

Appendix 9.4: Coordination in the retail energy market facilitated by price announcements

Contents

	<i>Page</i>
Introduction	1
Approach.....	2
Conditions for coordination to be sustainable.....	4
Tacit coordination on price	15
Outcomes consistent with coordination on market segmentation and/or prices	25
Annex A: Cost structures of the Six Large Energy Firms	27
Annex B: An analysis of the frequency of positions within rounds of price announcements.....	28

Introduction

1. In this appendix we assess the evidence we have gathered on the issue of tacit coordination by the Six Large Energy Firms in the supply of gas and electricity to domestic customers in Great Britain.
2. The State of the Market Assessment found that several characteristics of the markets for the retail supply of gas and electricity were conducive to coordinated behaviour. It also found that aspects of the behaviour of the Six Large Energy Firms appeared to be consistent with tacit coordination between them, including the announcement of price changes around the same time and of a similar magnitude and convergence of domestic supply margins.
3. In our issues statement¹ we said that we would consider the evidence that the Six Large Energy Firms (while not reaching agreements on their behaviour) were tacitly coordinating, in adopting strategies and behaviours to their mutual advantage. In particular, we said that we would consider the following two possibilities:
 - (a) The pre-announcement of price increases may facilitate tacit coordination in prices. This practice may have had the effect of reducing the uncertainty for a supplier in relation to how its rivals might respond to a price increase, allowing suppliers to coordinate the timing and scale of price increases, and so sustaining prices at a higher level than would otherwise prevail. An increase in prices is an event that might stimulate customers to search for a better price; yet if other suppliers raise prices by

¹ [Issues statement](#), paragraph 55.

similar amounts, at much the same time, the potential savings to be had from switching are likely to be reduced. Reducing customer expectation of the gains from switching might soften competition.

- (b) Vertical integration in the supply of gas and electricity may facilitate market sharing. It has been suggested that vertically integrated suppliers are increasingly using similar strategies across their businesses, including in relation to hedging and generation portfolios. One argument is that they may try to avoid asymmetries in their hedging strategies and generation portfolios that might give any of their competitors' windfalls from upstream activities that may influence their conduct in the retail markets, including their incentives or ability to expand downstream. The effect might be to reduce the incentives of suppliers to compete aggressively to increase market share.
4. With regard to the second of these possibilities, we consider, on reflection, that the behaviours identified, if established, would be relevant to our assessment of whether the structural characteristics of the retail markets are conducive to tacit coordination (and not evidence of actions taken by the Six Large Energy Firms to reach, sustain or enhance tacit coordination). Our preliminary analysis of the strategies of the Six Large Energy Firms including strategies in relation to hedging and generation portfolios are set out elsewhere (in particular, Appendix 7.1: Liquidity and Section 3 of the main document).
5. In this appendix we therefore focus on the evidence in relation to tacit coordination facilitated by price announcements.

Approach

6. In general terms, suppliers might coordinate on the prices at which they sell a product or on the markets in which they compete to supply a product and/or service.
7. In the issues statement we distinguished between collusion and coordination. We said that collusion involved companies reaching explicit agreements or engaging in concerted practices – eg in relation to the prices and/or quantities of a product to be sold – and was prohibited under Chapter I of the Competition Act 1998. In contrast, tacit coordination may arise in a stable market where firms interact repeatedly and come to be able to anticipate each other's actions, allowing them to coordinate behaviour without reaching any agreement to do so. Such coordination involves firms competing less aggressively over time and forgoing the possibility of higher individual profits

in the short term (by cutting prices unilaterally), in the expectation that this will lead to higher profits in the longer term.²

8. The standard approach set out in the CMA's Guidelines on market investigations (the Guidelines)³ to investigating allegations of tacit coordination is to consider, first, whether the market is conducive to coordination and, then, whether the evidence of behaviour and market outcomes is consistent with coordination. Given this, our approach is as follows:
 - (a) We first revisit the evidence on whether the characteristics of the retail supply of gas and electricity to domestic customers are conducive to tacit coordination (paragraphs 12 to 50).
 - (b) We then consider whether there is evidence of tacit coordination facilitated by price announcements (paragraphs 51 to 80).
 - (c) Finally, we consider whether market outcomes are consistent with tacit coordination (paragraphs 81 to 87).
9. Our main sources of information are as follows: the main parties' responses to information requests including a request specifically concerned with their behaviour around price announcements; documents provided by the main parties in response to the 'first day letter' and the supply questionnaire; and a summary of the documents gathered by Ofgem in conducting the Energy Supply Probe and the retail market review (RMR) reforms.
10. In addition, we have considered the responses received from parties to our working paper on coordination in the retail markets facilitated by price announcements, published on 5 March 2015. The relevant responses to our working paper and our assessment of these responses are summarised in each section of this appendix.
11. We conducted a thorough trawl of the documents provided by the parties. We observed no evidence in these documents to suggest tacit coordination among the Six Large Energy Firms.

² Issues statement, paragraph 53.

³ *Guidelines for market investigations: Their role, procedures, assessment and remedies*, CC3 (Revised), April 2013, paragraph 244.

Conditions for coordination to be sustainable

12. The Guidelines state that three conditions need to be satisfied for coordination to be sustainable:⁴
- (a) Firms need to be able to reach an understanding and monitor the terms of coordination. When there is no explicit agreement, firms need to have sufficient awareness of each other and be able to anticipate each other's reactions so as to identify a mutually beneficial outcome.
 - (b) Coordination needs to be internally sustainable among the coordinating group – ie the firms have to find it in their individual interests to adhere to the coordinated outcome; and they must lack an incentive, or have a positive disincentive, to compete because they appreciate how each other will react.
 - (c) Coordination also needs to be externally sustainable, in that coordination is unlikely to be undermined by competition from outside the coordinating group or from the reactions of customers.
13. An important part of our investigation is therefore to establish whether or not the specific structural characteristics of the markets create the conditions in which coordination can arise and be sustained. We assessed whether such characteristics are satisfied in the domestic supply of gas and electricity. In particular, we looked at:
- (a) the degree of symmetry between suppliers measured by market shares, cost structures and suppliers' business models, which we consider to be relevant to the ability of suppliers to reach an understanding on mutually beneficial outcomes (paragraphs 14 to 25); however, this characteristic should not be overstated: there are circumstances under which firms may find it mutually beneficial to coordinate even in the presence of asymmetries;
 - (b) the degree of market transparency on conduct, and the stability of market shares and demand, which we consider to be relevant to the internal stability of coordination (paragraphs 26 to 30); and
 - (c) the extent of barriers to entry and expansion, which we consider to be relevant to the external stability of coordination (paragraph 31).

⁴ CC3, paragraph 250.

Symmetry

14. Symmetry is relevant to the assessment of the ability of suppliers to establish an understanding on their conduct. Stable market shares, for example, might also be evidence of outcomes consistent with coordination.

Market shares

15. Annual market shares for the Six Large Energy Firms, excluding British Gas, are fairly similar for electricity at a national level (in the range of 11.5 to 16.2% for electricity and 9.4 to 14.4% for gas, in October 2014). British Gas has higher market shares of 24.1 and 37.1% respectively in electricity and gas.
16. In addition to that, the market shares of each of the Six Large Energy Firms have been fairly stable over time for both gas and electricity with year-on-year changes of more than 1% being unusual (the main exception being the decline in British Gas's share of gas accounts).
17. EDF Energy³⁴ RWE³⁷ and SSE³⁹ said that there were differences in market shares. They also noted that the number of customers gained and lost by each supplier varied over time.
18. On the latter point, we consider that the number of customers gained and lost would be relevant to our assessment of whether market conditions are conducive to coordination if this is something that suppliers take into account in setting the SVT. Based on information set out in Appendix 8.3: The pricing strategies of the Six Large Energy Firms, we note that the number of customers gained and/or lost is a factor for the Six Large Energy Firms in setting prices, but that this appears to be more so for fixed-term tariffs than for standard variable tariffs.

Cost structures

19. Information on cost structures of the Six Large Energy Firms is provided in Annex A. This information shows that:
 - (a) for all suppliers, three cost items – energy; network distribution and transmission charges (including gas transportation charges); and social and environmental obligations – have accounted for around 80 to 90% of the total costs of supply; and
 - (b) in any year, these three cost items each account for a similar proportion of total direct costs across suppliers.

20. Suppliers have limited control over the costs associated with network distribution and transmission, and social and environmental obligations. These will vary between suppliers according to, among other things, differences in their regional presence, customer mix and policies, and performance in relating to meeting their obligations.
21. We examined hedging behaviour of the Six Large Energy Firms as part of our liquidity work (see Appendix 7.1: Liquidity). We found that their hedging behaviour in terms of the proportion of consumption hedged at various points ahead of delivery was similar, but not identical.
22. We also looked at how indirect costs compared across suppliers on a per customer account basis. Indirect costs include costs associated with billing, metering, bad debts, marketing and sales, and contributions to central costs. We found differences between suppliers in the level and breakdown of indirect costs. We note that reasons for this could be differences in the range or quality of the service provided to their customers, differences in the efficiency in the delivery of these services or internal accounting practice on the allocation of costs (see Appendix 9.13: Retail energy supply profit margin comparators).

Business models

23. While the physical product supplied to domestic customers is homogeneous, there is scope for differentiation in the choice offered to customers (for example: payment methods, tariffs, and benefits such as gift vouchers) and the quality of customer service (for example: billing, metering and provision of information).
24. In practice, there are similarities in the product offering of the Six Large Energy Firms. For example, all the Six Large Energy Firms:
 - (a) offer a standard variable tariff to which the majority of their domestic customers subscribe;
 - (b) offer fixed-rate non-standard tariffs with contract lengths typically between one and two years;
 - (c) offer a similar range of payment options (ie prepayment, credit and direct debit); and
 - (d) have the same distribution channels.
25. To an extent these similarities are a reflection of the regulatory regime that limits the structure of tariffs, discounts and other financial terms that suppliers

can offer (see Appendix 2.1: Legal and regulatory framework). Nevertheless, evidence suggests differences in the commercial strategies of the Six Large Energy Firms (see Appendix 8.3: The pricing strategies of the Six Large Energy Firms). We also note that the Six Large Energy Firms are all vertically integrated. That said, there are different degrees of integration within each of the vertically integrated firms and the degree of generation/supply balance. Also, we note that Centrica and E.ON have both announced moves towards de-integration.

Transparency

26. Transparency is also relevant to the assessment of the ability of suppliers to establish and sustain mutually beneficial conduct.
27. We observe that in the supply of gas and electricity to domestic customers:
 - (a) Information is readily available on the prices and other terms of supply for all products currently being offered by each supplier. Internal documents provide evidence that all suppliers are continuously monitoring the products offered by their rivals.
 - (b) All suppliers make public statements, in advance of implementation, of intentions to change the price of their standard variable product. These announcements will typically give a 'headline' rate change and an implementation date. The headline rate is typically an average across regions and based on the change in bill for a dual fuel domestic customer, paying by monthly direct debit with 'typical' consumption.
 - (c) Cornwall Energy publishes quarterly market share statistics for the domestic retail energy markets for Great Britain and by region. These statistics appear to be widely used in the industry.
 - (d) Cornwall Energy also publishes quarterly statistics on the numbers of domestic gas and electricity accounts gained and lost by each of the Six Large Energy Firms for Great Britain. In addition, suppliers will have private information on the suppliers to which they lose domestic customers and the suppliers from which they gain domestic customers.
 - (e) Since 2009 Ofgem has required the Six Large Energy Firms to produce an annual consolidated statement to show the costs, revenues and profits for the different segments of their generation and supply businesses. Ofgem produces a review comparing profits between the companies, and over previous years. Ofgem's objective is to make the market clearer and the information provided by the statements easily available to domestic customers.

- (f) Ofgem's Supply Market Indicator (SMI) has provided a commentary on recent and possible future cost trends energy firms face and how they change over time. It also estimates the annual bill for average domestic gas, electricity and dual fuel customers and the cost per customer a large supplier incurs to deliver gas and electricity. The SMIs have been published monthly.
28. For each of the Six Large Energy Firms, their expectations in relation to the conduct of rivals have an input into commercial decision making. For example, a factor in determining the price of the standard variable tariff is expectations in relation to the prices of rivals' standard variable tariffs (see Appendix 8.3: The pricing strategies of the Six Large Energy Firms). These expectations will be informed by published financial and market statements, market reports and the segmental statements suppliers are required to provide to Ofgem. However, we understand that the segmental statements provide no more information on the supply businesses of the energy firms than would be available if these supply businesses were listed on the London Stock Exchange and, in any event, are published six months after the end of its financial year.⁵

Stability of demand

29. The stability of demand is relevant to the assessment of the incentive for suppliers to deviate from coordinated outcomes and the ability of other suppliers to detect deviating behaviour. In particular, all other things being equal, the less sensitive domestic customers are to changes in relative prices, the lower the potential gains to be had from deviating from any tacit understanding.
30. Our findings in relation to the price sensitivity of domestic customers are set out in the main report.

⁵ For example: an internal EDF Energy 2011 document stated the following:

Centrica represents our key competitor and hence our main focus is on their portfolio. Historically Centrica have published more financial data than its peers (such as a split between Upstream and Downstream or specific energy costs) this decreases the level of uncertainty and number of assumptions that need to be made. However, recent regulation requirements (OFGEM segmented results) have required all large energy suppliers to publish financial data on residential business given us an opportunity to get more transparency regarding competitors' hedging strategies. With the growing importance of understanding the interaction between competitors and impact of new regulation proposals it's becoming essential to have a robust competitor hedging methodology that can be applied for all our competitors.

Barriers to entry and expansion

31. Our assessment in relation to barriers to entry and expansion are set out in the case studies on barriers to entry and expansion working paper. This working paper provides evidence of the obstacles that smaller firms have faced in entering the supply of energy to domestic customers and growing their businesses. We note, however, that in recent years these suppliers have grown rapidly. Their domestic market shares grew from around 1 to 7% between July 2011 and July 2014 for electricity and from around 1 to 8% for gas over the same period.

Parties' views

32. Parties did not accept that conditions exist in the retail supply of energy to domestic customers that would allow for coordination.

Symmetry

33. Centrica said that:
- (a) based on Cornwall data the range of market shares for domestic supply, as at end of 2014, were 11 to 24% and 9 to 14% for electricity and gas respectively;
 - (b) over the period of the CMA's investigation, its approach to hedging had changed significantly and it suspected that the hedging policies of its rivals would have also varied; and
 - (c) the size and speed of change in energy costs would vary with hedging strategies. The combination of the different cost bases and different commercial strategies meant that it would be difficult for suppliers' incentives to be consistently aligned and maintained.
34. EDF Energy said that:
- (a) there were clear differences in retail market shares and market share was fluctuating (particularly when looked at regionally and on a monthly basis), indicating a lack of market stability; and
 - (b) smaller suppliers had a growing market share and accounted for over 50% of total switches following significant growth since May 2014 with a number having grown beyond the 250,000 exemption threshold for certain policy costs which shows that barriers to entry were not significant.
35. E.ON said that:

- (a) it believes that the GB energy markets lack a number of the fundamental characteristics of market(s) which may be conducive to coordination and that the conduct of suppliers in the market is not consistent with coordination;⁶
 - (b) there were simply too many suppliers to reach an understanding and monitor the terms of any coordination, or for the coordination to be internally sustainable;⁷
 - (c) there were very material differences in the electricity generation/supply balances between the Six Large Energy Firms (which will be enhanced by E.ON's de-integration strategy);⁸
 - (d) Appendix 7.3: The pricing strategies of the Six Large Energy Firms makes it clear that, even within the constraints of regulation, the commercial strategies of the Six Large Energy Firms differed;⁹
 - (e) whilst the underlying product was homogenous, there was scope for differentiation on quality of service and additional services/products that were an important factor in the choice of supplier (or encouraging a customer to stay with their existing supplier);¹⁰
 - (f) the scope for differentiation between suppliers would be even greater with smart meters; and¹¹
 - (g) given the degree of commonality of costs it was not surprising that suppliers might, on occasions, need to start to think about price changes at similar times, but there were likely to be some distinctions caused by different hedging strategies, and other costs.¹²
36. RWE said that the market shares of the Six Large Energy Firms were not stable and had declined consistently over the period. Using Cornwall data, RWE said that:
- (a) there had been considerable variation in market shares over time among the Six Large Energy Firms; and

⁶ E.ON response to updated issues statement, paragraph 215.

⁷ E.ON response to UIS, paragraph 216.

⁸ E.ON response to UIS, paragraph 219.

⁹ E.ON response to UIS, paragraph 220.

¹⁰ E.ON response to UIS, paragraph 221.

¹¹ E.ON response to UIS, paragraph 222.

¹² E.ON response to UIS, paragraphs 229 and 230.

- (b) suppliers experienced large gains and losses over short periods with each of the Six Large Energy Firms having, quarter on quarter, gained or lost tens or even hundreds of thousands of customers.
37. RWE said that whilst the components of the cost base were similar for the Six Large Energy Firms, the degrees to which individual suppliers were affected by shifts in one or the other cost element were likely to differ. Also, consolidated segmental statements showed a difference between the lowest and highest:
- (a) wholesale cost for domestic electricity of 27% in 2011, 31% in 2012 and 12% in 2013, and for gas of 17% in 2011, 23% in 2012 and 9% in 2013; and
- (b) direct cost in 2012 of 30% for electricity and 20% for gas.
38. RWE said that the firms might be exposed to varying degrees of pressure in relation to their own operating costs and commodity costs (depending on their specific hedging strategies) which meant that there was scope for company-specific cost differences to drive different competitive strategies in terms of either the timing or the magnitude of price changes, with consequent enhancement of competition.
39. SSE said that:
- (a) the market shares of the Six Large Energy Firms had fluctuated partly as a result of the sustained increase of the market share of smaller suppliers since 2008. SSE had grown from the fifth to the second largest GB energy supplier although since 2009 its market shares in both electricity and gas had declined steadily. On average, SSE had gained [X] customers but lost [X] customers every year;
- (b) suppliers had different hedging strategies that affected their input costs in different ways. SSE's hedging policy was likely to differ widely from its competitors because of its price freeze strategy;
- (c) the Six Large Energy Firms were not vertically integrated to the same degree and their generation/supply balances differed. Centrica and E.ON were taking steps to reduce their degree of vertical integration;
- (d) a large number of more recent entrants with a range of business models and specific customer positioning further disrupted any basis for coordination; and

- (e) suppliers in the energy markets compete on a wide range of competitive parameters as well as price, including: different types of tariff offerings (in particular in relation to price, term, and 'greenness'); customer service; the provision of 'smart' services and complementary service offerings (for instance, home services, telecoms); loyalty rewards and incentive schemes; and energy efficiency and micro-renewables offerings. SSE's competitive offering focused, in particular, on the prioritisation of trust and fairness to customers and award-winning customer service.

Transparency

40. Centrica said:

- (a) the information gathered from the consolidated segmental statements regarding commodity costs was out-of-date when published. In particular, reported costs would have been influenced by decisions taken more than two years prior, in which time, hedging strategy might have changed;
- (b) demand was not stable and easily forecast, consumption per customer had fallen with improved energy efficiency, and there were variations in consumption levels from year-to-year with weather (particularly on gas);
- (c) the assumed prices and costs used in the SMI did not provide additional information about competitors' cost structures that were not already publicly available; and
- (d) the growth of independent suppliers was a significant constraint on the Six Large Energy Firms and a factor that mitigated against the risk of coordination.

41. EDF Energy said that the consolidated segmental statements were limited in their usefulness as they were backward-looking and Ofgem's SMI had been criticised, for example by Energy UK, as providing inaccurate and misleading information.

42. EDF Energy also said that:

- (a) it had actively encouraged customers to engage and consider their choice of tariff, which had resulted in a migration away from the standard variable tariff;
- (b) if there were tacit coordination over standard variable customers, this would be irrational and/or evidence of successful 'cheating' on the coordination strategy;

- (c) this would also indicate the lack of a focal point for coordination; and
 - (d) it had not experienced or observed a specific supplier ever being singled out for anything that could be seen as representing a punishment mechanism.
43. E.ON said that strong competition pushed it to take account of competitors' behaviour but that the information available was not perfect or complete and this natural supplier behaviour of taking into account its competitors' actions and positions was consistent with behaviour in a competitive market.¹³
44. RWE said:
- (a) that much of the transparency was driven by Ofgem interventions and efforts by energy companies to ensure that customers understood what made up their bill;
 - (b) publication of the consolidated segmental statements could help decrease the entire industry's costs by facilitating benchmarking that might drive gains in efficiency. For example, when first published in 2009, [redacted]; and
 - (c) using the published information it could only derive plausible ranges for competitor potential strategies and – given the backward-looking nature of the consolidated segmental statements – it could not derive any actual hedge positions looking one or two years into the future.
45. SSE said that it was natural for players to continually assess the market to ensure that their products remained competitive and that using a common source of industry data was standard business practice. SSE said that publication of the consolidated segmental statements and Ofgem's SMI was driven by regulation to encourage trust in the energy markets, and suppliers remained unable to see each other's costs, purchasing strategies, hedging strategies or other critical business information.

Price sensitivity of customers

46. E.ON said that:
- (a) the working paper on coordination appears to underplay the lack of external sustainability of coordination, significantly underplaying the constraint exercised by the number of rapidly growing suppliers other than the six largest suppliers (to the extent that any coordination analysis is

¹³ E.ON response to UIS paragraph 228

focused on the six largest suppliers) who have grown rapidly in the past years¹⁴; and

(b) it was not possible for suppliers to differentiate between those customers who were engaged and those who might be less engaged. This meant that it was not possible for the less engaged customers to be a focal point for coordination without an impact on those customers who were more engaged and coordination becoming externally unsustainable. E.ON also referred to the level of competition from smaller suppliers as impacting any such theory.¹⁵

47. RWE said that it was misleading to equate customers on a standard variable tariff to being price-insensitive, as many of these customers might have been on non-standard before and might well be on another non-standard at a later stage.

Our assessment

48. Applying the criteria set out in the Guidelines, it appears that there are some characteristics of the retail markets that may be conducive to tacit coordination. In particular: the degree of transparency on the prices offered by suppliers and other terms and conditions, and on the suppliers to and from whom domestic customers are lost and gained; and the degree of similarity in the cost structures and business models offered by suppliers.

49. However, we have also found that: there are some differences in the business models of suppliers; there will be short- to medium-term differences in energy costs reflecting differences in purchasing strategies; and there are groups of domestic customers, including those subscribing to fixed-rate products, who are price sensitive. We would expect these differences to make it more difficult to align and maintain incentives to coordinate across the group of Six Large Energy Firms.

50. We also note that smaller suppliers have recently achieved significant growth in the share of domestic customers, particularly in the fixed-priced/fixed-period segment of the markets, which is another factor that may mitigate the risk of coordination in the retail markets.

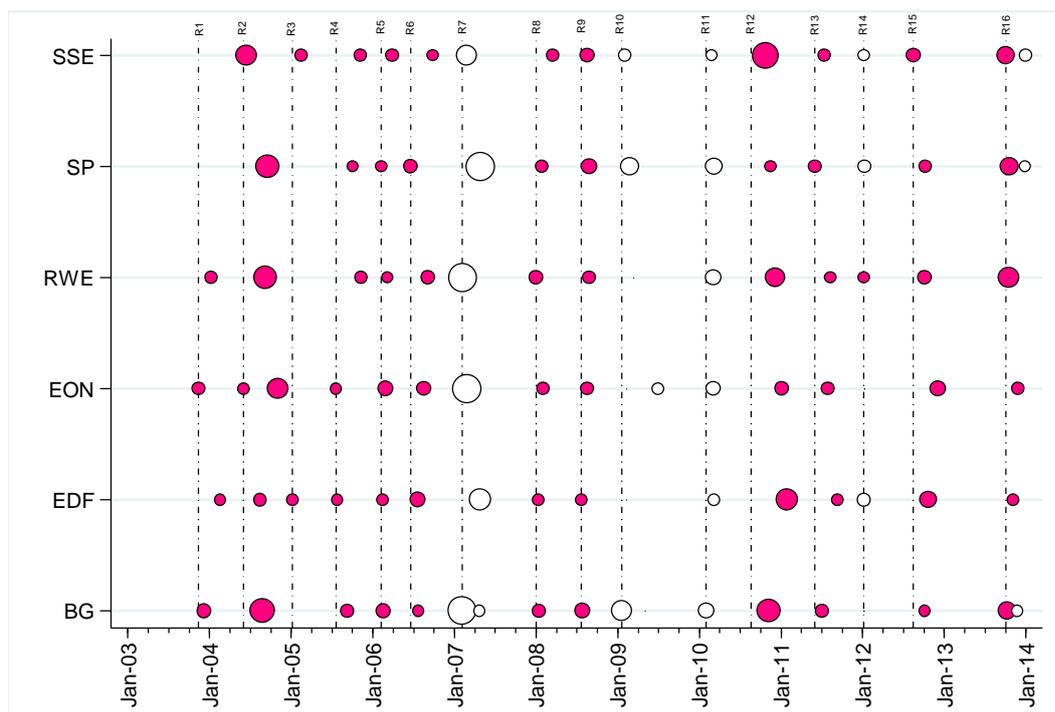
¹⁴ E.ON response to UIS paragraph 223.

¹⁵ E.ON response to UIS paragraphs 225 and 226.

Tacit coordination on price

51. In addition to investigating structural characteristics of the markets that may be conducive to coordination, we looked at whether the Six Large Energy Firms have taken any actions to reach, sustain or enhance coordination.
52. The Six Large Energy Firms make public statements, in advance of implementation, of intentions to change the price of their standard variable product. These announcements will typically give a 'headline' rate change and an implementation date. The 'headline' rate is typically an average across regions and based on the change in bill for a dual fuel domestic customer, paying by monthly direct debit with 'typical' consumption.
53. Figures 1 and 2 show for the period 2004 to 2014 the timing of the announcement of changes to gas and electricity prices, the direction of the announced changes (pink denotes an increase and white a reduction), and their size (the larger the diameter of the circle the larger the increase relative to other announcements).

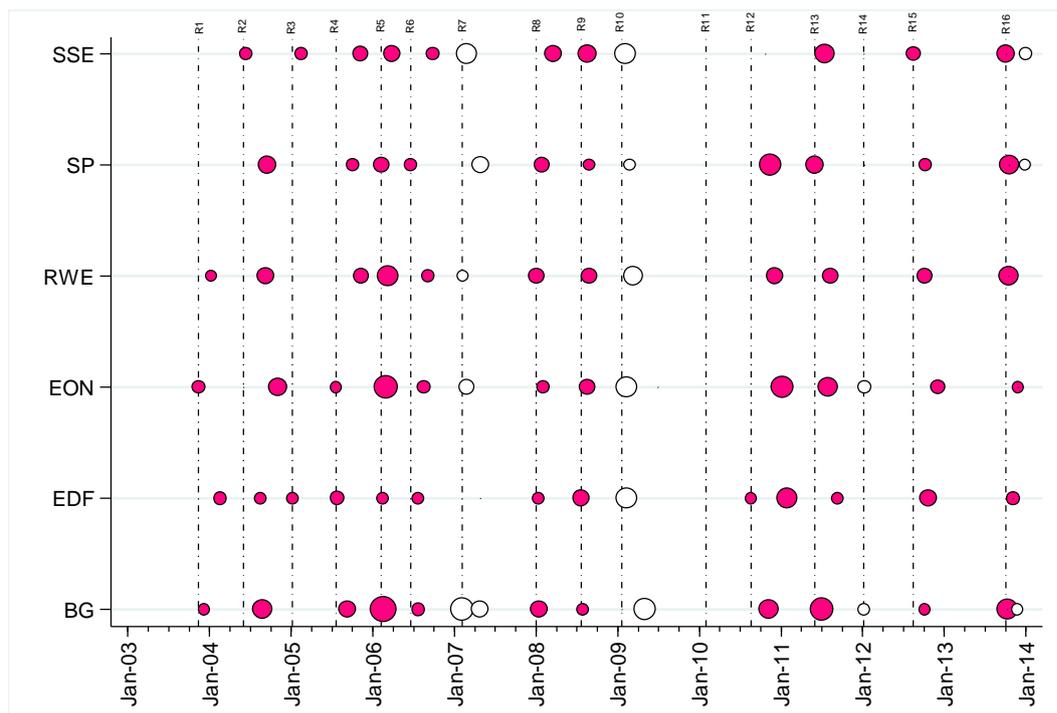
Figure 1: An analysis of the timing, direction and size of announced changes in standard variable tariff gas prices, 2004 to 2014



Source: CMA analysis.

Note: Pink circles denote positive gas price changes and white circles denote negative gas price changes.

Figure 2: An analysis of the timing, direction and size of announced changes in standard variable tariff electricity prices, 2004 to 2014

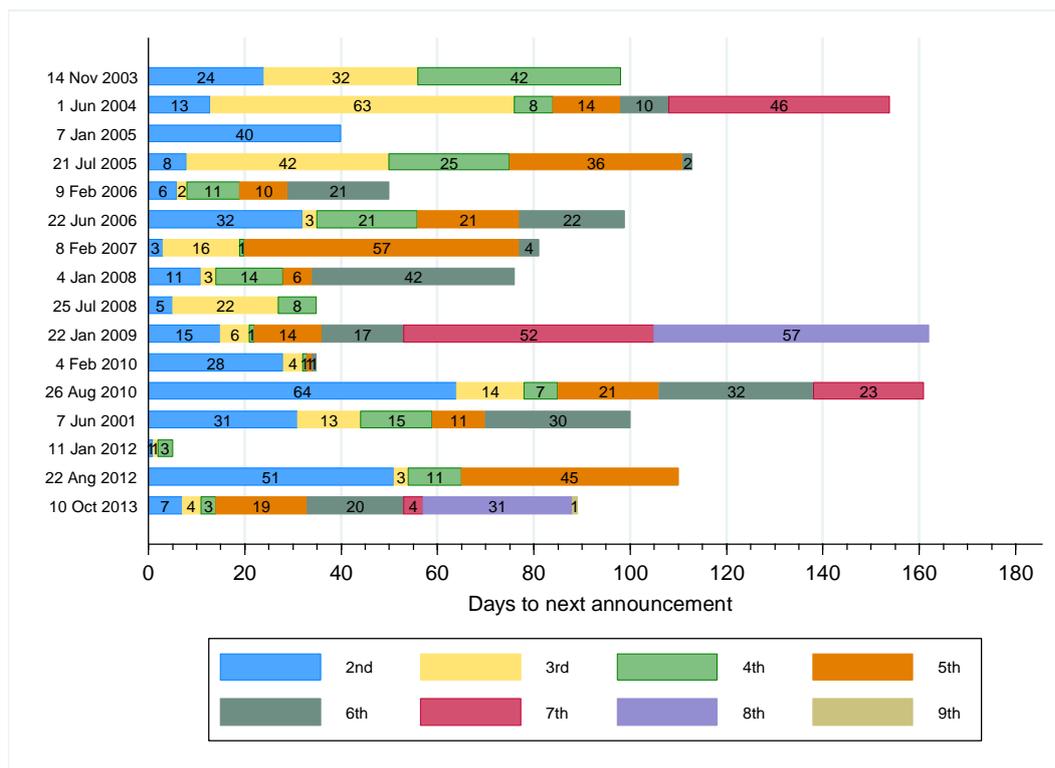


Source: CMA analysis.

Note: Pink circles denote positive electricity price changes and white circles denote negative electricity price changes.

54. These figures show that within ‘rounds of price changes’ there are differences between suppliers in the size of the announced changes. These also show that late 2013/early 2014 announcements by British Gas, Scottish Power, and SSE were closely followed by announcements of a price reduction soon after. This is discussed further below (see paragraph 73).
55. The dotted lines identify what appear to be rounds of price changes. Figure 3 provides further information on the timing of the first announcement and then the elapsed time to and between subsequent announcements. This shows that the time period over which announcements have been made has varied. Typically the period has been more than 40 to 50 days.

Figure 3: Timing and days prior to subsequent price announcements



Source: CMA analysis.

56. Annex B provides information on the order in which the Six Large Energy Firms announced price changes. This does not suggest that any one supplier has tended to be a leader. EDF Energy, RWE and SSE said that CMA's results do not match their data, for part or the whole period, and they provided revised figures. EDF Energy suggested that an issue could be the definition of 'rounds' of price announcements.
57. We said in the issues statement that we would investigate the possibility that the public pre-announcement of 'headline' changes to standard variable prices could be a practice facilitating tacit coordination – see paragraph 3(a)).
58. In investigating this matter we have, among other things, considered the scope of the price announcements; alternative explanations for why suppliers might announce, in the way they have, intended changes to prices for standard variable tariffs; and whether suppliers are indeed using these announcements to signal their intentions to rivals and for rival suppliers to be in a position to adjust their behaviour accordingly.
59. We note that the standard licence condition (SLC) 23 of gas and electricity supply licences requires suppliers:

- (a) before April 2011 to notify their customers of a unilateral variation of their contract to increase prices or in any other way that is to the significant disadvantage to the customer either (i) optionally in advance or (ii) up to 65 working days after the variation took effect; and
 - (b) since April 2011 to notify domestic customers directly in writing at least 30 calendar days in advance of the date on which the price increase (or other unilateral variation) takes effect.
60. Ofgem has not required suppliers to publicly announce/publish information on intended or proposed price changes. As noted above, the requirement is to inform domestic customers.

Scope of the price announcements

61. We asked the Six Large Energy Firms to confirm the scope of price announcements in terms of what tariffs they cover. The responses were as follows:
- (a) Centrica said its public announcements concerned prices for its standard variable tariffs for standard meters and prices for tariffs in some way linked to the standard variable tariff including capped and tracker products.
 - (b) EDF Energy said that it only publicly announced price changes relating to its standard variable tariffs.
 - (c) E.ON said that its public announcements of price changes concerned only standard variable tariffs, but that the announcements may have referred also to the launch or withdrawal of fixed-term tariffs.
 - (d) RWE said that its public announcements related to its standard variable tariffs for standard and Economy 7 meters.
 - (e) Scottish Power said that its public announcements of price changes generally concerned standard variable tariffs, and discounted variable and capped tariffs where applicable.¹⁶
 - (f) SSE said that its public announcements of price changes generally concerned standard variable, discounted variable, capped and white label products.

¹⁶ The 6 January 2014 announcement included selected fixed-price products that had a GB average direct debit, dual fuel bill above that of its new standard variable direct debit prices, which were also reduced to the same level as the new GB average standard variable direct debit, dual fuel bill.

62. These statements appear to be consistent with the copies of press statements and internal documents provided by suppliers.

Reasons for price announcements

63. The Six Large Energy Firms told us that in announcing price changes their objectives were, in broad terms, to manage their relationships and reputation with domestic customers, regulators and politicians, and to meet market regulatory requirements. In particular:
- (a) Centrica suggested that the key reasons for making announcements were London Stock Exchange rules that required all publicly traded companies to make an announcement for events that affected their profits, and the desire to ensure that the inevitable media reporting of a British Gas tariff price change was accurate and not likely to mislead customers.
 - (b) EDF Energy's reasons for making public announcements were to generate positive PR messages (announcements being an alternative to giving customers advance notification when prices were reduced, and so it had no obligation to write to customers, although it had done so for some price decreases), to mitigate the impact of customer losses to competitors that had already announced and/or implemented price decreases, and to manage potentially negative media coverage.
 - (c) E.ON said that public announcements allowed it to ensure that journalists and commentators had access to accurate and complete information including information on actions being taken to support vulnerable customers and/or the context for any changes made to comply with regulations.
 - (d) RWE said that the primary drivers for its public announcements were a desire to ensure accuracy in terms of both the message and the figures reported in the media, and to ensure transparency for customers.
 - (e) Scottish Power said that when listed on the London Stock Exchange it was required under listing rules to make an announcement in respect of any price change that could materially have affected its earnings. Scottish Power also said that public announcements allowed it to ensure greater accuracy of media reporting and to explain to its customers the reason for the price increases and ways in which they could mitigate their effect.
 - (f) SSE said that, as well as market drivers and regulatory obligations, other factors taken into account in determining the timing of price announcements included competition; customer relations; logistics; and political and financial reporting considerations.

64. These explanations appear consistent with the documentary evidence we have received.

Timing of price announcements, notification and implementation

65. We asked the Six Large Energy Firms to give, for each change in the price of its standard variable tariff since 2004, the date of any public announcement, the date of implementation and the date the supplier started notifying domestic customers.
66. We note that since 2004 the periods between price changes have been between seven and nine months. Suppliers told us that this reflected the preference customers have for certainty and the costs to suppliers of changing prices including the reputational damage associated with price increases.
67. We considered the length of the period between a supplier announcing a price change and (a) notifying domestic customers or (b) implementing the change to be key to our analysis of whether price announcements may be used by suppliers to signal their intentions to rivals, and for rival suppliers to be in a position to adjust their behaviour accordingly.
68. The shorter the period between an announcement and notification and/or implementation the less opportunity there is for suppliers to use the public announcement of changes as a device for coordinating on the size or timing of a change.
69. We generally found that the period between the Six Large Energy Firms' public announcements of a price change and starting to notify domestic customers or implementation has since mid-2011, which is when SLC 23 came into effect, been at most around ten days. Before this date there were instances when the period was longer, but we did not identify any particular patterns in the behaviour.

Centrica

- (a) Since 2004 British Gas has started notifying customers the same day as any public announcement.
- (b) Often British Gas announced price increases between four and six weeks before implementation, and implemented price reductions on the same day as any public announcement.
- (c) In 2008 British Gas implemented two price increases with no advance announcement.

EDF Energy

- (a) From 2012 EDF Energy has announced price increases six to seven weeks before implementation.
- (b) In 2011 EDF Energy notified customers between the announcement date and ten days afterwards.
- (c) Before 2011 customers may have been notified of a change a week either side of the implementation date, or on the same day as the announcement and/or implementation.
- (d) From 2009 to 2011 the period between announcement and implementation was typically shorter than six weeks.
- (e) From 2004 to 2008 changes may have been implemented on the same day as the announcement or a few days or weeks later.

E.ON

- (a) Since mid-2011 E.ON has started notifying customers within a few days of the public announcement of a price increase.
- (b) Since mid-2011 E.ON has announced price increases approximately six weeks before implementation.
- (c) Between 2008 and mid 2011 E.ON generally announced price changes four weeks before implementation.
- (d) Between 2004 and 2008 E.ON either started notifying customers or implemented a change within two or three weeks of a public announcement.

RWE

- (a) Since 2004 RWE has started notifying customers of price changes the same day as any public announcement.
- (b) Since mid-2011 RWE has announced price changes five to seven weeks before implementation (there were two exceptions when price changes were announced within three to four weeks before implementation).

Scottish Power

- (a) Scottish Power does not have full information on the dates it started notifying customers of price increases, but said that its policy had been to

issue public announcements just before starting to notify customers.
Practice for price decreases varied.

- (b) Since 2011 price increases have been implemented within six to seven weeks of a public announcement, reflecting the time taken to prepare and issue a mailing and give 30 days' notice to individual customers in line with new regulations.
- (c) From 2004 to 2011 price increases were generally implemented within a few days to three weeks of a public announcement.

SSE

- (a) Since 2012 SSE has commenced the customer notification procedure the same day as the public announcement.
- (b) Since mid-2011 SSE has generally announced price changes eight to eleven weeks before implementation (one price change was announced 14 weeks before implementation; however, this was in relation to one of SSE's white label tariffs).
- (c) From 2004 to 2011 the customer notification procedure generally commenced within three weeks of a public announcement. The period between an announcement and implementation and/or notification has been as long as seven or eight weeks. However, for half of the price change announcements for this period the customer notification procedure commenced around one month, and sometimes as long as two months, before implementation.

Modification of plans between announcement and implementation

- 70. The Six Large Energy Firms told us that they were, in effect, committed to a change once they start notifying their domestic customers. While a supplier could theoretically reverse or modify its decision, this would be an unattractive option because it could be costly in management time, damaging to the firm's reputation with domestic customers and delay a price change for which presumably there were good commercial reasons.
- 71. Centrica, EDF Energy, E.ON, RWE and SSE confirmed that there were no occasions on which they had modified the level or timing of price changes between announcement and implementation.
- 72. Scottish Power said that it had not identified any occasions when its plans in relation to a change in price changed materially following the public announcement. There was one instance prior to Scottish Power's acquisition

by Iberdrola in 2007, when there was a slight error in the London Stock Exchange announcement, the announcement was withdrawn, an apology given and the corrected notice republished.

73. As noted above, Figures 1 and 2 show that price increases announced by British Gas, Scottish Power and SSE at the end of 2013 were closely followed by announcements to reduce their prices. Our understanding is that these reductions followed a DECC announcement on 2 December 2013 that was expected to have the effect of reducing suppliers' costs. Those suppliers that had not yet announced price increases were able to factor DECC's announcement into the price increases announced later in December.
74. We recognise that a rival pre-announcing an intention to raise or lower prices might prompt a supplier to do the same shortly afterwards. This might be the case regardless of whether the supplier had been contemplating changing its prices. Nevertheless, we consider this could also be consistent with competitive behaviour – in particular, suppliers responding to the actions of rivals.

Parties' views

75. Centrica said that:
- (a) as a large proportion of the bill was regulated a significant element of the cost base changed by a similar magnitude and at a similar time for all suppliers, leading to similar incentives to change prices;
 - (b) the risk of large customer losses if a supplier was first to increase prices provided an incentive for each supplier to delay a price rise to avoid being first; and
 - (c) the significant lead times required to prepare for price increases meant that competitor announcements that occurred close to British Gas's proposed announcements could not influence its decision making.
76. EDF Energy said a large proportion of a customer's bill was driven by external costs that were common, or very similar, for all suppliers and that any parallel behaviour of market participants with respect to pricing largely reflected movements in these underlying costs, and also a desire to avoid being the first to raise price.
77. EDF Energy also said that it was incentivised to use fixed-price tariffs to compete for rivals' standard variable customers and this constrained its ability to price unilaterally. It viewed the core underlying feature to be a lack of customer engagement and not unilateral market power. It also said that the

alignment of price announcements might in fact act as a strong trigger mechanism to customer engagement. Whilst standard variable tariff price changes had tended to be announced in close proximity, other tariffs were launched throughout the year and those were where the largest savings could be realised.

78. E.ON said that it strongly supported the CMA's view that the company that announces price increases first risks losing more customers than those that follow, which would provide a unilateral explanation for observations of clustering in price announcement behaviour. In 2005: it had been the first company in the market to put up its prices; had been heavily criticised in the media for doing so; and despite ending up with the cheapest standard prices, it had lost [X] customer accounts net ([X]% of its base). Given this experience E.ON said that, when taking any price decision in a competitive market like the retail energy markets, it is to be expected that a supplier would take account of both likely pricing initiatives of other suppliers and its own competitive positioning compared to other suppliers when determining its own prices. E.ON said that pre-announcements enabled it to ensure that it was open about the level and extent of any price change and, in the event of a price increase, any mitigating actions were also understood.
79. RWE said that the CMA's concern that price announcements might soften competition were based on mistaken perceptions that (i) suppliers did actually announce price changes in relatively close succession; and (ii) the timing of announcements reduced expected gains from switching. In particular:
- (a) the time that elapsed between the first and the last price-change announcement had often been between two to three months or more;
 - (b) the average number of days that had passed between the first and last supplier to announce a price rise had been 63 days;
 - (c) there was a wide variation in the number of days that passed between the first and the last of a series of announcements, with the longest time span being 110 days; and
 - (d) there was an incentive to delay a price increase – in the hope of being able to attract customers, which had a pro-competitive effect which needs to be balanced against a sufficient recovery of cost.

Our assessment

80. The evidence does not appear to indicate that the Six Large Energy Firms are modifying their behaviour in relation to the scale or the timing of announced

price changes in response to subsequent price announcements made by rival suppliers.

Outcomes consistent with coordination on market segmentation and/or prices

81. We considered whether observed market outcomes were consistent with tacit coordination. In particular, we observed the following market outcomes:
- (a) stable market shares;
 - (b) similar pricing strategies, ie suppliers charging the same prices; suppliers increasing or decreasing their prices at the same time and by similar amounts;
 - (c) similar profit margins and/or a convergence of profits over time; and
 - (d) high profitability.
82. Our findings in relation to these outcomes are as follows:
- (a) Market shares: As explained in paragraphs 15 and 16, we found that market shares have been stable nationally and at a regional level.
 - (b) Prices: Our findings to date in relation to the pricing of the standard variable tariffs offered by the Six Large Energy Firms are set out in Section 8. We observe that standard variable tariffs do move together, but we do not see a consistent convergence of tariffs over time
 - (c) Profitability and margins: Our findings in relation to profitability and margins in domestic supply are set out in Section 10 and associated appendices.
83. We note that none of these outcomes would by themselves be evidence of tacit coordination. In particular, some of these outcomes could also be consistent with weak competition arising from unilateral market power (eg stable market shares and high profitability), and some could be consistent with a competitive market (eg price parallelism).

Parties' views

84. EDF Energy said it had been loss making at the retail level, only returning to EBITDA profitability in 2014 and that this would not make a sensible coordination strategy.
85. RWE said that the variation in EBITDA margins earned by each of the Six Large Energy Firms – both inter-temporally and, in particular, cross-

sectionally – was not indicative of, or consistent with, a tacitly coordinated outcome.

86. SSE said that the considerable variation of EBIT margins between the Six Large Energy Firms is inconsistent with a coordinated outcome.

Summary

87. Based on the evidence set out above, we have observed that:

- (a) There are some characteristics of the supply of gas and electricity to domestic customers that may be conducive to coordination. However, we have also identified factors that may make it more difficult for firms to reach and sustain coordination.
- (b) We do not have evidence of suppliers using price announcements as a mechanism to signal their intentions in relation to the pricing of their standard variable tariff to rival suppliers to determine their prices accordingly.
- (c) We do find some evidence of outcomes consistent with coordination, but we note that those outcomes can also be observed in markets that are not subject to coordination.

Annex A: Cost structures of the Six Large Energy Firms

1. [✂].

2. [✂].

[✂]

[✂]

[✂]

[✂]

Annex B: An analysis of the frequency of positions within rounds of price announcements

Table 1: Frequency of positions within rounds of price changes, November 2003 to January 2014

<i>Company</i>	<i>First</i>	<i>Second</i>	<i>Third</i>	<i>Fourth</i>	<i>Fifth</i>	<i>Sixth</i>	<i>Follow ups</i>
EDF Energy	4	4	1	3	2	2	1
British Gas	3	6	5	1	0	0	3
E.ON	3	0	4	4	2	2	2
Scottish Power	3	0	1	6	1	3	1
SSE	2	6	2	1	1	3	1
RWE	1	2	3	2	5	2	0

Source: CMA analysis.

Table 2: Frequency of positions within rounds of price changes, January 2008 to January 2014

<i>Company</i>	<i>First</i>	<i>Second</i>	<i>Third</i>	<i>Fourth</i>	<i>Fifth</i>	<i>Sixth</i>	<i>Follow ups</i>
EDF Energy	3	1	0	2	2	1	1
British Gas	2	5	2	0	0	0	2
SSE	2	4	2	0	0	1	1
RWE	1	1	2	2	2	1	0
Scottish Power	1	0	1	5	1	1	1
E.ON	0	0	3	2	2	2	1

Source: CMA analysis.

Table 3: Frequency of positions within rounds of price changes, November 2003 to December 2007

<i>Company</i>	<i>First</i>	<i>Second</i>	<i>Third</i>	<i>Fourth r</i>	<i>Fifth</i>	<i>Sixth</i>	<i>Follow ups</i>
E.ON	3	0	1	2	0	0	1
Scottish Power	2	0	0	1	0	2	0
British Gas	1	1	3	1	0	0	1
EDF Energy	1	3	1	1	0	1	0
RWE	0	1	1	0	3	1	0
SSE	0	2	0	1	1	2	0

Source: CMA analysis.