement, SSE stopped this practice in 2013 (a move followed by several other major suppliers). SSE has introduced variable business rates which apply by default at the end of a fixed term contract. These rates are published on SSE’s website,<sup>47</sup> and are set at a level which may be subject to changes on similar time frames to domestic tariffs. Whilst SSE’s decision to stop automatic rollovers was an appropriate response to customer concerns, it would also seem to be a sign of a well-functioning market that other suppliers may see an advantage in continuing to offer automatic renewal if that is what they believe their customers want.
- 6.3.30 SSE firmly believes that the energy supply market works effectively in the interests of micro-business customers. SSE is therefore particularly concerned with calls in some quarters to further regulate the micro-business market to reflect the types of changes already introduced in the domestic sector. There is a danger that parallels drawn between micro-business and domestic customers fail to fully recognise this overlap. Any intervention to replicate changes already introduced in the domestic market would drive up prices.
- 6.3.31 SSE supported the key changes introduced for micro-business customers through the RMR and has been proactive in making further voluntary changes to its processes to better meet its micro-business customers’ needs. SSE also fully supports Ofgem’s ongoing work to better regulate the practices of Third Party Intermediaries (*TPIs*) who play an important role in the non-domestic market. In particular, SSE regards further direct regulation of the activities of TPIs as the most effective means of promoting business protection for micro-business customers. (Ofgem has concurrent powers to enforce the Business Protection from Misleading Marketing Regulations and is still considering how best to proceed with the regulation of TPI activities.)

#### **Conclusions on Hypothesis 4(a)**

- 6.3.32 For the reasons set out above, SSE rejects the proposition that “*weak customer engagement*” is a “*harmful feature of this market*” that is undermining incentives of suppliers to compete.
- 6.3.33 Notwithstanding this, SSE recognises that more can be done—including reviewing existing regulation—to make the market simpler and more transparent and, ultimately, to deliver a better customer experience. As explained above, it is in SSE’s commercial interests to stimulate further engagement in order to help it to build consumer trust and customer satisfaction, and ultimately, to improve its competitive offering. SSE discusses the need for regulatory reform in Section 6.5 below.

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<sup>47</sup> SSE Variable Business Rates for Business Electricity effective 1 April 2014, available at <http://www.ssebusiness.co.uk/SSEInternet/uploadedFiles/BusinessEnergyCentre/Public/InformationCentre/Variable%20Business%20Rates%20Apr%202014%20with%20EUC%20info.pdf>.



- 6.3.34 In addition to this, SSE considers that more could be done to stimulate competition by creating routes to market for suppliers. An important opportunity here relates to internet-based energy price comparison sites (*ICSs*), which are now used by three million GB energy customers. These sites have played an increasingly important role in stimulating customer engagement in recent years by making it easier for customers to compare a wide range of tariffs at the touch of a button. They are also an important route to market for suppliers.
- 6.3.35 However, SSE is concerned that a number of features of the ICS market are restricting competition between these sites, meaning that this important route to market is not working as well as it could be for customers or new entrants. Recent market investigations into other sectors, such as the Competition Commission's 2013 investigation into private motor insurance, found that price comparison websites were not working as well as they could be in stimulating competition and concluded that there needed to be improvements to their operation. SSE believes that the CMA should focus closely on the role played by price comparison websites in the context of this market investigation as well.
- 6.3.36 By way of context, it should be noted that the market for price comparison websites is highly concentrated. One recent study found that a large majority of consumers (85%), who had used a price comparison website in the last two years, had used one or more of the four leading energy price comparison websites. By contrast, only 8% had used only other sites.<sup>48</sup> SSE is concerned that this market power may allow these providers to charge higher commission fees and charges to suppliers—costs which are ultimately borne by end customers. The level and nature of commissions and charges can also be unpredictable and opaque.
- 6.3.37 In addition to this, SSE is concerned about a number of other features of the ICS market:
- (a) Ofgem's standard consumption level estimates are not necessarily relevant for every consumer and some sites offer the ability to estimate consumption based on property and usage characteristics. However, there is no agreed methodology nor standard consumption data on which to base such an estimate;
  - (b) ICS comparison results are price-focussed and do not reflect product features that may have value to a consumer. In the past, energy and home services bundles have been shown very low down the results tables because they are more expensive than energy-only products. Consequently prospective customers who may have valued such an offer may never have actually seen the product; and
  - (c) ICSs are restrictive in the comparison they provide. For example, Economy 10, which is available throughout the country, is not shown.

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<sup>48</sup> Page 21 of RS Consulting (2014), *Price comparison websites: consumer perceptions and experiences – A report by RS Consulting for Consumer Futures*, available at <http://www.consumerfutures.org.uk/files/2013/07/Price-Comparison-Websites-Consumer-perceptions-and-experiences.pdf>.

## 6.3.38 SSE would prefer:

- (a) presentation of comparisons in a similar format to car insurance, whereby non-price-focussed product features are displayed in a first column as the ‘main product’ with subsequent columns featuring products which are either free of charge or can be optionally added (in the case of car insurance this would be legal cover, breakdown services, etc.);
- (b) standardisation of methodologies for estimating regulatory impacts and consumption to more readily allow for like-for-like comparisons based on usage;
- (c) ICSs to display a price comparison for all products available in the market regardless of whether they can sell the product or not; and
- (d) a central repository of pricing data to ensure that there is a single source of data to be used consistently across all ICSs.

SSE hopes to have the opportunity to engage further with the CMA on these options.

**6.4 Hypothesis 4(b)**

6.4.1 SSE categorically denies participating in tacit coordination in the GB energy market, nor is SSE aware of any such tacit coordination having taken place. SSE therefore rejects Ofgem’s unevidenced assertion that there is “*a reasonable suspicion*” that tacit coordination is a feature of the GB energy market.

6.4.2 When determining whether there could be conditions that facilitate coordination, the CMA must give weight to the factors in its Guidelines as follows:<sup>49</sup>

- (a) firms need to be able to reach an understanding and monitor the terms of coordination;
- (b) coordination needs to be internally sustainable among the coordinating group; and
- (c) coordination needs to be externally sustainable.

6.4.3 The Issues Statement does not apply this established framework, but instead merely indicates that the SMA found that “*several characteristics of the markets for the retail supply of gas and electricity are conducive to coordinated behaviour*”.<sup>50</sup> SSE disagrees with this conclusion for the following reasons:

- (a) the SMA considers only a small selection of the key characteristics driving behaviour in this market. The CMA will need to consider the full context of this market, as described by SSE in Section 2 of this Response; and
- (b) viewed collectively the characteristics of the market are *not*, in fact, conducive to tacit coordination—these are considered in turn below.

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<sup>49</sup> Paragraph 250 of the Guidelines.

<sup>50</sup> Paragraph 54 of the Issues Statement.

- 6.4.4 In the Issues Statement, the CMA also refers to the finding in the SMA that certain “*aspects of the behaviour of the six largest suppliers would appear to be consistent with tacit coordination between them*”.<sup>51</sup> SSE strongly disagrees with this conclusion, as explained below.

#### **Characteristics of this market are not conducive to tacit coordination**

- 6.4.5 In the SMA, Ofgem perceives the existence of a number of characteristics in the GB energy market to be conducive to tacit coordination. SSE addresses these characteristics and demonstrates why they are not conducive to tacit coordination in turn below.<sup>52</sup>

- (a) **Level of concentration in the market.** Contrary to the suggestion in the SMA, GB does not have a highly concentrated energy market, as set out in Section 5.2 above. This is the case particularly when compared with other European energy markets. This lack of concentration would make it harder for suppliers to reach an understanding with one another or monitor any coordination that was already occurring.
- (b) **Disruptive market entry.** In the SMA, Ofgem voices concerns that the rate at which the largest suppliers are winning new customers has declined over time.<sup>53</sup> Ofgem’s interpretation of this situation as a reduction in the intensity of competition is misguided.

The key driver for the largest suppliers’ declining ability to win new customers is the significant entry of new players and the competition they represent.<sup>54</sup> As Figure 29 of the SMA (reproduced below) demonstrates, small suppliers started to increase their share of new customers in 2008, at the same time as the larger suppliers’ share of new customers began to fall.

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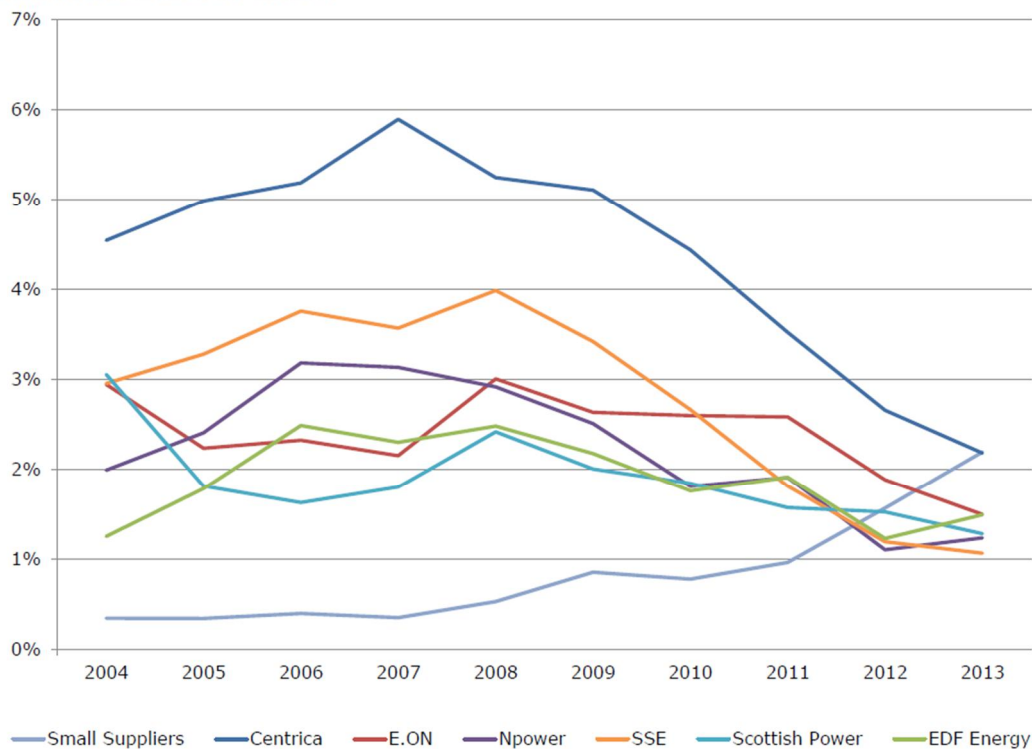
<sup>51</sup> *Ibid.*

<sup>52</sup> Paragraph 1.27 of the SMA.

<sup>53</sup> Paragraph 4.11 of the SMA.

<sup>54</sup> Figure 38 (page 78) of the SMA.

Figure 6.8: Figure 29 of the SMA

**Figure 29: New electricity customers as a proportion of all electricity customers 2004 to 2013.**

The SMA's suggestion that the conditions of the GB energy market are conducive to tacit coordination overlooks the disruptive impact of the entry and expansion of these new suppliers. There are over 24 energy suppliers currently active in the GB energy market. If the larger suppliers attempted to coordinate prices to the detriment of consumers, those consumers could switch suppliers. This would undermine the external stability of any coordinated agreement.

- (c) **Product differentiation.** At paragraph 3.2.3 above, SSE has explained the diversity in the range of wholesale electricity products available on the market, and does not repeat this point here—however, it is clear that, contrary to the SMA, it would be wrong to consider wholesale electricity products to be homogenous.

In addition, at the retail level, energy is *not* the end-product sold to the customer in the energy market. The end-product includes not only electricity but also customer service, value added services (e.g. a greener offering), and a broader product mix (see paragraph 6.2.10 above).

Suppliers in the energy market thus compete on these parameters, as well as on price. This would make a coordination outcome considerably harder to achieve and monitor.

- (d) **Asymmetric costs and market instability.** The costs facing suppliers can, and sometimes do, vary dramatically and without warning. The peaks and troughs in wholesale energy costs over the last ten years are particularly important in this regard (see Figure 4.1 at paragraph 4.2.8 above). SSE rejects the SMA's proposition that "*wholesale costs have been quite stable since 2008*".<sup>55</sup> This overlooks, for example, marked swings in wholesale energy costs following the global financial crisis and recession, the Arab Spring and the Fukushima nuclear disaster. Given that wholesale energy costs constitute the single largest component of a supplier's cost base, these unanticipated exogenous shocks would repeatedly throw any tacit agreement out of equilibrium, having a highly disruptive impact on the ability of suppliers to sustain a coordinated outcome.

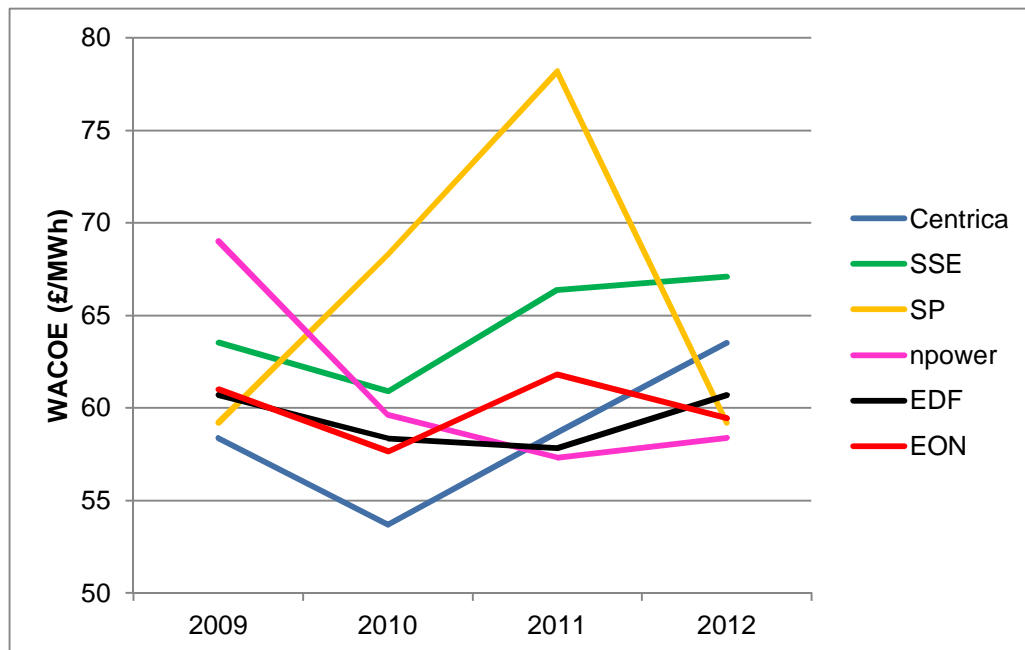
Indeed, the SMA acknowledges this point, stating that the volatility of wholesale energy prices can "*disrupt coordination if these fluctuations affected firms in different ways and lead to some having a strong incentive to deviate from the coordinated outcome*".<sup>56</sup> However, the SMA then dismisses the effect of wholesale energy price fluctuations disrupting coordination by stating that wholesale energy prices "*affect all of the six large suppliers in similar ways*". This is incorrect. In reality suppliers have different levels of exposure to exogenous cost shocks, as a result of having different degrees of vertical integration and different hedging strategies in the energy futures market (see paragraph 3.11.1 above).

This can be seen from the differences in the suppliers' weighted average cost of electricity (*WACOE*), as shown in their CSS submissions. The chart below maps how these WACOE estimates have varied across suppliers and over time: the widely divergent costs faced by suppliers at any given time are a reflection of widely divergent commercial interests, thereby precluding the internal stability necessary for tacit coordination.

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<sup>55</sup> Paragraph 449 of the SMA.

<sup>56</sup> *Ibid.*

**Figure 6.9: Evolution of WACOE submissions across the six largest suppliers**

Source: CSS submissions to Ofgem.

Moreover, following its 2016 price freeze commitment, SSE's domestic hedging policy is likely to differ markedly from its competitors', as it must now secure a larger proportion of energy to January 2016. Furthermore, that SSE has altered its hedging strategy in this manner (and that no other supplier has followed this change of strategy) in and of itself indicates that there is no tacit coordination in the GB energy market.

In addition, wholesale costs do not make up the entirety of suppliers' costs. Indirect costs make up approximately 10% of the total costs. The SMA recognises that suppliers "*have significant control over*" these items.<sup>57</sup> Data from suppliers' CSS submissions suggests a wide variation in these costs across suppliers. Again, this asymmetry of costs would have a disruptive influence on coordinated behaviour between suppliers, since it would make any tacit arrangements more difficult to establish and sustain.

These cost asymmetries would render a coordinated outcome internally unsustainable.

### **Pricing transparency is not sufficient to evidence tacit coordination**

6.4.6 Pricing transparency in this market—i.e. that the wholesale costs of electricity and gas, as traded on commodity markets, are observable—is not in itself sufficient to lead to (or to be evidence of) tacit coordination.

<sup>57</sup>

Paragraph 6.17 of the SMA.

- 6.4.7 In recent studies, Ofgem has stated that it is “*confident that companies price independently*”,<sup>58</sup> and that “*coordination is unlikely to be taking place*”.<sup>59</sup> Instead, Ofgem has judged suppliers’ monitoring of one another’s pricing to be normal business behaviour: “*As any business would do, suppliers take account of competitor positioning, likely future behaviour and reaction when setting retail prices*”.<sup>60</sup>
- 6.4.8 In any event, even if prices were convergent, in its own guidance the CMA recognises that “*one problem in identifying such conduct [i.e. tacit coordination] is that similar or identical prices can also result from intense competition*”.<sup>61</sup> SSE therefore disagrees with the suggestion that transparency of pricing (in the sense of observable wholesale costs of electricity and gas) is in itself conducive to tacit coordination in this market.

### **Behaviours in this market are not evidence of tacit coordination**

- 6.4.9 The Issues Statement also suggests that the largest suppliers may be adopting strategies and behaviours to their mutual advantage.

#### *Announcement of price changes*

- 6.4.10 In its Issues Statement, the CMA states that it will consider whether the timing of announcements around price changes could give cause for concern with regard to tacit coordination. SSE categorically rejects this suggestion, which, SSE notes, is contrary to previous findings by Ofgem on the same issues.<sup>62</sup> On the contrary, the timing of any price change announcement, and then the period between that announcement and the actual price change, can be explained by a set of specific pressures to which SSE has to respond.
- (a) **Cost and revenue pressures.** Price changes are driven by the cost pressures that SSE’s business faces. While the *level* of these pressures will differ between suppliers depending on their business models and strategies (e.g. how far they hedge their exposure to international fuel price shocks by buying ahead), the *timing* of these changes will often coincide, given that cost drivers are often common (e.g. government policy, international fuel price shocks and network charges). There is also commonality in the types of customers supplied, and therefore their profile of expected consumption over time (e.g. by season), which influences decisions on the timing of price changes.
  - (b) **Competitive considerations.** When announcing a price rise, competitive pressures create a strong incentive for SSE to minimise the gap between the announcement date and the implementation date of the change. Announcing

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<sup>58</sup> Paragraph 24 of Ofgem (21 March 2011), *Retail Market Review – Findings and Initial Proposals*, Ref 34/11.

<sup>59</sup> Paragraphs 6.74 to 6.75 of Ofgem (7 April 2004), *Domestic Competitive Review*.

<sup>60</sup> Paragraph 7.29 of Ofgem (6 October 2008), *Energy Supply Probe – Initial Findings Report*, Ref 140/08.

<sup>61</sup> Paragraph 3.67 of the Guidelines.

<sup>62</sup> Paragraphs 7.29-7.33 of Ofgem (6 October 2008), *Energy Supply Probe – Initial Findings Report*, Ref 140/08.

further in advance than is necessary, in this scenario, would increase the risk of SSE losing customers without creating any countervailing benefit for the SSE's business. Therefore, absent other considerations, SSE would wish to have the implementation date as close as possible to the announcement as possible.

- (c) **Regulatory requirements.** However, there are now regulatory constraints that require a period of pre-announcement. In particular Standard Licence Condition 24.4.a, which Ofgem introduced in April 2011, requires at least 30 days' written notice to be given to each individual customer of a price increase.
- (d) **Logistical requirements.** Additional time is required to manage the logistical aspects of managing a price change. For example, the mailing period alone can take up to 20 working days. Shorter durations within this range cost more to implement (e.g. moving from second to first class postage) and increase operational and reputational risks (e.g. insufficient time to correctly notify customers if emails bounce back). For example, if bills are mailed out simultaneously without any staggering, this results in a spike in customer enquiries that can place pressure on SSE's customer service resources and lead to longer waiting times for customers trying to make contact. This impact on expected call volumes is particularly significant in the event of price increases which are coupled with potentially complicated changes to tariffs or discounts (which has been the case for SSE's two most recent price increases). Taken together with the regulatory requirement, these two factors alone would typically produce at least a 50 day period between announcement and the effective date. The planning and testing of processes to deliver price change mean that it is not possible to compress the timescale further (this also limits the maximum frequency of price changes).
- (e) **Political factors.** It has to be recognised that a price change in the energy sector attracts political and shareholder interest. Correspondingly different political and financial events are factored into the micro level around the timings of pricing announcements. For example, when making a price change in Autumn 2013, SSE considered the publication of its results and the timing of political party conferences.

6.4.11 These factors combine to affect both when the announcement is made and the time between the announcement date and the implementation date. Every price change has its own peculiar set of circumstances and it is these that have driven the manner of implementation and the time scales.

6.4.12 As the review of SSE's relevant documents submitted to the CMA will show, competitive and reputational concerns have always been at the forefront of such decisions, particularly when the background is one of unwelcome cost increases. Co-ordination with other suppliers has never figured in the assessment.

*Profitability and margins are not evidence of tacit coordination*

6.4.13 If tacit coordination were a feature of the GB energy market, it would be expected that the profitability and margins of participating suppliers would exceed 'ordinary'



(i.e. un-coordinated) levels, thereby: (i) rewarding players for participating in the coordination (and facing the risks of detection and enforcement); and (ii) precluding the incentive of participants to deviate from the coordination in pursuit of higher profits and/or margins (i.e. maintaining the internal stability of the coordination).

- 6.4.14 In fact, when the CMA looks at supply profits, SSE fully expects it to find that these are not excessive, consistent with the retail market working effectively and delivering value to customers.
- 6.4.15 The standard metric for measuring profitability in the retail market is the EBIT margin made on sales. Figure 6.10 below summarises margins made by SSE and the industry over the last five years, based on data contained in the CSS. This shows that the margins that have been earned over the period are entirely in line with Ofgem’s expectation of a ‘reasonable’ margin, and are at the lower end of a range of benchmark retail margins reviewed by Frontier Economics.

**Figure 6.10: Summary of key profitability metrics for supply**

	Range	Average/point
<b>Actual supply margins</b>		
SSE margin (2009/10–2013/14) based on CSS accounts	[X]%-[X]%	[X]%
Industry margin (2009/10–2013/14) based on CSS accounts	[X]%-[X]%	[X]%
<b>Benchmark supply margins</b>		
Ofgem “reasonable” margin from SMA	0.5%-4.8%	3%
Frontier benchmark of margins (for retailers with revenue risk exposure)	[X]%-[X]%	-

*Source: SSE and Frontier Economics.*

- 6.4.16 SSE’s margin between 2009/10 and 2013/14 has varied between [X]% and [X]%, with an average margin of [X]%. Industry margins have varied between [X]% and [X]%, with an average of [X]%. As such, SSE’s average margin is broadly in line with average industry margins, neither of which can be considered excessive.
- 6.4.17 The SMA suggests that a ‘reasonable’ margin should lie between 0.5% and 4.8%, with Ofgem suggesting that a figure of 3% would appear to represent a reasonable return.
- 6.4.18 Frontier Economics, on SSE’s behalf, has conducted a benchmarking analysis the results of which are included in Annex 5.1. As that Annex shows, the benchmarking exercise indicated an initial retail margin range of [X]% to [X]%, which was further refined by including only margin estimates for retailers exposed to revenue risk (e.g. due to competition and the absence of regulation). On this basis, the refined retail margin range is [X]% to [X]%, and the observed margins for both SSE and the industry as a whole lie at the lower end of this range. In short, SSE’s (and the industry’s) profitability in supply is broadly in line with the levels considered ‘reasonable’ by the SMA and Ofgem.
- 6.4.19 On the basis of the above, there does not appear to be evidence of profitability and/or margins sufficiently high to sustain (or evidence) tacit coordination in this market.

## 6.5 Hypothesis 4(c)

- 6.5.1 Recent regulatory intervention has reduced the ability, not the incentive, for energy suppliers to compete. Both the non-discrimination licence condition (*SLC 25A*) and the RMR tariff simplification measures have hindered suppliers' ability to differentiate themselves, innovate and, ultimately, to offer customers a personalised offer to fit their particular circumstances.

### Environmental and social objectives

- 6.5.2 SSE does not propose to deal with the impact of social and environmental policies in this Section. The impact of these has been assessed in Theories of Harm 1 and 3.

### Non-discrimination licence condition (SLC 25A)

- 6.5.3 On its introduction, Ofgem itself acknowledged the real possibility of SLC 25A negatively impacting competition:

*"We recognise that there are risks to the intensity of competitive activity between suppliers as a result of this measure. The impact on competition is ambiguous and made particularly uncertain by the specific characteristics of the energy supply market. ... We recognise that some forms of price discrimination have in the past helped competition to develop in the domestic energy supply market."*<sup>63</sup>

- 6.5.4 During SLC 25A's application period, several indicators of competition, such as customer switching rates and variety of products, dipped, although it is unclear the extent to which this was attributable to this provision given the range of other changes afoot at the same time (for instance, the cessation of doorstep selling, and increasing costs with their contingent impact on prices).

### RMR

- 6.5.5 SSE supports the spirit and the intention of the RMR and subsequent reforms: the principles of a simpler, clearer, fairer market are positive for customers and may help to increase customer engagement and thus strengthen competition within the energy market.
- 6.5.6 Nonetheless, SSE is concerned that, as a package, the RMR reforms are restrictive, unduly onerous and prevent SSE giving customers what they want—an energy offer tailored to their personal circumstances. Not only do the reforms prevent suppliers from being able to offer and compete on customer choice, they also tie up valued resources which would otherwise be dedicated to competition and create artificial barriers to entry.

### *Simplification of tariffs and bundling*

- 6.5.7 The four tariff reform is particularly repressive as it removes additional parameters on which suppliers can compete. SSE and other suppliers are now prevented from offering the fixed discount tariffs and prompt payment discounts which were so

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<sup>63</sup> Ofgem (16 June 2009), *Addressing Undue Discrimination – Final Impact Assessment*, Ref 73/09.

popular with customers. Furthermore, all tariffs and bundles must be open to new and old customers which has reduced suppliers' ability to offer acquisition bonuses to customers as an added incentive to switch supplier.

- 6.5.8 Ofgem and DECC both recognise the negative impact these measures have on competition. In its action plan for small suppliers announced in August 2014, Ofgem stated that it would try to speed up the process of granting derogations from the four tariff limit set by RMR for small suppliers (White Labels are already exempt from contributing to four tariff limit of the parent supplier) and potentially, to consider a derogation. This action is an implicit acknowledgement by Ofgem that this measure is stifling innovation in the market.
- 6.5.9 The restrictive RMR rules on product bundling have also reduced the scope for innovation within the industry—this is particularly concerning given the potential that the rollout of smart meters would otherwise create for such innovation. It is now much harder for suppliers to offer benefits such as discounts from non-energy add-ons (such as boiler care). These add-ons previously facilitated and encouraged competition within the market.
- 6.5.10 In addition, Ofgem's rules make White Label offerings less attractive. White Labels can offer a lower cost route to market for potential new entrants. However, excessive restrictions in this area limit the potential competitive benefits, with the partnerships becoming either unattractive or unviable for either the parent supplier or for the partner organisation. In particular, Ofgem's intention not to extend the temporary provision for Cheapest Tariff Messaging (*CTM*) will leave suppliers vulnerable to 'soft' mis-selling accusations through showing tariffs for different brands on their bills. Please refer to Annex 6.2 below for further explanation of these concerns and risks.

#### *Resources and barriers to entry*

- 6.5.11 The overly burdensome nature of the RMR reforms (alongside the ever-changing regulatory landscape) means that suppliers' time, money and effort are often tied up in implementing regulatory changes and ensuring compliance with fewer resources left to dedicate to business improvement, innovation and improving customer service. This is frustrating for SSE since it greatly restricts its ability to differentiate itself from its competitors. More importantly it has a direct impact upon the competitiveness of the market and the choices available to customers. As with SLC 25A, the lack of diversity within the market results in a less attractive proposition for customers.
- 6.5.12 Furthermore, regulatory hurdles present a barrier to entry to the market. In many instances regulatory complexity is increased where there is a conflict between the principles-based Standards of Conduct licence condition and the much more prescriptive rules-based regulation found in the other RMR-introduced licence conditions.
- 6.5.13 Many of RMR's adverse and unintended consequences could be addressed by minor adjustments to supply licences. This is discussed in more detail in Annex 6.2 and would warrant further examination by the CMA.

## Annex 2.1

## COSTS ASSOCIATED WITH CLIMATE CHANGE AND SOCIAL POLICY

## Energy efficiency obligations

1. Obligations on large energy suppliers to deliver a specified level of energy and carbon savings have existed in various forms since 1994:
  - (a) from 1994 until 2008, the Energy Efficiency Standards of Performance (*EESoP*) and then the Energy Efficiency Commitment (*EEC*) set targets for suppliers to deliver energy savings from domestic customers, particularly for disadvantaged customers;
  - (b) from 2008 until 2012, the Carbon Emissions Reduction Target (*CERT*) required large suppliers to achieve carbon savings targets from domestic customers, with a focus on people over 70 or on certain benefits;
  - (c) from 2009 until 2012, the Community Energy Saving Programme (*CESP*) required large suppliers to deliver carbon saving targets in specific low-income areas; and
  - (d) from 2012, the ECO replaced the CERT and the CESP. ECO includes three targets for the period 2012 to 2015: (i) a general carbon reduction target; (ii) a carbon target for low income areas; and (iii) a target to improve the ability of vulnerable households to heat their homes. The level of obligation for each supplier is based on its share of domestic electricity supply at the beginning of each one-year phase.
2. To date, the energy efficiency obligations have been the most costly of all the government schemes to deliver. Between 2005 and 2012, the costs of meeting the energy efficiency obligations grew from £10 to a peak of £54 for the typical dual fuel customer in the final year of the CERT.
3. These cost increases were the result of more stringent targets and the increasing unit cost of delivering savings as the cheaper measures became exhausted. Bottlenecks in the supply chain near the end of obligation periods also developed, leading to unit cost increases at these times (e.g. in 2012 as the CERT drew to close). The ECO has required a greater focus on harder-to-treat homes and more costly measures which has increased unit costs for suppliers. However, recent reforms are expected to partially reduce these cost pressures.<sup>64</sup>
4. These schemes are also complex and have their own risk and impact on price volatility which increase the resources required to understand and administer delivery of the policy.
5. Aside from generally rising costs, with all the energy efficiency schemes, there has been significant uncertainty around what the scheme will cost to deliver. In particular, at the point tariffs are set, there is significant risk around what the scheme will cost, which introduces financial risk for suppliers. A further risk is that the ECO is based

<sup>64</sup> This includes reforms to reduce the level of some of the targets and extending the obligation period by 2 years.

on a supplier's customer volumes in the previous year. Therefore, if in the following year the supplier loses customers, the liability must be recovered from the diminished customer base.

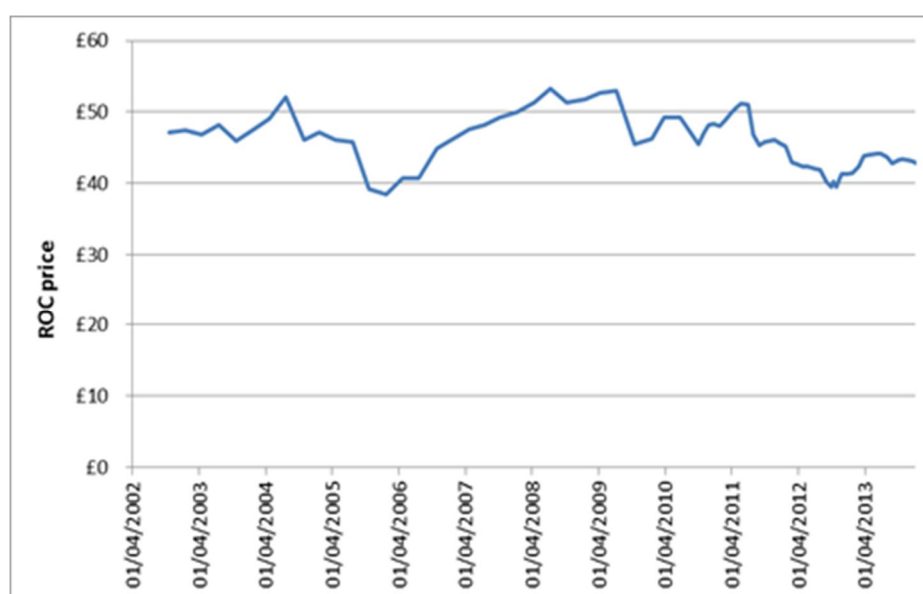
6. Suppliers have attempted to manage these risks by developing long-term relationships with delivery partners and internal capacity to deliver measures. However, this has been inhibited by policy uncertainty around the levels of the target, what measures count towards the target and rules around priority groups. For example, in 2010 the rules around using energy-efficient light bulbs to meet the targets were changed such that they only counted towards the target if customers requested them. The recent changes to the ECO targets are another example of this.

### **The Renewables Obligation (RO)**

7. The RO was introduced in 2002 to support large-scale renewables. It requires suppliers to source an increasing proportion of their electricity supply from renewable sources. They achieve this by purchasing certificates (**ROCs**) which are allocated to each MWh of renewable generation. The obligation is based on a proportion per MWh of electricity supplied and therefore represents a variable, per MWh, cost to suppliers.
8. The RO currently represents the second most costly government scheme to deliver after the ECO. Between 2005 and 2014, the cost of the RO grew from £6 to £32 for the typical dual fuel customer.
9. The main driver of cost increases over time has been the increasing level of the obligation. Up until 2009, this was according to a set rising trajectory. From 2009, this has been set according to a 'headroom' mechanism where the obligation is set at 10% above next year's *expected* generation. In the first year (2002/03) the obligation level was 3% and has now risen to over 20%.<sup>65</sup>
10. As with the ECO, the complexities of the RO increases the resources required to understand and administer the scheme.
11. As well as generally rising costs, suppliers also face some risks around RO costs from year-to-year and within-year:
  - (a) The price of ROCs can vary and is uncertain as a result of supply conditions (e.g. the level of new plant commissioned, wind speeds and the level of wind generation or the level of biomass plant dispatch). Figure 2.2 below shows how the ROC price has varied over time, including some periods where prices have changed rapidly; and
  - (b) The level of the obligation is uncertain, particularly since 2009 when the obligation has been set on a yearly basis by DECC according to next year's forecast renewables generation.

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<sup>65</sup> This is the percentage of ROCs that must be purchased for each MWh of electricity supplied to customers. Because some technologies are now allocated multiple ROCs per MWh of generation (e.g. offshore wind), this percentage no longer corresponds to a percentage of electricity supply that comes from renewable sources. This 'banding' of technologies is a further complication in predicting future obligation levels and ROC prices.

**Figure 2.2: ROC prices**

Source: e-ROC auctions.

### FiTs

12. FiTs were introduced in 2010 and provide subsidies for small-scale renewables. The costs of these subsidies must be recovered by large suppliers. They must also arrange for payments to and metering of FiT customers. The overall costs of FiTs are allocated to suppliers on the basis of their electricity supply market share via a quarterly 'levelisation' process (with an annual reconciliation). The costs of the FiTs scheme were £9 in 2014 for the typical dual fuel customer.
13. The main driver of these costs is the increased uptake of small-scale renewables over time. Each installation receives payment for 10 to 20 years and FiT tariff payments increase each year in line with the Retail Price Index.
14. From year to year, suppliers also face some risk around FiT costs as a result of uncertainties around: (i) uptake of FiTs; and (ii) the level of output from FiT installation (e.g. solar output varies according to levels of sunshine).
15. In the build-up to and early years of the scheme, there was also major uncertainty around and changes to how the scheme operated. This hampered the ability for suppliers to develop efficient, enduring solutions for payment.

### Social spend

16. The WHD was introduced in 2011 and requires large suppliers to fund and administer rebates on the electricity bills of vulnerable households. The obligation is apportioned between suppliers according to their domestic market shares as measured by numbers of customers. The cost of social schemes is equivalent to £11 in 2013 for the typical dual fuel customer.

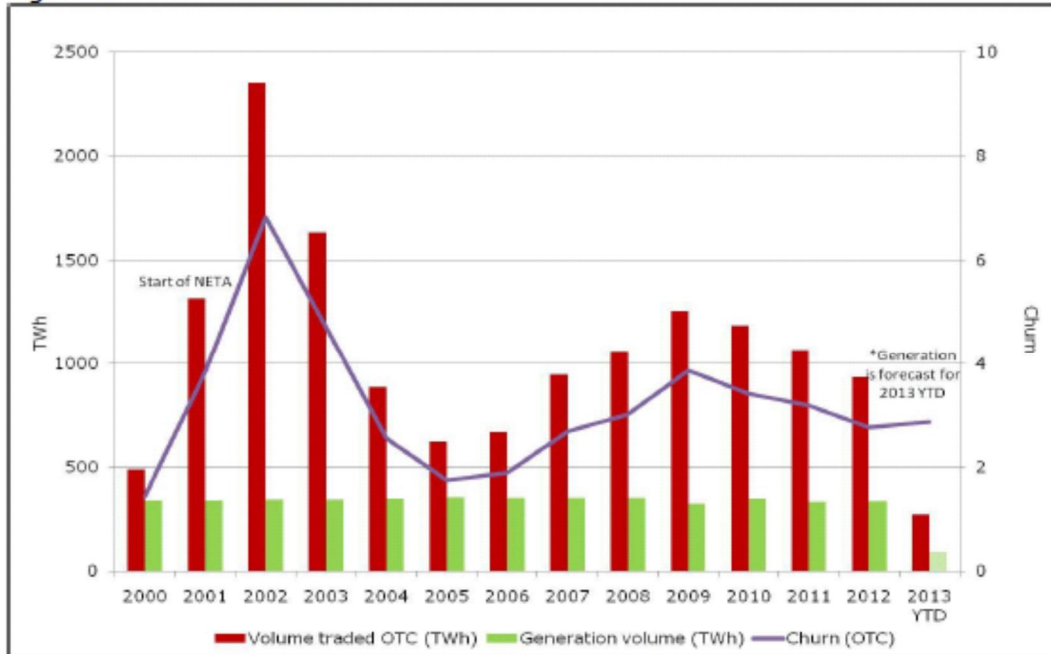
## Carbon costs

17. Since 2005, electricity generators have been required to purchase allowances for the carbon they emit under the EU Emissions Trading Scheme (*EU ETS*). In addition, the government's EMR has introduced a number of new charges, raising costs for customers. Since 2013, the CPF has imposed a carbon tax on fossil fuels used for electricity generation. These costs are reflected in higher wholesale prices but, for presentational purposes in Figure 2.1 above, we have removed them from wholesale prices and included them as a government scheme cost for clarity. Carbon costs have increased from zero in 2005 to £13 in 2014 for the typical dual fuel customer. This is a result of rising EU ETS prices and then the introduction of the CPF which has an increasing trajectory. There is little scope for suppliers to control carbon costs except for as part of their general wholesale price risk management strategies.
18. The Capacity Market supplier obligation is a tax on suppliers to fund the annual capacity payments to generators that are successful in the capacity auction and to fund the administrative costs of the Delivery Body. These costs will be apportioned to suppliers based upon their peak market shares.
19. The CfD supplier obligation is a separate tax to fund all charges associated with CfDs based on a supplier's daily market share. When tariffs are set, neither the levy amount nor the volume of electricity to which they will be applied is known. As such, suppliers face significant pricing risk and high collateral costs, neither of which suppliers can control.

### Annex 3.1 OFGEM CHARTS ON LIQUIDITY

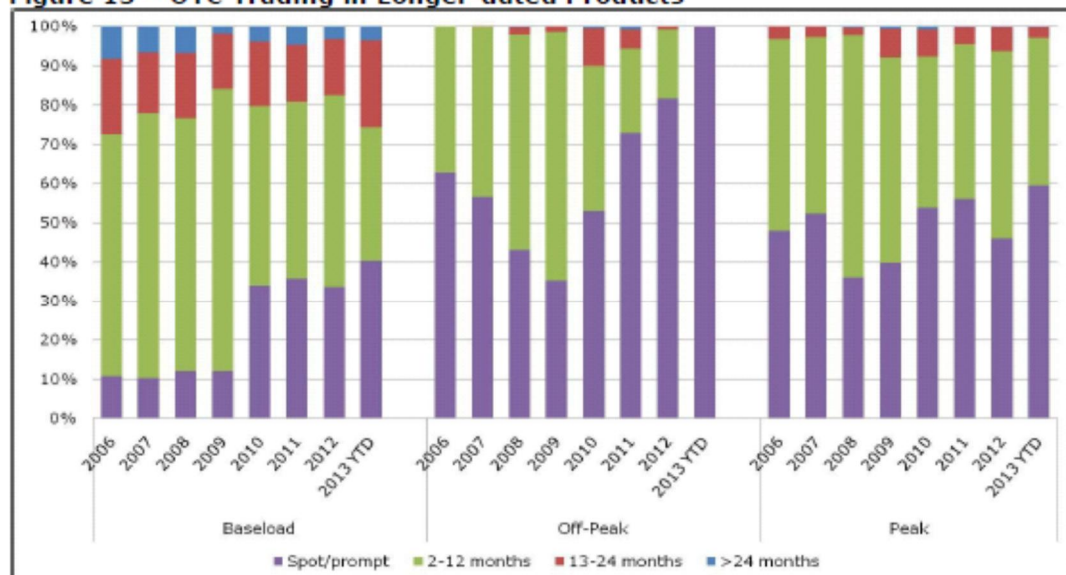
1. This Annex sets out the Ofgem charts referred to in Section 3.3 above. These charts are reproduced from Appendix 2 of Ofgem's 2013 publication *Wholesale power market liquidity: final proposals for a 'Secure and Promote' licence condition*.

**Figure 12 – GB Annual Churn**



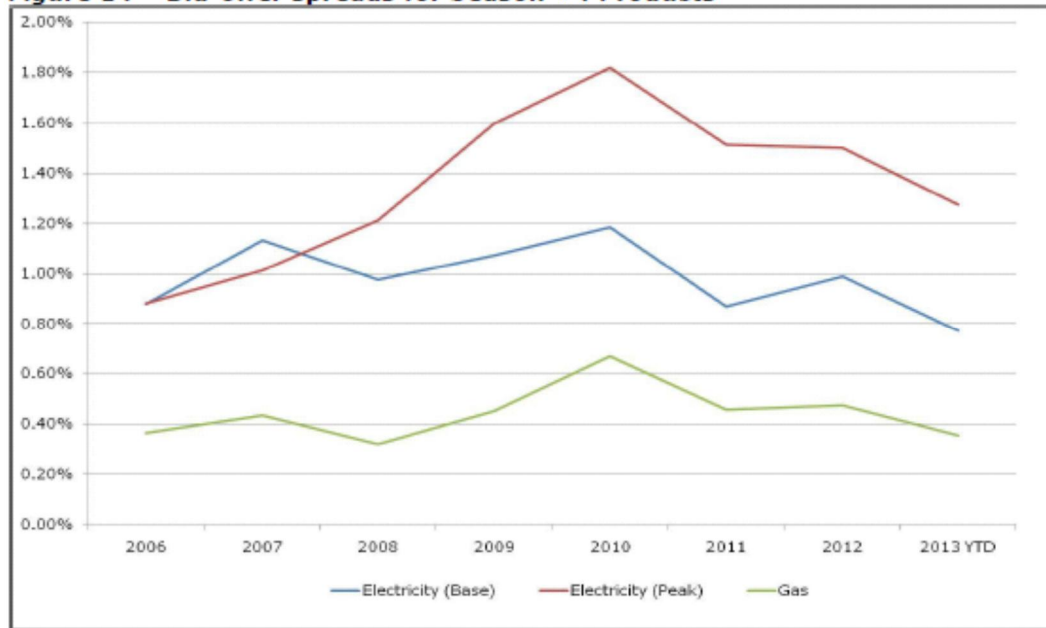
Source: ICIS Heren, APX, N2EX, ICE, DUKES

**Figure 13 – OTC Trading in Longer-dated Products**



Source: ICIS Heren



**Figure 14 – Bid-offer spreads for Season +4 Products**

Source: ICIS Heren

**Figure 16 – Day-ahead Auction Trading (N2EX and APX)**

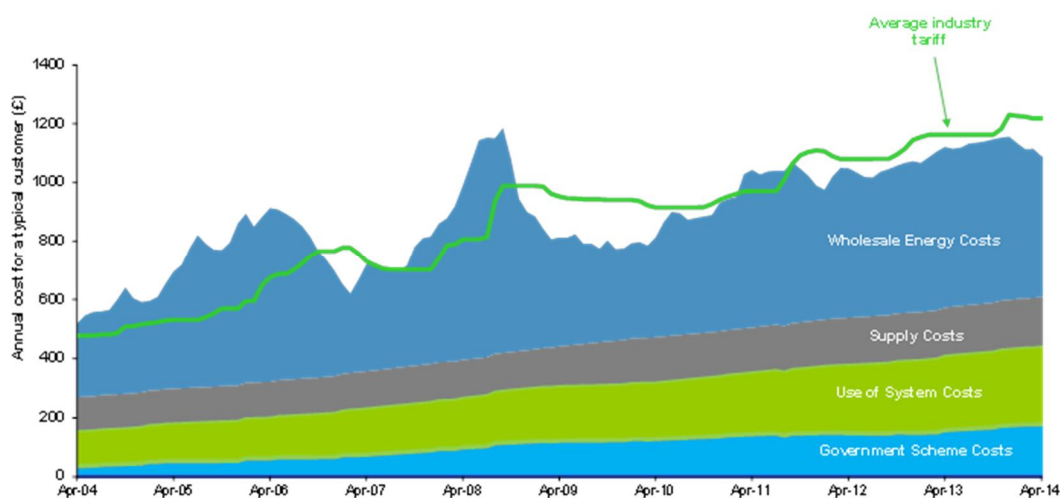
Source: N2EX, APX

### Annex 4.1

#### EXPLANATION OF THE EVOLUTION OF TARIFFS AND COSTS FOR A TYPICAL CUSTOMER

2. As explained in paragraph 4.2.8 above, SSE's prices are cost reflective and the available evidence would suggest that this is true of SSE's vertically integrated rivals as well. This can be seen from Figure 4.1, reproduced below, which provides a high-level indication of how industry costs and average tariffs across the six largest suppliers have evolved over the last ten years for a typical dual fuel domestic customer. As explained, this chart is only intended to provide a high level overview of long run trends in these cost pressures and tariffs. It does not capture the full richness of factors that can influence these costs and tariffs over the short run—for example, in the short term, wholesale energy costs are influenced by hedging strategies on the energy futures market, which vary from supplier to supplier and are not captured in this graph. Nonetheless the chart provides a useful indication of how costs and tariffs have evolved over decade as a whole.

**Figure 4.1. Evolution of tariffs and costs for a typical customer**



Source: SSE.

3. This Annex provides an overview of the data sources and assumptions used to calculate each of the components of this chart. Where possible, SSE has based its analysis on industry data, but—as explained below—SSE has had to make assumptions or inferences in certain places where data is not directly available.
4. The chart maps the evolution of average annual bills (in £) across the six largest suppliers for a typical dual fuel domestic customer as well as the evolution of the average annual costs (in £) of serving that customer. The data is presented in nominal rather than real terms. In order to isolate the impact of these cost pressures, the analysis holds the customer's level of consumption fixed over time at 3,200 kWh per annum for electricity and 13,500 kWh per annum for gas. This is in line with

Ofgem's recommended assumptions regarding typical domestic consumption values.<sup>66</sup>

### Tariff data

5. The tariff data presented in the chart is an average across the six suppliers' general domestic dual fuel tariffs. Each supplier receives equal weighting, as does each region within each supplier. Monthly direct debit (**MDD**) prices receive a 60% weighting to reflect the approximate proportion of customers who use this payment method. The remaining 40% of customers are largely made up of customers paying on a quarterly basis and so these quarterly tariffs were given a 40% weighting (in reality, a minority of these non-MDD customers in fact pay by prepayment meter (**PPM**), but the tariffs for PPM and quarterly payment methods are generally similar).

### Cost data

6. The '**Use of System**' costs presented in the chart denote costs associated with charges levied for use of the gas and electricity transmission and distribution networks. The costs reported are historic unweighted average costs across regions, based on data published by National Grid and the regional distribution network operators.
7. The **Government schemes costs** reported in the chart are based on the following cost estimates:
  - (a) ROCs;
  - (b) CfDs;
  - (c) the Capacity Mechanism;
  - (d) the CERT;
  - (e) the CESP;
  - (f) the WHD;
  - (g) FiTs;
  - (h) Emissions Trading; and
  - (i) the Carbon Floor.

In some instances the costs are based on actual observed run rates (e.g. with FiTs) and in other instances based on published data (e.g. with ROCs). Estimates for the WHD and CfDs are derived from industry-wide DECC figures. In addition to this, VAT costs have also been included in the government costs category in the chart, alongside the costs of these government schemes.

8. For the construction of the chart, a 12-month forward-looking rolling average is taken over all use of system, government scheme and supply cost data, a broadly consistent

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<sup>66</sup> Ofgem (3 July 2013), *Review of typical domestic consumption values*, Ref 113/13.

approach with Ofgem's Supply Market Indicator (**SMI**) methodology, which is also 12-month forward-looking.<sup>67</sup>

9. **Supply cost data** is based on CSS data from 2009 until 2012, as reported in Ofgem's SMI analysis.<sup>68</sup>

The equivalent supply cost data for the period before 2009 or the period after 2012 was not available. However, according to Ofgem, "*over the last 10 years, these costs have remained broadly flat in real terms*".<sup>69</sup> For the purposes of estimating supply costs in the chart above, SSE therefore assumes that industry supply costs remained flat in real terms before 2009 and after 2012.

10. **Wholesale data** is based on the 12-month ahead price of gas and electricity and stems from SSE's internal price books, which are constructed using market information from published sources such as Heren. The resulting energy price is then applied to half hourly demand indices that SSE has developed to estimate the shape for each meter configuration. These demand indices have been calculated using regression coefficients produced by Elexon which are common to all suppliers. Please note that carbon costs associated with Emissions Trading and the Carbon Floor are captured in the 'government schemes' cost component of the chart. They have therefore been removed from the 'wholesale costs' component to prevent double-counting.

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<sup>67</sup> Ofgem (31 July 2014), *Supply Market Indicator Methodology*.

<sup>68</sup> Ofgem (31 July 2014), *Charts: outlook for costs that make up energy bills*, available at <https://www.ofgem.gov.uk/publications-and-updates/charts-outlook-costs-make-energy-bills>.

<sup>69</sup> Ofgem, *Supply Market Indicator*, available at <https://www.ofgem.gov.uk/gas/retail-market/monitoring-data-and-statistics/understanding-energy-prices-great-britain/supply-market-indicator>.

**Annex 5.1**  
**FRONTIER ECONOMICS**  
**ENERGY GENERATION AND RETAIL PROFITABILITY BENCHMARKS**

1. [Whole annex redacted.]

## Annex 6.1

### MEASURES TAKEN BY SSE TO ASSIST VULNERABLE CUSTOMERS

1. SSE has voluntarily undertaken a range of measures to support its vulnerable customers as indicated below.
2. Under the voluntary arrangement, SSE provided help for fuel poor customers in advance of the introduction of the Warm Home Discount scheme. Within this, SSE created and provided customers with an industry leading social tariff, 'energyplus Care'. This was supported by a Fuel Poor Code of Practice which outlined SSE's commitments, including for example assistance for customers paying by Fuel Direct. With the introduction of the WHD, suppliers were required to phase out social tariffs over three years; energyplus Care is now closed and customers have been moved to a live tariff and receive WHD (which, for many customers, is of a lower value than the discount they previously received).
3. Since the introduction of the WHD scheme, SSE has increased the number of customers helped through the Broader Group rebate and exceeded its commitments against the obligation provided.<sup>70</sup> SSE's success has been a direct result of the skills and commitment of its front line advisors, from whom SSE receives the majority of its referrals.
4. Year on year, SSE has extended its commitment to its Hardship Scheme which provides assistance to low income, vulnerable customers who have been struggling to pay outstanding debt. A total of £3.5 million was set aside for this purpose during the last financial year. Once again, customers have been identified for this assistance through a number of routes, including SSE's front line advisors and local and national charitable organisations who work directly with vulnerable customers. In addition, recognising that many vulnerable customers are unaware of sources and routes for assistance, an element of this assistance has been provided through proactive contact with customers known to be low income and vulnerable. Unlike many trust funds, this fund is run in-house, which has the advantage of ensuring that customers are less likely to drop out through the process and allows SSE to continue to build trusting relationships and a more sustainable solution overall.
5. SSE also funds projects with key organisations—Citizens' Advice Bureau, National Energy Action and Energy Action Scotland, delivering projects aimed at increasing training and awareness amongst organisations working locally with vulnerable customers.
6. Provision of Benefit Entitlement Checks to identify whether households are eligible for any additional financial support—during the last financial year, this initiative helped 210 customers increase their household income, with an average increase for them of £3,765 per annum (£72 per week).
7. In addition, the following targeted industry initiatives are also relevant to vulnerable customers.

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<sup>70</sup> The Broader Group rebate provides financial assistance to low income and vulnerable households who meet SSE's eligibility criteria. SSE provides this rebate to a specific number of customers each year and reports annually to Ofgem on performance against this obligation.

8. The industry has worked for a number of years to share data with the Department of Work and Pensions to successfully deliver the automatic payment of rebates (first the Energy Rebate Scheme, followed by the Core Group Warm Home Discount scheme) to low income pensioners. Both the success of data matching and the volume of customers proactively helped has increased year on year.
9. In addition, the industry has funded national campaigns, such as Energy Best Deal and Big Energy Saving Week—delivered by Citizens' Advice, for a number of years to provide face to face advice and education to help consumers reduce energy costs and to encourage customers to consider the benefits of seeking the best energy deal.
10. The industry has also funded a Home Heat Helpline to ensure customers have dedicated route to obtain independent support and assistance.
11. The measures above supplement Ofgem's regulatory protections for vulnerable customers.

## Annex 6.2

### ELEMENTS OF THE DOMESTIC RMR REFORMS WHICH SSE BELIEVES HAVE UNINTENDED CONSEQUENCES

#### Introduction

1. SSE is concerned that, taken as a package, the RMR reforms are restrictive, unduly onerous and prevent customers getting what they want. The overly burdensome nature of these particular reforms (alongside the ever-changing regulatory landscape) mean that suppliers' time, money and effort is often tied up in implementing regulatory changes and ensuring compliance with little left to dedicate to business improvement, innovation and improving customer service. This is frustrating for suppliers since it greatly restricts their ability to differentiate themselves from their competitors but more importantly this has a direct impact upon the competitiveness of the market and the choices available to customers.
2. SSE simplified domestic tariffs in 2012, over a year before the RMR tariff cap took effect and SSE is not calling here for a return to a complex market characterised by tariff proliferation and customer confusion. However, the complexity of elements of the RMR supply licence conditions themselves risk creating more confusion for suppliers and customers alike, despite the simpler market with fewer tariffs from each supplier. SSE believes that a pragmatic compromise could be found which would address the risk of tariff proliferation without compromising suppliers' freedom to compete effectively by offering innovative or engaging products. This is discussed further in relevant areas below.
3. Furthermore, regulatory hurdles present a barrier to entry to the market. In many instances regulatory complexity is increased where there is a conflict between the principles-based Standards of Conduct licence condition and the much more prescriptive rules-based regulation found in the other RMR-introduced licence conditions.

#### Prescriptive requirements create complicated bills

4. The key documents to be affected by Ofgem's prescriptive content requirements are bills and annual summaries. Pre-RMR, a total of three pages in the supply licence set out the requirements of both of these documents. Post-RMR, there are nine pages of requirements for bills and 16 pages of requirements for annual summaries—an eightfold increase. This represents an inordinate increase in the level of prescription of both content and layout of these documents.
5. Based on feedback from its customers, SSE has long argued that the bill contains too much information. In order to accommodate all of the requirements, bills are either cluttered or extremely long—both of these options lead to complaints from customers.
6. The RMR missed an opportunity to move some of the useful information from bills to the annual summary. As a result, SSE believes that the RMR rules have made customer communications less useful and more confusing.



### **Tariff restrictions and product bundling rules remove customer choice**

7. The tariff cap was one of the RMR's headline reforms but the tangible benefits to customers are not clear cut. Even with the cap on tariff numbers it is impossible to personally evaluate and compare every tariff from every supplier—whereas an internet comparison site will tell a customer which tariff is best for their individual circumstances no matter how many tariffs there are in existence.
8. Whilst limiting the number of variants of energy price to four (for a particular meter type and a particular location) may not, by itself, necessarily be restrictive, the difficulty arises as a result of the way that tariffs are defined. Complex and restrictive rules have been introduced to govern free gifts, loyalty rewards and bundled products or services. Alongside the tariff cap, these rules greatly restrict how a supplier can innovate and create packages which set it apart from the competition.
9. Many service providers in other markets use 'bundles' as a way of packaging their service with useful or desirable products which entice customers to switch to them. The broadband and landline market has seen significant disruptive competition as a direct result of the bundling of services—to the extent that BT now uses exclusive live coverage of football matches to promote its broadband offering. The current restrictions on product bundling make this type of disruptive competition extremely unlikely in the domestic energy supply market.
10. Customers understand and may even expect these kinds of offers. Bundles should not restrict competition: serial switchers will not generally tie themselves into a multi-service long-term deal whilst reluctant switchers may be encouraged to compare the market because of the more attractive offers and savings available. Rewards are permitted, but the rules state that the contract terms and conditions must clearly set out the value and timing of these rewards. Whilst this does mean that customers are able to thoroughly evaluate their tariff, the consequence is that suppliers cannot offer one-off, out of the blue, rewards. [§X].
11. Similarly, the rules on loyalty rewards and introductory offers restrict competition. Since all customers on a particular tariff should be able to claim the same benefit, it is no longer possible to offer any kind of sign-up reward directly targeted at new customers. Such rewards previously provided a valuable stimulus to switching.

### **Discount restrictions**

12. The prompt payment discount was also removed as a direct result of the RMR reforms and this led to widespread customer complaints and dissatisfaction. Ofgem's desire for simplicity and easy comparisons came at a cost to many customers. Whilst behavioural discounts do make the presentation of cost information such as Personal Projection and the Tariff Comparison Rate more complex, customers value such discounts and SSE feels it is appropriate to reward customers for exhibiting positive behaviour and taking actions in relation to their energy accounts.
13. SSE does acknowledge there is a balancing act between providing discounts that customers like and ensuring that prices are sufficiently simple and clear. Suppliers should be free to choose where to draw the line between simplicity and discounts and develop their own business model ranging from socialising all discounts (as per the

Ebico model) to offering a multitude of discounts for various customer choices and behaviours.

### **Regulations disadvantage customers who prefer evergreen tariffs**

14. As described in the discussion of customer engagement in Section 6.3 above, acquisition tariffs tend to fixed term, fixed price deals. The market is now skewed towards more active competition in the fixed term market since, under RMR reforms, it is far easier to offer a range of innovative, niche or discounted fixed term tariffs than to introduce a discounted evergreen tariff. Customers remain on a fixed term tariff once it has been removed from sale. This provides scope to innovate, create and replace fixed term tariffs regularly. The same is not true of evergreen tariffs. Once an evergreen tariff has been removed from sale, all customers on that tariff must be migrated to their relevant cheapest evergreen tariff.
15. So any supplier wishing to introduce a market leading tariff with limited availability would be compelled to make it a fixed price, fixed term deal. If it were offered as an evergreen tariff then, as soon as it is withdrawn from sale, the customers would have to move to a higher priced tariff. The acquisition tariff would become a 'bait and switch' deal and the supplier would suffer reputational damage.
16. Customers now receive CTM on a regular basis, so there is no risk that a supplier can hide better deals from existing customers. RMR licence obligations already ensure that customers on closed evergreen tariffs cannot be charged more than customers on the cheapest live evergreen tariff. A further obligation could be that suppliers cannot make their standard evergreen tariff dead at any point. This would mean that inactive customers who have never switched will always remain on the live core tariff.
17. Whilst the prohibition on creating new 'dead' tariffs was introduced with good intentions the above example highlights an unintended adverse consequence for competition.

### **White Labels**

18. Ofgem has said that it intends to extend the temporary provisions for White Labels – with the exception of CTM—until the end of the CMA investigation. This is a move which SSE broadly supports, but SSE considers that it would also be appropriate to extend the CTM temporary provision. SSE has concerns about the impact on customers if the current CTM provision were to be lifted.
19. Through showing tariffs for different brands on their bills, suppliers risk 'soft' mis-selling accusations. Customers may feel confused by seeing different brands advertised on the front page of their bill and it is likely that a customer may conclude that his/her supplier is promoting or endorsing the White Label brand shown in the CTM. The customer may then assume that the service levels and other non-energy aspects of that brand would be the same as their current supplier. The customer may also assume that the CTM provides a whole market comparison: this could lead to customers failing to compare tariffs effectively.
20. The number of White Label tariffs in the market may decline greatly and this route to market may be cut off entirely by this reform. Whilst SSE understands the intention

behind this reform, SSE feels that the negative unintended consequences far outweigh the potential benefit. SSE feels that the combination of other reforms such as the Standards of Conduct and tariff comparison tools, coupled with initiatives such as Ofgem's 'Be An Energy Shopper' campaign, contribute sufficiently to encouraging customer engagement and tariff comparison and that any further protection offered by expanding CTM will be negligible.

### **Sales and variations**

21. Paragraphs 6.3.25 to 6.3.26 above discuss the potentially counter-productive impact of lengthy sales processes. In addition to the requirements when marketing energy to domestic customers, the RMR introduced the Mutual Variations Licence Condition (*SLC 23A*). This means that some simple changes and variations to customers' contracts are now subject to counterintuitive and non-customer friendly rules. For example, if a customer phones his or her supplier and requests to close his or her direct debit, the customer might expect that the supplier would do this straight away. However, the rules dictate that changes which result in a negative financial impact (such as closing the direct debit results in the loss of a discount) cannot be made straight away and, before the change can be made, the customer must read and agree to a written notice of the negative impact that this change will have upon the price that the customer pays. The intention of this process is to provide strong consumer protection, however it has come at the expense of good customer service and customer satisfaction.
22. SSE would question whether this level of regulation is necessary given the level of existing protection for customers (including consumer protection regulations and the direct debit guarantee).

### **Conclusion**

23. Many of these adverse unintended consequences could be addressed by fairly minor adjustments to the supply licences. SSE recognises that there is a trade-off between providing customers with the choice of products they want and reducing the complexity of the market. However, SSE believes that the potential adverse impact on competition of the elements of the RMR package discussed here are sufficiently material to warrant further consideration by the CMA.