

**Professor Stephen Littlechild, Sir Callum McCarthy, Dr Eileen Marshall CBE,
Stephen Smith, Clare Spottiswoode CBE – Written evidence (UEM0096)**

The Lord Hollick
Chairman
Economic Affairs Committee
House of Lords
London
SW1A 0PW

20 January 2017

Dear Lord Hollick

**Submission to the House of Lords Economic Affairs Committee,
Investigation into the Economics of UK Energy Policy**

1. We write as former GB energy regulators in response to the Committee’s invitation to submit evidence in connection with its present investigation into the Economics of UK Energy Policy.¹
2. According to the Economic Affairs Committee website, “The core question for the Committee is what are the failures, if any, in the energy market and what measures are needed to correct them?”
3. The Competition and Markets Authority (CMA) has found that the wholesale market works well - generator market power and vertical integration are not problematic - and that regulatory interventions and actions or inactions by the Government are the main causes of Adverse Effects on Competition. The CMA also found that there is a serious failure in the domestic retail energy market, and the CMA and others have proposed various measures to correct that failure.
4. In our view, the CMA evidence, properly interpreted, suggests that the domestic sector of the retail energy market is not significantly less competitive than the industrial and commercial (I&C) market, which is widely regarded as very competitive. Consequently, there is no serious competition failure there that needs drastic measures to correct. Indeed, some suggested measures will more likely reduce competition and make customers worse off. If there is a public interest concern that some vulnerable

¹ All of us have had executive responsibility for energy regulation – and specifically regulation of retail competition - at the highest levels in Ofgem and its predecessor bodies Ofgas and Offer. Our combined executive experience covers the period from 1989 until October 2010. In addition, we are all trained economists with extensive experience of applying economics in regulatory practice, including in other regulated sectors in the UK and elsewhere.

customers pay more than other customers, the way to address this is by targeted support, and by enabling such vulnerable customers to better participate in the competitive market, as the Government is already doing.

5. Since the present investigation is focused on energy market failures we suggest that the Committee should continue to focus, as it has to date, on other problems in the energy market, particularly those associated with the costs of environmental policies. But it may wish to consider a separate investigation into the misperceptions surrounding the domestic retail energy market.

Alleged failure in the domestic retail energy market and proposed measures

6. The recent investigation by the CMA found “an Adverse Effect on Competition (AEC) through an overarching feature of weak customer response, which, in turn, gives suppliers a position of unilateral market power concerning their inactive customer base”. (CMA, *Summary of Final Report*, 24 June 2016, para 154)
7. Using its so-called direct approach, the CMA “estimated the detriment from excessive prices to the domestic customers of the Six Large Energy Firms to be about £1.4 billion a year on average over 2012 to 2015, ... with an upwards trend, reaching almost £2 billion in 2015.” (*Summary*, para 194) The CMA also used a second so-called indirect approach. “The analysis using the indirect approach yields a total estimate of customer detriment from excessive prices of £720 million a year over the period 2007 to 2014...” (*Summary*, para 200)
8. To remedy its perceived detriment of weak customer response, the CMA recommended (inter alia) that Ofgem obtain data about disengaged customers and disclose this to rival suppliers. (*Summary*, para 233). The CMA has also imposed a four-year price cap on tariffs to prepayment meter customers, until smart meters overcome some technical limitations of present pre-payment meters. (*Summary*, paras 243 - 252)
9. Some have argued that, in view of the magnitude of the estimated detriment, more could or should be done. At the recent Committee hearing (10 January 2017), the Secretary of State commented that “one of the striking things about the CMA report was that it reported that there was £1.4bn annually of detriment to customers, which is clearly a huge amount of money, and therefore requires a response as to how that can be brought down”. He was considering “whether the pro-switching recommendations, which may be important, are sufficient to deal with the detriment that is being suffered by those people who don’t switch”.
10. One member of the Committee (Baroness Bowles) pressed for a further restriction: “why shouldn’t each electricity company offer just the standard variable tariff ... that would be real competition, wouldn’t it?”
11. Professor Martin Cave, in a dissenting minority opinion to the CMA Report, went further. He argued that “The harm which is presently inflicted on households in this market (£2 billion in 2015, or an average of £75 for every British household) is very severe” and proposed a “wider price cap remedy” on all Standard Variable Tariffs (SVTs), presently accounting for about 70 per cent of customers. (CMA, *Final Report*, pp 1415-1417)

12. As we submit this evidence, CMA and Ofgem conference speakers are reported as saying that “the energy retail market is in a ‘last chance saloon’ and risks becoming ‘a thing of the past’”.²

Errors in the CMA’s direct approach

13. The CMA took the view that the domestic market was characterized by weak customer response. It then sought to calculate the extent to which average prices paid by customers were above the levels that it would expect in a well-functioning competitive market. It made two attempts at calculating this perceived detriment.
14. Its direct approach put the average detriment at £1.4bn per year over 2012-2015, and £2bn in 2015. This approach began as an attempt to compare prices actually charged by the Six Large Energy Suppliers (the Big6) with a competitive benchmark price based on the (lower) prices actually charged by two new entrant mid-tier suppliers. But it soon became apparent that the two sets of suppliers were not directly comparable, and the CMA had to make a series of major adjustments.
15. A leading competition lawyer, whose firm advised one of the Big6 suppliers, has expressed concern about the CMA’s calculations and process.³ He explains that in March 2016 the CMA provisionally valued the average customer detriment at £1.7bn per year. The CMA’s detailed workings were made available to parties’ legal and economic advisers by way of a confidentiality ring. There was extensive criticism that the comparison had not been made on a like-for-like basis. One company argued that a proper adjustment would more than wipe out the alleged £1.7bn detriment. In its final report the CMA acknowledged the need to make adjustments but did not disclose their scale and nature. It also made two new adjustments in the opposite direction, details of which were again redacted, leading to the final estimate of £1.4bn detriment. This lack of transparency has given rise to serious concern and is described as “a highly unsatisfactory basis” for making judgements about overcharging.⁴

² Utility Week Energy Customer Conference, 19 January 2017, as reported by Tom Grimwood in *Utility Week*, 19 January 2017.

³ Mark Friend, “The unexplained mysteries of the energy market investigation”, *Competition Policy International*, December 2016.

⁴ “... the CMA’s detriment calculations leave many questions unanswered. Significant elements of the CMA’s detriment calculations are not in the public domain, as the published version of the final report contains extensive redactions. ... A cynical observer could be forgiven for wondering whether there was perhaps an element of reverse engineering in the methodology used to derive such a large a detriment figure, so that the CMA could more easily justify its decision to impose a price cap. Absent an appeal to the CAT, we will never know as the CMA did not make its underlying calculations available even to parties’ legal and economic advisers. ... Media commentators may be willing to take the CMA’s findings at face value, but absent any disclosure of the underlying workings even to parties’ legal and economic advisers, this seems a highly unsatisfactory basis for politicians and regulators to make judgments about whether the prices charged by the Big 6 reveal evidence of an ‘overcharge.’” (Friend, pp 2, 4, 5)

16. We emphasize here the hypothetical nature of the CMA's calculation. It ended up comparing actual Big6 prices with the CMA's guess at what mid-tier suppliers would charge *if* they were not loss-making and *if* they were not exempt from costly environmental obligations, and *if* they had reached an efficient scale and *if* they were in a steady state and *if* they were earning a normal return on capital.
17. Not surprisingly, the result was implausible. The estimated detriment averaging £1.4bn per year is significantly greater than the total domestic profit margin that the Big6 earned during this period, which was of the order of £1bn per year.⁵ Even assuming that the Big6 were £0.4bn per year more efficient (see following), to eliminate the alleged customer detriment would require them to operate at zero total profit margin. This makes no sense.
18. The CMA's own *Guidelines for Market Investigations* (April 2013, paras 30, 320) state that the CMA's benchmark well-functioning market is "not an idealized perfectly competitive market". The CMA reaffirmed that in this investigation. (*Final Report*, para 10.2) But that is precisely what the CMA ended up constructing.
19. In sum, the CMA's direct approach to calculating customer detriment was not transparent, was inconsistent with the CMA's own *Guidelines*, was based on a series of guesses rather than reality, and ended up with an implausible answer.

The CMA's indirect approach: the irrelevance of differential efficiency

20. The CMA's indirect approach calculated customer detriment as the sum of inefficient costs and excess profits. It defined inefficient costs as the difference between Big6 actual costs and the lower quartile of Big6 costs, amounting to an average of some £300m – £400m per year.
21. It is a truism that if firms were more efficient and had lower costs, then prices to customers would be lower. But that does not make differences in cost a source of customer detriment. In all real competitive markets, firms have differences in costs. Such differences do not indicate or measure customer detriment. If they did, all consumer markets would be imposing detriments on customers. By this criterion, only an idealized perfectly competitive market would yield no detriment.
22. Again, the CMA's approach is inconsistent with the CMA's own *Guidelines*. As far as we know, neither the CMA nor its predecessors nor any other competition authority has ever used such a calculation of customer detriment. It is surprising that CMA economists gave credence to this concept.

The CMA's calculation of excess profit, and some qualifications

23. Excess profit is a relatively familiar concept often used by competition authorities. The CMA calculated that the pre-tax Weighted Average Cost of Capital (WACC) in the energy supply market was in the range 9.3 – 11.5 per cent. The CMA then assumed that a normal competitive return on capital employed (ROCE) would be 10 per cent, rejecting

⁵ See the annual *Consolidated Segmented Statements* available via links on the Ofgem website.

arguments that it should choose the middle of that range (10.4 per cent) or carry out a sensitivity analysis. (*Final Report*, Appendix 9.12 para 2)

24. The CMA then calculated that the Big6 suppliers' aggregate excess profit, above that 10 per cent normal competitive rate, averaged £303m per year in the domestic market over the period 2007-2014. (*Final Report*, Table 10.6)
25. But three important questions need to be asked. First, do these ROCE figures provide a full and accurate picture? Suppliers challenged the use of ROCE, given that these were relatively capital-light businesses. The CMA made very extensive adjustments to company figures including asset valuations.⁶ In many cases companies strongly challenged these adjustments and argued that, with more appropriate adjustments, their return on capital was lower than the CMA claimed. And there must be some question whether the CMA's benchmark of a stand-alone retail business is the most appropriate one, given that none of the Big6 suppliers operate that model and a new entrant supplier that did operate that model has recently gone out of business.
26. Second, if ROCE is accepted as the criterion, is 10 per cent ROCE the most plausible benchmark for a competitive retail market? On the same basis the CMA calculated that there was also an excess profit in the market for I&C customers, averaging £44m per year. The CMA said that the I&C market was omitted from Ofgem's reference because of "lower" or "limited" competition concerns. In fact, the I&C market is widely seen as very competitive, and we are not aware that Ofgem has expressed concerns about it. The CMA also indicated that the I&C market would be the most relevant comparator for the reference markets.
27. Our calculations using CMA data and assumptions suggest that the achieved return on capital in the domestic market averaged about 14.9 per cent over the period 2009-2014, compared to 12.3 per cent in the I&C market.⁷ If the very competitive I&C market is characterized by 12.3 per cent ROCE, this calls into question the assumption that 10 per cent is a normal competitive return. It seems more plausible to take the 12.3 per cent return in the I&C market as a realistic benchmark. On this basis, the estimated excess profit in the domestic market would be about $4.9 - 2.3 = 2.6$ per cent, so would average about £160m per year.
28. There is a further possible consideration. The CMA found that, in an important respect, the domestic market was more risky than the I&C market, and this could explain or justify higher profit margins on domestic tariffs.⁸

⁶ "... firstly, to assess the profitability of retail energy supply on a stand-alone basis; secondly, to identify all relevant operating assets, liabilities, revenues and costs whether or not shown in the accounts of the firms engaged in energy supply; and thirdly, to ensure that amounts are reflected at an appropriate value." (*CMA Appendix 9.10, Analysis of retail supply profitability*, p 3)

⁷ Based on data in *Final Report Table 10.6*, and *Appendix 9.13 Retail profit margins*, Table 1. Average aggregate domestic profit (EBIT) = £5500/6 = £917m less excess profit £303m yields normal profit £614m hence implied capital at 10% ROCE is £6140m and average profit rate is $917/6140 = 14.9\%$. Average I&C aggregate profit £8900m/6 = £233m less excess profit £44m yields normal profit £189m hence implied capital £1890m and average profit rate $£233/1890 = 12.3\%$.

⁸ "In relation to wholesale energy cost risks, we accept that a significant proportion of I&C customers are on tariffs which vary with wholesale prices to a greater extent than domestic and SME tariffs.... to the extent that the Six Large Energy Firms choose to manage such risks by holding capital, we recognise that a higher [EBIT] margin may

29. Leaving that aside, however, an excess profit of £160m per year averaged over 50 million energy accounts is little over £3 per account per year, or about £6.50 per year on a dual fuel bill presently averaging around £1200 per year. Even if the £160m were spread only over dual fuel customers on standard variable tariffs it would still amount to less than £10 per such customer per year.

The domestic market is indeed competitive but hindered by regulatory interventions

30. The third important question is whether any calculated excess profit on a ROCE basis is properly attributable to weak customer response and unilateral market power, or to some other factor. Factors that are commonly examined in any market assessment include market structure and conduct, and in this case the adverse impact of regulation.
31. The CMA explained that six major suppliers actively compete in the domestic market, and each has lost about two-thirds of its original customer base, as well as having taken customers from the other suppliers. In recent years some thirty new suppliers have entered the sector, while others have exited. Entrants have taken some 15 per cent of customers, a proportion that is steadily growing. New entry continues: a new supplier (Fischer Energy) announced its entry this week.⁹ Numerous local authorities have also indicated their intention to enter the market.
32. As the CMA *Report* explains, suppliers vary in their focus and offer (or used to offer) a wide range of different and innovative tariffs. At one time the range and variety of tariffs was even greater. But starting in 2008, Ofgem imposed a series of restrictions on suppliers. First was a non-discrimination condition, then there were restrictions on direct marketing (including but not limited to doorstep selling). For two years Ofgem was proposing to restrict all customers to a single variable tariff for which Ofgem would set the monthly standing charge. In the event, Ofgem introduced its Simple Tariff rules that limited the number and variety of tariffs that could be offered.
33. The CMA investigated these rules and its conclusions were damning: it doubted that there was a significant beneficial effect on customer engagement, the rules had dampened price competition by restricting the ability to compete and reducing the incentive to cut prices, they restricted the ability to compete through innovation, the required withdrawal of tariffs or changes in tariff structure may have made some customers worse off, and overall these rules had an Adverse Effect on Competition. (*Final Report*, pp 571 -7) To remedy this detriment, the CMA recommended that the Simple Tariff rules be withdrawn.

be required. ... This would suggest that a competitive benchmark for domestic and SME customers might be around 0.4 to 0.5 percentage points higher than the same benchmark for I&C customers, i.e. it would increase from around 1.9% to around 2.4%." (Appendix 9.13, *Retail profit margins*, para 184)

⁹ *The Guardian*, 15 January 2017, as reported in *Cornwall Energy Daily Bulletin*, 16 January.

34. Others besides the CMA have also documented how Ofgem’s interventions reduced competition and increased prices to customers.¹⁰ As another indicator, the proportion of customers switching suppliers each year had grown steadily from an annual average of 15 per cent in 2003 to 20 per cent in 2008. Ofgem’s regulatory interventions reduced it to 10 per cent by 2013. Only in the last year or so, and with some of those policies now being rescinded, does the switching rate seem to be recovering, and is now about 15 per cent.
35. In sum, the full range of the CMA’s evidence, properly interpreted, suggests that the domestic retail energy market is about as competitive as the I&C market. Both are characterized by new entry, innovation and competitive pricing tending to drive out excess profits. In aggregate, the profits that remain are broadly at the levels required to remunerate shareholders for the costs and risks involved. If there is any small excess profit in the domestic market once a more realistic benchmark is used, this is about one tenth of the customer detriment that the CMA claimed. It would be surprising if Ofgem’s regulatory interventions that the CMA found to have reduced competition were not responsible for some or all of this.

“Weak customer response” and customer protection

36. If CMA evidence actually indicates a competitive rather than a non-competitive domestic retail energy market, this has important implications both for understanding the market and for policy. For example, it is no longer tenable to claim that there is “weak customer response” or that less active customers are not protected by competition.
37. In order to claim that there is “weak customer response”, it is not sufficient to argue that some customers are less engaged than the CMA expected them to be, or would like them to be, or would be consistent with its concept of a well-functioning market, or would be in what it thinks would be their interest or in the public interest. The criterion has to be whether customer response is so weak that it has an Adverse Effect on Competition. Properly interpreted, the CMA’s evidence is now clear: there is no significant lack of competition in the domestic retail energy market, other than as a result of regulatory interventions. The market is *not* characterized by weak customer response.
38. Certainly, some customers are less active than others. As in any real competitive market, some customers are willing and able to spend time looking for lower prices, and when they find them they take advantage of them. Other customers are less willing or able to do this, or actively choose not to switch, and consequently pay higher prices. But even for the less engaged customers, the extent and threat of movement of customers between suppliers has been sufficient to force prices down to essentially eliminate excess profits.
39. The allegation that disengaged customers are not protected by competition is thus unjustified. In aggregate, competition has beaten down prices to existing customers,

¹⁰ Consultation response from the Centre for Competition Policy, University of East Anglia, 10 September 2016.

substantially to the level of average cost – or at least, taking the modified CMA calculation at face value, to within about £10 on a £1200 annual bill. There is simply no basis for suggesting that energy retailers are in a “last chance saloon” or for questioning whether the market should be open to competition.

“The competitive level” of tariffs

40. The Secretary of State commented to the Committee that “the evidence from the CMA report shows that the customers of some of the big firms who are on the standard variable tariff are paying very much more than is in touch with a competitive tariff”. (Oral Hearing, 10 January 2017) The CMA did indeed give the impression that the lower priced fixed tariffs are “the competitive tariffs” set at “the competitive level”, and that the standard variable tariffs are set “above the competitive level”. But this is misleading, because *both* sets of tariffs are competitive.
41. To explain: if suppliers are to survive in the market, they need to attract new customers to replace customers that they have lost, and to grow. To do so, they tend to price down to marginal or incremental cost, i.e. with little or no contribution to overhead costs in the first year or so. In recent years they have often used fixed-price fixed-period (say one year) tariffs for this purpose. Existing customers may be on a standard variable tariff that will have to cover overhead costs as well as incremental costs. So the standard variable tariff will be higher than the fixed tariff. But this is not at the expense of existing customers: if suppliers lost existing customers and did not attract new customers by offering lower prices, then prices to existing customers would have to increase, not decrease, in order to spread overhead costs across fewer customers.
42. However, suppliers cannot set prices of standard variable tariffs at whatever level they like. The higher they are, the more likely that existing customers will leave, and that customers on fixed tariffs will not transition later to the standard variable tariffs. So standard variable tariffs are part of the competitive market too. And the CMA evidence suggests that this, too, is an effectively competitive part of the market, with prices broadly in line with aggregate costs.

Possible “remedies”

43. In our view, the CMA Report has not identified a competition problem or market failure in the domestic retail energy market that needs a remedy, at least not a problem associated with “weak customer response” or unilateral market power. The suggestion that everybody has to be engaged in order for a competitive market to work properly is not correct. It is not necessary for all or most customers to be constantly evaluating alternative offers and frequently changing supplier or tariff.
44. As noted above, it was put to the Secretary of State that if all suppliers were required to offer just the standard variable tariff, this would be “real competition”. Rightly, he explained that one had to proceed carefully because the CMA had found such regulatory interventions not to have been successful in the past. That was putting it mildly: as explained above, the CMA found that regulatory interventions had not

increased customer engagement, had removed some tariff varieties that customers liked, had reduced competition and had made some customers worse off.

45. The CMA is now requiring suppliers to give Ofgem their confidential data on loyal customers so that rival suppliers can be enabled to target these customers. It remains to be seen whether this will increase the switching rate. Some customers may be prodded into action, others may resent the annoyance or inconvenience involved. The CMA is also imposing a price cap on prepayment meter tariffs. This seems likely to reduce switching. But even if, overall, customer preferences changed sufficiently to increase the switching rate to, say, the highest level ever recorded in this country (about 20 per cent in 2008), over three quarters of customers would still not be changing supplier each year.
46. More importantly, an increase in switching would not fundamentally change the nature or extent of competition in the market. True, there would be more low price tariffs, and a higher proportion of customers would pay lower prices as a result of switching tariff or supplier. But this would not come at the expense of suppliers, whose prices are already driven down by competition so that (in aggregate) they only just cover their costs. Rather, it would come at the expense of other customers. Overhead costs would be shared among the fewer less active customers and, as more customers switched, there would be an increasing need to include in the lower priced tariffs some contribution to overhead costs.
47. Of course, the higher cost suppliers would also come under pressure to become more efficient, and that would lead over time to correspondingly lower prices. But that is happening anyway, with existing levels of competition and customer switching.

Vulnerable customers

48. There is understandable concern that some vulnerable customers might be paying more than they need to, because they are unable or unwilling to shop around and change tariff or supplier. That is a legitimate public interest issue rather than a competition issue. However, the solution is not to distort or constrain the market, but rather to improve targeted support so as to reduce the dependence of such customers on the energy market, and to enable them to take advantage of the lower prices that the competitive market already offers.
49. The Department already reports useful work in this respect. For example, it is improving the energy efficiency of the homes of fuel poor households and continuing the Warm Home Discount, and enabling suppliers to offer new tariffs via smart meters, including the possibility of cheaper energy at off-peak periods.¹¹ It is also helping vulnerable and low income customers with switching and other options.¹²

¹¹ Submission from the Department for Business, Energy and Industrial Strategy (BEIS), 31 October 2016, paras 62-3.

¹² “64. The Government recognizes, however, that those who are “less well-off, more likely to describe themselves as struggling financially, less likely to own their own home, less likely to have internet access [and] more likely to be disabled or a single parent” are less likely to have considered or actively switched” (*CMA Updated Issues Statement*, 18 February 2015, para 136). The Government has therefore provided nearly £3m to fund the Big

50. There have been concerns that some of Ofgem's rules on suppliers with respect to direct marketing, and on use of Third Party Intermediaries, may prevent or discourage the development and provision of trusted advice. This would seem a useful area for Ofgem and the Department to explore further.

Conclusions

51. In many respects the CMA has delivered a good and constructive report. It finds that the wholesale market works well. Generator market power and vertical integration are not problematic barriers to entry. These are important assurances. Equally, its finding that actions or inactions by Ofgem and the Government are the main causes of Adverse Effects on Competition is a salutary message.
52. Unfortunately, in our view the CMA's analysis of the domestic market is mistaken. It has not only wrongly blamed the large retail suppliers and their customers. It has also given false hope to customers, regulators and politicians that measures to nudge more customers into action and/or to discipline suppliers could radically improve the situation and bring lower energy prices to the majority of domestic customers. This is simply not the case. The CMA's alleged detriments of £1.4bn or £2bn per year, that remedial action could translate into benefits for customers at the expense of suppliers, are illusory.
53. This is not to deny that energy prices have increased significantly over the last 15 years or so, to the hardship or discomfort of many customers. Assisting vulnerable and other customers to switch to cheaper tariffs could be useful. But such tariffs are already available. The explanations for high and increasing energy prices do not reflect a failure of competition in the retail energy market. They reflect actual and potential increases in wholesale prices (which are much influenced by global markets), network costs, and particularly the costs of environmental policies. If there is a wish to avoid unnecessarily high domestic energy prices, these are the areas where the potential remedies lie, and in connection with market failure the last is where the Committee could most usefully focus its attention. But the Committee might also wish to consider a separate investigation into the misperceptions surrounding the domestic retail energy market.

From:

Stephen Littlechild, Director General of Electricity Supply and Head of the Office of Electricity Regulation (Offer) 1989-1998

Energy Saving Network over the last 3 years. This programme provides grant funding to community and voluntary organisations that are able to reach, have the trust of and can therefore assist vulnerable consumers to take action to save money through switching, debt advice and the take up of free or low cost energy efficiency measures. Over the last three years the Big Energy Saving Network has reached around 350,000 vulnerable and low income consumers, with 51% saying they now spend less on heating their home as a result. This year's £1.7m programme is jointly funded by BEIS (£1m) and National Energy Action (£700,000) and aims to reach a further 190,000 vulnerable consumers this winter."

Sir Callum McCarthy, Chairman and Chief Executive of Ofgem and the Gas and Electricity Markets Authority (GEMA) 1998-2003

Eileen Marshall CBE, Director of Regulation and Business Affairs, Offer 1989-1994; Chief Economic Adviser and later Deputy Director General of Ofgas 1994-1999; Managing Director, Ofgem and Executive Director, GEMA 1999-2003

Stephen Smith, senior executive positions at Ofgem 1999-2002 and 2003–2010 including Managing Director, Markets, 2004-2007 and Executive Board Member, GEMA 2004- 2010

Clare Spottiswoode CBE, Director General of Gas Supply and Head of the Office of Gas Regulation (Ofgas) 1993–1998.

25 January 2017