
Anticipated acquisition by Centrica of 20 per cent of Lake Acquisitions

ME/4133/09

The OFT's decision on reference under section 33(1) given on 7 August 2009. Full text of decision published 25 August 2009.

Please note that the square brackets indicate figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

PARTIES

1. Centrica plc (**Centrica**) is publicly listed on the London Stock Exchange. It secures and supplies gas and electricity for domestic (that is, household) and commercial customers. Its primary operations are in Great Britain (GB), North America and Europe. In GB it is active in generation, wholesale trading and supply to end-customers in electricity and gas markets.
2. EDF SA (**EDF**) is an integrated energy company with a presence in a wide range of electricity businesses: generation, wholesale trading, transmission, distribution, supply to end-customers (endnote I). Prior to its acquisition of British Energy plc (**BE**), EDF owned three power stations in the UK (one CCGT¹ and two coal) with a total capacity of approximately 5 GW.² However, EDF has committed to divest one of its CCGT power stations (the 803 MW CCGT power station at Sutton Bridge) as a condition of the European Commission's (**EC's**) clearance of EDF's acquisition of BE (**EDF/BE**).³ EDF is also constructing a new 1.3 GW CCGT plant at West Burton (next to its existing coal plant), which is expected to commence commercial operations in 2011. EDF, partly through its ownership of BE, owns eight sites considered suitable for new nuclear build (NNB).
3. Lake Acquisitions Limited (**Lake Acquisitions**) is the subsidiary of EDF SA which owns BE (endnote II). BE is the main nuclear energy generator in GB. It owns and operates eight nuclear power stations in GB with a total

¹ Combined cycle gas turbine.

² EDF also has a minority share (approximately 19 per cent) in a 907 MW CCGT plant at Barking.

³ Case No. M.5224, 22 December 2008.

installed capacity of 9.4 GW.⁴ It also supplies electricity to large industrial and commercial (I&C) customers in GB (endnote III). For the year ended 31 March 2008, BE's turnover was approximately £2.8 billion, all achieved in the UK.

TRANSACTION

4. On 11 May 2009, Centrica announced that it had agreed to subscribe for a 20 per cent shareholding in Lake Acquisitions, for approximately £2.3 billion (the merger). As a result of this shareholding, EDF and Centrica will jointly own, on an 80/20 basis, BE, the owner and operator of eight nuclear power stations in GB.
5. Centrica and EDF (the Parties) have also agreed to enter a number of additional transactions. The main elements of these other transactions are:
 - EDF and Centrica will have the right to off-take uncontracted power from the existing BE nuclear fleet in proportion to their respective shareholdings in Lake Acquisitions (the Equity Power Purchase Agreement or PPA)
 - under a commercial power purchase agreement, EDF will make available to Centrica a total of 18TWh of additional power between 2011 and 2016 on market based terms (the Commercial PPA and, together with the Equity PPA, the PPAs)
 - Centrica and EDF will also form an 80/20 joint venture in relation to NNB activities in the UK. Centrica has committed to contribute 20 per cent of the pre-development costs for the first NNB project and will have a right to participate up to 20 per cent in subsequent new NNB projects with EDF in the UK on a project by project basis (the NNB JV). Once the NNB projects become operational, Centrica will be entitled to off-take power from those projects calculated by reference to the investment it has made in the NNB projects that are operational as a proportion of the overall investments that have been made by the NNB JV in those projects.
6. The transactions, summarised above, will be implemented via Centrica's investment in two separate companies: (i) an investment in Lake Acquisitions, whose subsidiary, BE, owns and operates BE's existing nuclear generating fleet; and (ii) an investment in the NNB JV company, which will take over sites from EDF/BE for the development and operation of NNB plants.

⁴ It also owns a coal-fired generation plant at Eggborough, however this is currently being managed and run independently from BE and will be divested in accordance with commitments given by EDF to the EC in connection with its acquisition of BE.

DEAL RATIONALE

7. Centrica submitted that its rationale for the proposed transactions is to provide it with a partial hedge against fluctuations in wholesale market gas prices. While Centrica has some non-gas fired generation (from its wind generation portfolio and its supply contract with Drax, for example), it is largely dependent on gas to generate electricity. It also has a large downstream gas tariff (residential) customer base (British Gas accounts for around 40–45 per cent of gas supplied to domestic customers in GB). Indeed, Centrica cannot itself produce enough gas to satisfy the requirements of its downstream customers. Therefore, Centrica is heavily exposed to gas prices (either when supplying downstream customers directly from its own generation or sourcing its requirements from the wholesale market). No other major UK generator or supplier has such a heavy exposure to gas. Centrica submitted that nuclear generation has costs which are relatively stable and therefore provide a good hedge against gas generation where costs are considerably more volatile.
8. In support of its arguments, Centrica submitted a number of market analysts' reports corroborating the view that Centrica's heavy exposure to wholesale gas prices gives it a different risk profile from its key competitors.
9. Based on the information provided by EDF, it appears to have entered into the transactions for a number of reasons, including []; allowing it to strengthen its position in Benelux;⁵ and [].

JURISDICTION

10. Centrica submitted, and the OFT agrees, that Centrica will have material influence over Lake Acquisitions and, in turn, BE (through its proposed 20 per cent shareholding in Lake Acquisitions).⁶ This is on the basis of Centrica's veto power over various important decisions taken by Lake Acquisitions (including those broadly consistent with the key matters requiring special resolution under UK law,⁷ and the incurring of debt or the making of acquisitions above a certain level) and its representation on the Lake Acquisitions Board and the BE Board.
11. The OFT believes that, as a result of the merger, Centrica will cease to be distinct from Lake Acquisitions, and therefore BE, for the purposes of the Enterprise Act 2002 (the **Act**).

⁵ Centrica has agreed to sell Segebel to EDF, a wholly-owned subsidiary which in turn owns a 51 per cent in SPE. As at 31 December 2008, SPE was the second largest electricity generator in Belgium.

⁶ This is the lowest level of control that may give rise to a relevant merger situation under the Enterprise Act 2002.

⁷ Such as decisions relating to changes to constitutional documents, winding up, reductions or changes to allotment of shares, and the creation of encumbrances over shares.

12. BE had a turnover of around £2.8 billion to the year ending 31 March 2008, and the 'turnover' test under section 23(1) of the Act is therefore met. Since Centrica is not obtaining full control or decisive influence over BE, the EC Merger Regulation does not apply in this instance.⁸
13. The OFT therefore believes that it is or may be the case that a relevant merger situation is in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
14. Centrica also submitted that its participation in the NNB JV forms part of the same overall relevant merger situation, or alternatively forms an additional merger situation, and that either way the JV falls within the OFT's jurisdiction under the Act and should therefore form part of this decision.⁹ Although it is not clear to the OFT that it would have jurisdiction over the JV, the OFT considers that the JV, as currently contemplated by the Parties, does not raise competition concerns (as discussed further below) and therefore the OFT has left open the question of jurisdiction in this respect.

MARKET DEFINITION

15. Centrica and BE overlap in the generation and supply of electricity in GB. The Parties do not overlap in Northern Ireland and Northern Ireland is not affected by the transactions.

Upstream electricity generation/wholesaling

16. In recent decisions (EDF/BE; Iberdrola/Scottish Power¹⁰), the EC has defined a single market encompassing both the physical generation and wholesale trading of electricity, incorporating both baseload and flexible generators and generated using any fuel source. The OFT has defined upstream electricity markets in generally the same way, although it has previously left open the question of whether there is a separate market for flexible generation.¹¹
17. The Parties submitted that, given there is no overlap between Centrica's and BE's flexible generation portfolios, even if a separate market for flexible generation were to be considered, this would not make any material

⁸ Council Regulation 139/2004.

⁹ In particular, Centrica submitted that the transaction involving Centrica's participation in BE's existing and new nuclear businesses should be viewed as one overall transaction. This, Centrica argued, is reflected in the transaction documents which treat existing and new nuclear as one deal, even if (for accounting/drafting reasons) they are in separate legal structures.

¹⁰ Case No. M.4517, 26 March 2007.

¹¹ *Completed acquisition of Great Yarmouth Power Limited by RWE Npower* (ME/2140/05); *Completed acquisition of Enfield Energy Centre Limited by E.ON UK plc* (ME/1808/05)

difference to the analysis.¹²

18. Some third parties have told the OFT that there is no clear delineation between baseload and flexible generation. For example, some generation which is generally flexible may be cheap enough (at some points in the year) and reliable enough to be used as baseload. Conversely, some base load generation is used to service the demand of tariff customers (since their demand is not completely unpredictable).
19. In the present case, Centrica's fleet is made up of flexible generators, although the OFT understands that, depending on the relative price of gas and demand conditions, some of these may also be suitable for baseload generation. Conversely, BE's generation portfolio is baseload.¹³ However, the OFT considers that the precise scope of the upstream market can be left open in this instance as it would not materially alter the competitive assessment.
20. In terms of the geographic scope of the market, consistent with EC decisional practice, the OFT considers this to be GB-wide. As the EC noted in EDF/BE, GB is regulated by BETTA¹⁴ and is therefore subject to the same conditions of competition. Market enquiries in this case also supported this view.

Retailing of electricity

21. In recent cases, the EC has defined separate retail markets for GB domestic customers, I&C customers that acquire electricity at half hourly (HH) rates and I&C customers that acquire electricity at non-half hourly (non-HH) rates.¹⁵ OFT decisional practice has generally been consistent with this, although in Npower/Telecom Plus¹⁶ it left open the possibility that there was a combined retail gas and electricity supply market.
22. Market enquiries revealed that there are a number of significant differences between the way residential customers and I&C customers purchase electricity, and further, differences in the way different types of I&C customers purchase electricity. The OFT was informed that each category of customer has a different demand profile. Specifically, I&C customers tend to have steadier, more predictable demand profiles throughout the week, whereas residential customers' demand is a lot less predictable and can vary between and within days quite significantly, and at quite short

¹² BE currently owns a flexible coal-fired plant in Eggborough, however this is due to be divested by EDF according to commitments given to the EC as part of its acquisition of BE. As a result of this divestment, BE will not own any flexible generation capacity.

¹³ BE's flexible coal fired plant at Eggborough is soon to be divested in line with remedies given to the EC as part of EDF's acquisition of BE.

¹⁴ British Electricity Transmission and Trading Agreements.

¹⁵ HH customers pay for their electricity according to a tariff calculated by reference to market prices, whereas electricity is supplied to non-HH customers at a pre-agreed price.

¹⁶ ME/2221/06.

notice. Further, the OFT understands that the majority of residential customers¹⁷ purchase electricity on a 'tariff' basis with no minimum term that is, the price is not fixed and can be varied, and there are minimal restrictions on customers switching suppliers whenever they choose. Many suppliers to residential customers also offer a 'dual fuel' option, whereby customers are given the option to acquire both gas and electricity from one supplier, usually at a discounted rate to the cost of acquiring each separately. The OFT was informed that some I&C customers acquire electricity on a HH (tariff) basis, but can also acquire it on a fixed term, fixed price contract (non-HH) basis.

23. According to a number of market participants, the difference in demand profiles of residential and I&C customers, as well as the terms under which they are supplied, affect the way in which suppliers choose to service these customers. Residential customers tend to be supplied with flexible generation (whether from a supplier's own generation assets or from generators that have sold contracts to suppliers), whereas suppliers tend to supply non-HH I&C customers (that is, those on fixed price contracts) by purchasing the entire volume of electricity required to service them for the contract period at the time the contract is struck. For HH I&C customers (that is, those mostly on a tariff basis), although they have relatively predictable demand, as they are able to switch at relatively short notice, acquiring volumes ahead of time to service them involves more risk than for non-HH I&C customers.
24. Given market enquiries were generally supportive of the EC's approach in BE/EDF, the OFT has defined markets for the supply of (i) residential customers; (ii) non-HH (contract) I&C customers; and (iii) HH (tariff) I&C customers.
25. In terms of the geographic scope of the retailing of electricity, it may be possible that it is regional rather than national (or GB-wide). This is because in England and Wales, the former Public Electricity Supply area providers still account for a large proportion of supply in those areas.¹⁸ The EC considered somewhat similar market conditions in Germany in Vattenfall/Nuon Energy.¹⁹ However, the OFT has found that most of the major suppliers are present in all/most areas of Great Britain, and BETTA also governs how these customers are supplied. As such, the OFT considers it likely that the geographic scope of these supply 'markets' is GB-wide, although it did not consider it necessary to conclude on this issue.

¹⁷ Centrica submitted that around [more than 50] per cent of its residential customers are on a flexible tariff, not a fixed price contract.

¹⁸ During the privatisation and liberalisation process of the UK's electricity market, the generation of electricity (which was segmented into 12 regions within England and Wales (endnote IV)) was sold off to private companies in each region. These companies typically continue to have a strong retail presence in those regions today.

¹⁹ Case No. M.5496, 22 June 2009.

Other markets

26. The OFT considered whether the merger was likely to affect any other markets in the UK. In this regard it noted that Centrica is a significant player in gas storage supply, with a significant proportion of its electricity generation portfolio that is reliant on natural gas. However, given the lack of overlap between the Parties, and the absence of any substantiated concerns from third parties in relation to either of these markets, they are not considered further.
27. Some market participants raised concerns that the NNB JV would reduce the number of potential competitors for NNB projects.
28. Centrica submitted that, []. This was corroborated by internal Centrica documents. Furthermore, the OFT notes there are at least two other well-resourced entities that are likely to compete for NNB projects going forward, such that any reduction in potential competition for these projects would probably not be significant. This market is therefore not considered further.²⁰

COMPETITION ASSESSMENT

HORIZONTAL ISSUES

29. The OFT considered three theories of harm raised during the course of its market investigation, arising out of the horizontal overlap in electricity generation and wholesale trading between the Parties:
 - Standard unilateral effects, that is, would the merger give either Party the ability to raise prices or decrease service quality in electricity generation and/or supply?
 - A reduction in strategic competition, that is, would the merger reduce the incentives for the Parties to compete against each other in electricity generation and/or supply? and
 - Co-ordinated effects, that is, would the merger give the Parties the incentive and ability to coordinate their behaviour in a way that would substantially lessen competition in electricity generation and/or supply?

Industry Background

30. At the time of the decision on reference, Centrica and EDF/BE are competitors in the upstream generation and supply of electricity in GB. EDF/BE's generation capacity will be somewhat reduced as a result of

²⁰ As outlined in paragraph 14, above, the OFT did not consider it necessary to conclude as to whether it had jurisdiction to assess the NNB JV under the Act.

commitments given to the EC in connection with its acquisition of BE, which will come into effect during the course of the next few years. These are:

- the divestment of BE's coal fired power station at Eggborough
- the divestment of EDF's CCGT generator at Sutton Bridge
- the divestment of a NNB site at Dungeness or Heysham
- termination of the grid connection at Hinkley Point, and
- EDF also made a commitment to offer, via OTC²¹ or structured trades, [25–35] TWh of wholesale electricity to the market between 2012 and 2015.

31. Where they are relevant to the analysis, regard has been had to the above changes in the structure of the GB electricity industry.
32. The OFT is also aware of other anticipated changes in the market that are to take place in the market. Those that are relevant to the competition assessment of this case are discussed at the appropriate juncture(s) throughout this decision. These include, for example, Centrica's new 885 MW CCGT plant at Langage commencing operations in 2009 and EDF's new 1.3 GW CCGT plant at West Burton commencing operations in 2011.

Market shares

33. Based on estimates of total generation capacity for 2009/10 Centrica submitted that it has a generation market share of approximately 6.5 per cent, whereas the combined EDF/BE has a market share of approximately 17.5 per cent.²² Assuming that the maximum volume that Centrica would be entitled to under the Equity PPA is attributed to it,²³ post-merger the Parties contended Centrica's market share will increase to approximately nine per cent and EDF/BE's will decrease to approximately 15 per cent. This represents a transfer of market share from BE to Centrica of approximately 2.5 per cent of anticipated GB capacity for 2009/10 (or three per cent if measured by the Parties' 2008 output). Based on these figures, the merger will have a deconcentrative affect on the structure of GB's generation market. Indeed, pre-merger, the market's HHI²⁴ would be

²¹ Over The Counter.

²² Approximately 12.5 per cent BE; five per cent EDF. This assumes the Eggborough and Sutton Bridge plants do not form part of the EDF/BE portfolio.

²³ This is highly conservative given Centrica is entitled to 20 per cent of the uncontracted capacity of BE, and a significant proportion of BE's capacity is currently contracted to third parties. Based on information provided by the Parties, the OFT does not anticipate Centrica will receive its maximum entitlement until at least 2013.

²⁴ Herfindahl-Hirschman Index. This index is a measure of market concentration which not only takes account of the number of market suppliers, but also their relative sizes.

927. As a result of the acquisition, this decreases by 40 to 887.

34. In terms of flexible generation, Centrica is expected to have a market share of approximately eight per cent (5.1 GW; including the capacity of the new Langage plant) in both 2009/10 and 2012/13. Given BE will not have any flexible generation, however (once its Eggborough plant is divested in line with the EC remedies), no increment arises in flexible generation.

Standard Unilateral Effects

35. No concerns were raised during market enquiries that Centrica's acquisition of a 20 per cent share of BE would give either Centrica, EDF or BE the ability to unilaterally exercise market power in the GB electricity wholesale market. The OFT is satisfied, based on the very small increment attributable to the merger and the lack of third party concern, that no competition concerns arise in this regard. This issue is therefore not discussed further.

Less Standard Unilateral Concerns

36. Some third parties put to the OFT certain less standard unilateral concerns which could be categorised as a reduction in strategic competition. These concerns arose from a fear that information flows between EDF and Centrica could create an opportunity for harm to competition.
37. The pertinent facts on information flows are that:
- EDF will be responsible for the day to day running of BE
 - the Centrica representatives on the Lake Acquisitions board will receive sufficient information to make informed decisions for the overall management of the BE business
 - the Centrica representatives on the Lake Acquisitions board will be able to disclose information about Lake Acquisitions/BE to other members of Centrica for the purpose of managing Centrica's investment in Lake Acquisitions (but not if such disclosure would breach any laws or regulations, or if it contains technical nuclear information)
 - []
 - [], and
 - all information received by the Centrica representatives may be disclosed to the board of Centrica and other employees of Centrica (endnote V).
38. Some third parties raised concerns that Centrica would be getting real time

information on BE output and unplanned outages. As a result, concerns were raised that Centrica could alter its output to take advantage of this information. Alternatively, Centrica might be able to take advantage of the information through trading in the wholesale market.

39. In response, the Parties told the OFT that Centrica knowing about unplanned 'trips' and outages is no different from any other generator knowing about its own plant's performances in real time. Further, the Parties submitted that information about unforeseen incidents such as these is made known to the wider market in 'real-time' via existing market data flows.
40. Under the National Grid's Operating Code, events which may have an operating effect on the transmission system (including breakdowns and faults) must be reported to National Grid within 15 minutes.²⁵ National Grid reports to the market every 30 minutes, and market enquiries raised doubt that this would be sufficient time for the Parties to take advantage of advance notice of this information to damage competition.
41. The Parties also told the OFT that any information sharing between EDF and Centrica ignores the presence of other generators, which account for over 70 per cent of GB generation (and over 85 per cent of flexible generation). As such, the Parties argued that supply from the other generators would be likely to defeat any attempt by the Parties to manipulate market outcomes via information sharing.
42. The OFT does not consider there to be a realistic prospect that the information that Centrica will receive under the terms of the proposed merger will result in material harm to competition.
43. Industry experts told the OFT that Centrica and/or EDF would not have enough time to adjust their own output decisions to materially affect the supply of electricity in the UK as a result of unplanned outages at BE before the rest of the market was notified of the outage. In addition, even if Centrica and/or EDF were able to adjust their output to take advantage of this information asymmetry, it is not clear that the merger enhances the likelihood of consumer harm (as EDF may already be able to do this pre-merger) or even whether it would be harmful to competition. Rather, it is more likely to be a transfer of income from EDF to Centrica; At worst, Centrica may find itself in a position to acquire power more cheaply for a brief period, but this, again, is more likely to be a transfer of income between sellers in the wholesale market and Centrica with little, if any, effect on competition or downstream customers (given that any transaction would occur on the spot market).

²⁵ Operating Code 7 (OC7). Further, a written report to National Grid must be sent within 2 hours (OC10).

VERTICAL ISSUES

Effect on liquidity

Introduction

44. Liquidity in wholesale electricity markets refers to the ability of buyers and sellers to purchase and sell sufficient quantities of electricity to meet their needs. The more liquid the market, the easier it is to do this.
45. Where a transaction involving a transfer of output from one firm to another results in a decrease in the volume of electricity traded in the wholesale electricity market, it is said to reduce the liquidity of this market. This could occur where, for example, a net buyer of electricity (a company with a 'short' position) acquires a company that is a net seller of electricity (a 'long' position) and internalises all of the target's excess generation capacity to service its customers. In this scenario, liquidity would be reduced by the volume of electricity that would have been traded absent the merger, but is now being used to supply the acquirer's customers.
46. It needs to be recognised, however, that this is very much a 'worst case' scenario in that companies in the GB market tend to trade in excess of their requirements. In its recent Liquidity Discussion Paper, Ofgem stated that, on average, a unit of electricity is traded approximately three times before it is delivered to the end customer.²⁶ Further, market enquiries revealed that this level of trade is generally higher among the 'Big Six' vertically integrated players.²⁷ Ofgem calculated that Centrica's 'churn factor' is [4.5 - 5.5] and EDF's is [4.5 - 5.5].²⁸
47. On the other hand, where a transaction results in the transfer of electricity between two companies with the same generation/supply balance that is, both net generators (long) or both net suppliers (short), the transaction will not alter these balances and so there may be less effect on liquidity. This is because one company's increased need to sell electricity may be offset by the other's corresponding decreased requirement to sell.²⁹
48. In EDF/BE, the EC considered that competition concerns could arise from increased vertical integration in the GB electricity market leading to a reduction in liquidity:

²⁶ Ofgem, Liquidity in the GB Wholesale Energy Markets, 8 June 2009 at 2.31

²⁷ The six largest vertically integrated energy providers in GB: EDF, Centrica, E.ON UK, ScottishPower, nPower and Scottish and Southern Energy.

²⁸ BE's churn factor is not included here as EDF now owns and controls BE's trading activities.

²⁹ This ignores the fact that some companies have higher churn factors than others. So, for example, where a company with a low churn rate acquires one with a high churn rate, there may still be an effect on liquidity, despite there being no relative change in the acquirer's need to trade.

[a] concentration that increases the level of vertical integration of the merged entity can potentially lead to a decrease of the merged entity's need to trade with other counterparties in the wholesale markets since part of its power needs might, post-merger, be covered by the merged entity's own power generation. If this happens it is possible that liquidity in the wholesale markets is reduced.³⁰

49. The EC considered that this had the potential to lead to competitive harm because:

low levels of liquidity reduce the ability of generators to sell electricity in the wholesale market efficiently...

and

the reduction in choice makes it more difficult to efficiently hedge the positions of the different counterparties, both generators and suppliers, possibly leading to higher costs.³¹

Moreover, low liquidity is likely to give rise to increased levels of volatility in wholesale prices: that is, significant variations and unpredictability of prices. The vast majority of the respondents have confirmed this fact and that the lack of reliable price 'signals' from the wholesale market significantly reduces the ability of independent generators or suppliers to get the necessary financing for new projects and future expansions. The result is that barriers to entry increase for independent counterparties since the lack of reliable wholesale prices makes it very difficult to predict what the future earnings of the new businesses/expansions will be.³²

50. Similarly, in its recent discussion paper, *Liquidity in the GB Wholesale Electricity Markets*, Ofgem stated that:

[i] Illiquid markets may act as a barrier to entry into both the generation and supply market and may act as a source of competitive disadvantage to small suppliers. Conversely, liquid markets provide investment signals to market participants and reduce the possibility of parties manipulating prices. Illiquid markets may therefore reduce the efficiency of wholesale energy markets and reduce competition between industry parties.³³

51. Due to the structure and operation of the GB wholesale electricity market, any impact on liquidity may not be felt for some years into the future. For example, electricity contracts are currently sold out as far as three years into the future on the OTC platform, with BE's output being substantially

³⁰ At 40.

³¹ At 55.

³² At 56.

³³ At p.4.

contracted out until 2012. Further, there are a number of imminent changes due to take place in the market in the medium term. These include new generation coming online and the commencement of the commitments given by EDF to the EC in connection with the EDF/BE transaction.

52. The OFT understands that there are further changes that are due to take place in the market in the long term, such as the decommissioning of some of BE's nuclear fleet and the introduction of further new nuclear generation. Nevertheless, the timing and effect of these changes is by no means certain. As such, the OFT has assessed the potential impact on liquidity of the merger out to 2012/13, when EDF is due to begin making certain volumes of electricity available to the wholesale market in line with its commitments to the EC.

Approaches to assessing liquidity

53. In EDF/BE, the EC's approach to assessing the potential impact on liquidity was based on comparing the total generation capacity and total supply positions of the merger parties before and after the merger. The EC then examined whether the merger would lead to a net reduction in the merged entity's need to trade on the wholesale market (as compared to the sum need of the merger parties) in determining whether the merger may reduce liquidity.
54. An alternative approach was outlined by Ofgem in its Liquidity Discussion Paper³⁴ and is based on assessing the net position as between generation and domestic retail load that is, ignoring I&C customers. The rationale behind this is based on comments from the 'Big Six' that generators tend to supply their I&C customers with electricity purchased on the wholesale market, rather than supply them with electricity from their own plant. This, it is argued, is because the vast majority of I&C customer contracts are for fixed terms, at fixed prices and because their demand profile (that is, how much electricity they use at different times of the day) is relatively predictable. As such, it is more efficient and less risky for generators to secure contracts for these volumes further in advance of delivery (when they may be obtained at lower cost), locking in a margin for the contract.
55. By contrast, domestic customers are usually not on fixed term or fixed price contracts and their demand profiles can vary from day to day. As such, it may be preferable for generators to supply them with their own generation (which, depending on the plant, can be varied according to demand) than with contracts acquired from the wholesale market.
56. Thus, market participants informed both Ofgem and the OFT that 'residential' volumes, in general,³⁵ tend to be traded through the forward

³⁴ At 3.22

³⁵ Centrica advised that approximately [less than 50] per cent of its customers were on fixed price contracts and approximately [less than 50] per cent of its I&C customers were on a tariff.

market and, therefore, residential customer loads tend to be the drivers of liquidity.

57. The Parties provided several submissions assessing the impact of the merger using both approaches, and contended that competition concerns did not arise on either basis. They further submitted that, even were the merger to give Centrica the ability to internalise generation volumes, Centrica would not have the incentive to do so.
58. Given that it does not affect the outcome of the assessment whichever method is used, the OFT did not need to conclude on which method was more appropriate in this case and has assessed the merger using both. The following sections assess whether the merger could give rise to a reduction in liquidity (that is, result in a reduction of volumes traded in the wholesale market), before proceeding to examine whether Centrica would have the incentive to internalise volumes.

Assessment using total generation output versus total customer demand

59. The Parties submitted that the merger does not give rise to competition issues when assessed on a total generation versus total retail load basis, contending that both Centrica and EDF/BE are both net short pre-merger and in the short to medium term (immediately post-merger until at least 2012³⁶).

Relative positions of the Parties pre-merger and in the short-term post-merger

Pre-merger

60. Using FPN half-hourly data for 2007/08,³⁷ the Parties submitted that Centrica generated approximately 21 TWh in the GB market while its final consumer demand was approximately 46 TWh. Centrica's KPIs for 2008³⁸ indicated a similar position, showing it having generated 23 TWh with a demand of 43 TWh; a short position of 20 TWh.
61. For the same period, the Parties contended that a hypothetical EDF/BE entity (hypothetical because the two were not merged during this period), taking into account the divestment of Eggborough and Sutton Bridge as required by the EC remedies, would also have been short of electricity by approximately [0-10] TWh on a demand of approximately 80 TWh. As such, because both Centrica and EDF/BE are short pre-merger, the Parties argued that any increase in Centrica's ability to internalise the volumes it acquires from BE will be offset by the corresponding need for EDF to

³⁶ EDF's internal documents project that [].

³⁷ Final Physical Notification (FPN) data is the actual amount of electricity generated and supplied by an operator in the market and provides a historical measure of the relative generation/supply position of a company at a given point in time.

³⁸ <http://www.centrica.com/index.asp?pageid=26&type=all&year=2009>.

purchase equivalent volumes from the wholesale market.

62. Figure 1, below, illustrates the Centrica's calculations for the relative positions of Centrica and EDF/BE immediately post-merger:

Figure 1: Calculations of relative positions of Centrica and EDF/BE

[]

Source: Centrica

63. By contrast, a large number of third parties advised that they believed EDF was actually long pre-merger and that the merger would allow Centrica to internalise volumes equivalent to the extent to which BE was long in order to partially satisfy its shortfall in generation. There appear to be a number of reasons for these differing views, discussed below.

Assumptions about the output of BE's nuclear fleet

64. First, there are differences in the approaches to estimating what EDF/BE's output is likely to be at the time of the merger. It was generally accepted that BE's nuclear fleet experienced an unusually high number of outages in 2008 when compared with other years, and so it may not be appropriate to use these as a proxy for EDF/BE's output immediately at the time of the merger without adjusting for this.
65. The Parties provided estimates of current output based on historical data from 2007/08 (which it advised does not include the period covered by the high rate of outages in the BE fleet) and estimates of future output based on a series of models assuming 'competitive dispatch' of generators in the market.³⁹ Some third parties assumed an uplift in output combined with an assumption that certain nuclear generators would operate at full capacity.
66. Following discussion with Ofgem the OFT considered it appropriate to uplift BE's output by [] per cent uplift based on average load factors taken from 2006/07 and 2007/08. This took into account the fact that 2008 saw an unusually large number of outages in BE's nuclear fleet, but also took into account the age of the fleet and its past history of outages.
67. Late in its assessment, the OFT was made aware that the BE nuclear fleet's output for the first half of 2009 was up approximately 34.5 per cent on

³⁹ This assumes each generator is dispatched in a way that maximises its own profitability and does not take into account the possibility of strategic withholding that could occur where some market participants own multiple generators. This is conservative for the purposes of analysis under the total generation/total load methodology because it is more likely to result in EDF/BE having a 'long' position.

the same period in 2008.⁴⁰ If the same result is achieved for the second half of 2009, EDF/BE's total generation will be approximately [75-85] TWh, up from approximately [70-80] TWh in 2008 (adjusted to uplift output by [] per cent and excluding Eggborough and Sutton Bridge - discussed in the next section). The OFT has used this output figure in its 'most conservative' estimates below.

68. However, taking into account the historical performance of BE's nuclear fleet for the past five years, the OFT considers that its performance for the first half on 2009 may well have been abnormally high. It is far from clear, given the age of these reactors, that this level of performance – and therefore EDF/BE's slightly long position - would be likely to persist in the medium to long term. As such, the OFT's most conservative estimates, which are based on the assumption that these output levels will be maintained, are increasingly likely to be over-estimates as time progresses.

Eggborough and Sutton Bridge

69. A second reason for the differing views as to estimating EDF/BE's output appears to be related to the timing of the divestments of the Eggborough and Sutton Bridge plants. The Parties' estimates of Centrica and EDF/BE's positions for all relevant periods assume that both the Eggborough and Sutton Bridge generators have been effectively divested to third parties in line with the EC remedies, whereas other third parties have assumed that these still form part of the EDF/BE fleet pre-merger (and immediately post-merger in some cases), to be divested at a later date.
70. As noted earlier, under remedies provided to the EC as part of its acquisition of BE, EDF undertook to divest the Eggborough and Sutton Bridge generators. While the divestment of these generators will not occur until some time in the future, EDF's commitments to the EC require that Eggborough is managed independently from EDF until divestment and Sutton Bridge is currently being managed by a hold separate manager until a tolling agreement comes into effect in [].⁴¹ This effectively prevents EDF from trading or internalising the available (that is, non-contracted) volumes of these plants and the OFT therefore does not consider that they should form part of EDF/BE's generation portfolio for the purposes of its assessment. On this basis, the OFT has adopted the same approach as the Parties in excluding production at Eggborough and Sutton Bridge from the output estimation calculations.

Relative positions of the Parties pre-merger and in the short-term post-merger

71. Based on the assumptions set out above, the OFT's most conservative

⁴⁰ EDF, 2009 Half Year Results Presentation, available online at http://investors.edf.com/fichiers/fckeditor/File/Finance/common/H12009/H12009EDFGroupResultats_va.pdf

⁴¹ Eggborough: paragraphs 9-11; Sutton Bridge: paragraphs 23-24 and 26-27.

estimate is that, on a comparison between the Parties' respective generation and customer loads, pre-merger, EDF/BE is currently slightly long (by approximately [0-5] TWh), while Centrica is currently short.

72. It should be noted, however, that much of BE's generation is currently committed to long term contracts and is therefore not available to either EDF/BE or the market now and is unlikely to be traded into the market in the near future. If it is assumed that 50 per cent of BE's nuclear capacity is currently committed to long term contracts (which, based on information provided by the Parties, is a conservative assumption), then EDF/BE would be overall short pre-merger. Given these contracts clearly affect the volume of electricity traded in the market, the OFT considered it appropriate to take them into account and therefore views both EDF/BE and Centrica as being short pre-merger. The merger will therefore make EDF/BE shorter and Centrica less short, but will not change their overall net positions over the short term.
73. This position is not changed by consideration of either the Equity PPA or Commercial PPA. The Equity PPA only applies to uncontracted BE volumes and, given most of BE's output is committed to long term contracts for the first few years following the merger, Centrica is not expected to substantially benefit from these volumes in the short term. Centrica's internal documents indicate it does not anticipate receiving its full quota ([5-15] TWh) until at least 2014. In addition, the Commercial PPA does not commence until 2011 and so Centrica will not be entitled to any volumes under this agreement until then. BE's long term contracts also mean that EDF/BE is likely to remain effectively short in the short term post-merger.

Conclusion

74. Taking the above factors into account, the OFT considers that both EDF/BE and Centrica are effectively short on generation pre-merger, and that they would, absent the merger, both have remained short over the short term. As such, the OFT was doubtful that the merger would have any effect on the volume of electricity traded in the wholesale market immediately post-merger or over the short term.

Relative positions of the Parties in the medium term post-merger

75. As noted in the 'Industry Background' section, above, the OFT considers there are a number of imminent changes to the market that are certain enough to be taken into account for the purposes of the competition assessment. Such changes include increasing amounts of BE output becoming available to Centrica as current BE supply contracts end, new generation coming on-stream and the implementation of the EDF/BE EC remedies.
76. The OFT considers the following changes are likely to occur in the market

from the time of the merger until 2012/13:

- Centrica's long term contract with Drax will expire in 2012. Under this agreement, Centrica has the right to off-take 600 MW per annum from the Drax coal-fired power station
- EDF will divest the Eggborough and Sutton Bridge power stations in line with its commitments to the EC as part of its acquisition of BE. However, as noted above, given that these assets are currently ring-fenced from EDF, and will remain so until they are divested, it is assumed that these assets are not owned by EDF under any scenario
- EDF will make available a total of [25-35] TWh of electricity to the market, via OTC or structured trades, between 2012 and 2015
- Centrica's new 885 MW CCGT generator at Langage is expected to commence operations in 2009, and
- EDF's new 1.3 GW CCGT plant at West Burton is expected to begin commercial operations in 2011.

77. The OFT is also aware of other changes that may occur in the market, such as the decommissioning of some of BE's nuclear fleet, although the precise timing is uncertain at this stage. The OFT has therefore assessed the impact of the merger out to 2012/13 to determine whether there is a realistic prospect that the merger may negatively impact liquidity at any time up until then.

78. For the 2012/13 period, the Parties contended that each of Centrica and EDF would, absent the merger, still both be short of generation, assuming constant market shares in supply and 'a hypothetical competitive dispatch in generation' in the GB generation market. As such, the Parties argued that competition concerns are also unlikely to arise during this time period.

79. Figure 2, below, illustrates the Parties' arguments in this regard:

Figure 2: Parties' estimates of Centrica and EDF/BE's relative positions in 2012/13

[]

Source: Centrica

80. Using its estimates of the Parties' pre-merger positions as a starting point, the OFT incorporated the assumptions outlined in paragraph 76, above, as well as testing for sensitivities to the assumptions made (such as, for example, BE's nuclear output for the first half of 2009) to estimate Centrica's and EDF's positions out to 2013. Taking a conservative approach, the OFT assumed the retail loads of both Parties would remain

steady.⁴²

81. EDF/BE's generation capacity is expected to increase by 1.3 GW in 2011/12 by virtue of its plant at West Burton coming online. However, its capacity will decrease as a result of the Commercial and Equity PPAs, which will be in operation at this time. Further, under its commitments to the EC, it is required to make [25-35] TWh available to the market between 2011 and 2015. Assuming an average load factor for the new West Burton plant, and assuming that EDF is required to make only 25 TWh available to the market, the OFT considered that, on the most conservative realistic basis, EDF/BE would have had a relatively balanced position at this time, absent the merger.
82. However, as discussed in paragraph 68 above, the OFT considers that this estimate is likely to be conservative given that it assumes EDF/BE's nuclear output in 2012/13 is the same as for the first half of 2009 (in which BE's nuclear fleet generated at a level in excess of its average output for the previous five years), notwithstanding the fact that some of these generators will be close to the end of their expected life by this time. As such, it is realistic to conclude that EDF/BE would in fact have been short in 2012/13, absent the merger.
83. With respect to Centrica, its generation capacity is also expected to increase by this time, with its 885 MW plant at Langage expected to come online in 2009. It will also gain volumes via the Equity and Commercial PPAs. Despite these gains in the volume of electricity available to it, however, the OFT's calculations revealed that it was reasonable to consider it a net short operator in 2013.

Conclusion

84. The OFT considers it is realistic to conclude that both EDF and Centrica would, absent the merger, have continued to hold short positions out to at least 2012/13, although on a very conservative basis EDF/BE might have been balanced in 2012/13. In either case, the OFT is doubtful that the merger would have any effect on the volume of electricity traded in the wholesale market over the medium term.

Assessment using total generation output versus residential demand

85. When the Parties' respective generation and retail tariff portfolios are compared, the Parties submitted that Centrica and EDF/BE are both long pre-merger, and will remain so post-merger. Therefore, the Parties argued that the merger therefore does not raise competition concerns because the decrease in EDF/BE's need to sell the transferred volumes will be offset by a corresponding need for Centrica to sell them.

⁴² This is conservative because any growth in retail load would make the Parties more short.

86. In its Liquidity Discussion Paper, Ofgem estimated that EDF/BE had an estimated domestic retail load of less than 20 TWh in 2008, well below its output of approximately 67 TWh (after EC remedies are taken into account).⁴³ Using Centrica's projections for 2009/10, Centrica's residential load is approximately [25-35] TWh, below the generation capacity of approximately [25-35] TWh it will have when its Langage plant comes online later in 2009. The OFT therefore considers it reasonable to view both EDF/BE and Centrica as long compared to their respective residential tariff demand pre-merger.
87. Looking ahead to 2012/13, the Parties argued that both Centrica and EDF are likely to remain long. Figure 3, below, illustrates the Parties' arguments in this regard, as well as the assumptions used.

Figure 3: Estimates of generation versus residential tariff demand (endnote VI)

[]

Source: Centrica

88. Using its estimates of the Parties' pre-merger positions as a starting point, the OFT applied the assumptions outlined in paragraph 76, above, to estimate the Parties' relative positions in 2012/13, again testing for sensitivities in the assumptions made. Given EDF/BE's very long position in relation to its retail load, the OFT considers that it is realistic to conclude that it will remain long out to 2013. Centrica's generation position is forecast to increase, and so it follows that it will also remain net long vis-à-vis its retail load out to 2013.

Conclusion on reduction in available volumes

89. Under both methods for assessing the relative positions of the Parties going forward, the OFT is not persuaded there is a realistic prospect that the merger will lead to a reduction in the volume of electricity traded in the wholesale market. Under the total generation versus total load approach, if the Parties are both short, then any internalisation by Centrica of the volumes it obtains from EDF/BE will be offset by a corresponding need for EDF/BE to go into the market and acquire equivalent volumes. By contrast, under the total generation versus retail tariff load approach, if the Parties are both long, then there will be no net reduction in the amount of volumes that they will need to trade in the market.

Centrica's incentives to internalise volumes

90. The Parties argued that, even if the merger did reduce the Parties' overall need to trade in the wholesale market (that is, on the basis that EDF/BE did in fact have a long trading position and Centrica held a short position), in

⁴³ Ofgem estimates.

practice Centrica would not seek to internalise all of the volumes obtained from BE and liquidity would therefore not be reduced by the full amount of the overall decrease in the 'need to trade'. In fact, the Parties argued that Centrica has the incentive not to internalise these volumes.

91. Centrica submitted that it does not see significant benefits to internalising trades of wholesale electricity, and, as such, in 2006, introduced a new business structure [].
92. In support of its arguments, Centrica noted that it currently trades far in excess of the minimum level required to make up the shortfall it has in its generation portfolio, submitting that it had a churn rate of [more than 5],⁴⁴ which is well above the market churn rate of approximately three. Moreover, since the reorganisation of the business in 2006, Centrica submitted that the level of external trading as a proportion of its own generation [] is expected to be around [] per cent in 2009, up from around [] per cent in 2007. In support of this contention, Centrica provided data showing that just [] trades in over [] so far in 2009 have been conducted between Centrica's generation and retail arms.
93. The Parties also told the OFT that the proposed merger would not reduce wholesale market trading since there is little trading between Centrica and BE currently. For example, the Parties submitted that less than one per cent of Centrica's trades were for BE output directly from BE (whether base load, peak load or other power).
94. Finally, Centrica submitted that one of the rationales for the merger was for it to gain a financial hedge against rising electricity prices. In order to effectively do this, there needs to be a fully-traded and liquid market. As such, Centrica argued that it would be inconsistent with the rationale for the deal, as well as detrimental to its interests, to internalise volumes rather than trade them.

Conclusion on liquidity concerns

95. The OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition, as a result of a negative impact on liquidity in the electricity wholesale trading market.
96. On the basis of a number of conservative (yet realistic) assumptions, the merger will not have an overall impact on liquidity given that the Parties will either both be net short (if total generation output is compared to total demand) or net long (if total generation output is compared to total retail tariff demand) both in the immediate to short term and over the medium term.
97. The OFT is, however, mindful of the sensitivity of this analysis to the

⁴⁴ Confer Ofgem's estimate of [4.5 – 5.5] per cent– see paragraph 46.

assumptions made regarding the future trading positions of the Parties. This is particularly the case in relation to EDF/BE's position in the medium term (2012/13), which is close to being balanced. In other words, there is a risk that changes to the assumptions could, for example, move EDF/BE from a short or balanced position to a long position, which could have an overall impact on liquidity. In this scenario, if Centrica were to internalise all the volumes received from EDF/BE, there would not be any corresponding increase in trading in the market by EDF/BE, and therefore an overall reduction in trading in the market.

98. However, even if it were the case that EDF/BE were in fact long in 2012/13, it is unlikely that it would be anything more than slightly long, and therefore any potential impact on liquidity would not be significant. Moreover, the size of any impact would be reduced by Centrica's incentives not to internalise all of the volumes from EDF/BE. Given the evidence provided by Centrica with respect to its current incentives to trade (and disincentives to internalise), the evidence that Centrica is a relatively active trader in the wholesale market pre-merger despite being net short, and the limited amount of current trading between Centrica and BE, the OFT is persuaded that Centrica would not have the incentive to internalise a significant proportion of the volume from EDF/BE, which further reduce the potential for any negative impact on liquidity.

CO-ORDINATED EFFECTS

99. Following third party concerns, the OFT examined whether the proposed merger would give rise to coordinated behaviour. Several third parties said that they were concerned that EDF and Centrica may soften the competition between them. One scenario presented to the OFT was that the parties wish to preserve as large as possible customer base for NNB generation but switching customers between them would not be in their interests in this regard. Therefore, downstream competition (at the retail level) may be weakened as a result.
100. The Parties are stronger (at the retail level) in some parts of Great Britain than in others. So, for example, Centrica (through its subsidiary, British Gas) may cease competing (or reduce the intensity of its competition) for new customers in the former Public Electricity Supply areas of London, Seeboard and SWEB where EDF has a strong position in supply.⁴⁵
101. The OFT / CC's current draft merger assessment guidelines say that for coordination to occur:
- firms need to be able to reach and monitor the terms of co-ordination

⁴⁵ In March 2007 EDF had more than 50 per cent share of supply in these three areas. See Ofgem, Domestic Retail Supply Market Report, June 2007: www.ofgem.gov.uk/Markets/RetMkts/Compet/Documents1/DRMR%20March%202007doc%20v9%20-%20FINAL.pdf.

- co-ordination needs to be internally sustainable among the coordinating group – firms have to find it in their individual interests to adhere to the coordinated outcome, and
- co-ordination needs to be externally sustainable, in that there is little likelihood of coordination being undermined by competition from third parties.⁴⁶

Reaching terms of co-ordination

102. For the first condition, that firms need to be able to reach terms of coordination, the OFT notes that electricity supplied at the retail level is homogenous, a factor which generally helps coordinating firms to reach and monitor terms of coordination. Further, the OFT understands that retail prices are transparent as are the geographic areas in which individual retailers are strongest. What is more, the structural links between the Parties may aid the Parties to reach and monitor terms of coordination.⁴⁷ Therefore, this condition may be met in this case although, given the outcome of its overall assessment on coordination, the OFT has not found it necessary to conclude on this point.

Internal sustainability

103. In terms of internal sustainability, the OFT examined whether sufficient deterrence and punishment mechanisms are in place to sustain coordinated behaviour. For example, if the Parties coordinate on 'customer territories' (as postulated above) the reaction to one party competing for customers in the 'wrong territory' may be for the other to compete for customers in an area where the other is strong.

104. It is generally accepted that the more alike firms are, the greater their incentives will be to behave in a like manner. For example, firms are more likely to price in similar ways if their cost bases are similar. The Parties in this case argued that they are not very similar but rather are asymmetric in terms of their cost bases, generation mixes, geographic focus at the retail level and retail market positions.⁴⁸ The Parties' different mix of retail customers is further compounded by dual fuel contracts. Around one third (a proportion which is increasing) of British customers buy their electricity and gas together from the one supplier (a dynamic which further weakens

⁴⁶ Merger Assessment Guidelines: A joint publication of the Competition Commission and Office of Fair Trading, consultation document April 2009, paragraph 4.118.

⁴⁷ Draft CC/OFT guidelines, paragraph 4.128.

⁴⁸ For example, the parties submitted that British Gas accounts for around 45 per cent of gas supplied in Great Britain whereas it accounts for 20–25 per cent of electricity. By contrast, EDF and all of the other main suppliers, have a greater share of their supply in electricity than gas.

any link between the merger and competition at the retail level).⁴⁹

105. The Parties also argued that the BE off-take (under the Equity PPA) will be marketed and sold separately by EDF and Centrica who will continue to run the retail arm of their businesses separately from each other (thus reducing the scope for coordination because EDF and Centrica will still have to find upstream or downstream customers for their electricity individually).
106. Even if the Parties could coordinate on geographic areas, it is not clear what the punishment mechanism would be for any cheating from the coordinated outcome since an increase in the intensity of competition in individual areas would be slow (it would take time to build up market share in an area) and uncertain.
107. The merger does not lead to any material increase in internal stability. In particular there are strict controls on the power of each of the Lake Acquisitions shareholders and so this joint venture could not be used as a punishment mechanism.
108. For these reasons the OFT does not consider that there will be sufficient internal sustainability for coordination to be successful.

External sustainability

109. Finally, and for completeness, in terms of external sustainability, it may be the case that barriers to entry into the generation of electricity are high and that retail customers do not possess sufficient countervailing buyer power to disrupt coordination. However, successful coordination requires the entire market to participate, not just the merger parties. The merger does not represent a large structural change in the market – at the generation level around only 2.5 per cent of generation capacity is being transferred.⁵⁰ At the retail level, it is unclear what, if any, structural change the merger will bring about (especially since the merger involves BE baseload output which, while it can be used for domestic customers, is better suited to I&C customers). Therefore, the other suppliers in the retail market, who account around two-thirds of the electricity supply to domestic customers in Great Britain⁵¹ will be able to disrupt any attempts at coordination by the Parties, and the merger will not alter either the ability or the incentive for each of the six largest suppliers to coordinate their behaviour at the retail level.
110. Nor does the OFT have any evidence of pre-existing coordination in the retail market.
111. Having considered the available evidence, for the reasons given above the

⁴⁹ Ofgem, Domestic Retail Market Report, June 2007, page 7.

⁵⁰ This is around three per cent of current output.

⁵¹ Ofgem, Energy Supply Probe, initial findings report, 6 October 2008, figure 3.1.

OFT does not consider that the merger presents a realistic prospect of a substantial lessening of competition through coordinated effects.

BARRIERS TO ENTRY AND EXPANSION

112. A significant number of market participants raised concerns that barriers to entry into both electricity generation and supply are already very high and that the merger would raise them even further.
113. For most third parties, the low level of liquidity in the GB wholesale market was cited as the most significant barrier to entry and expansion. Third parties surveyed advised that the liquidity of the wholesale market is a key factor in the ability of generators to make decisions about future investments. The more liquid the market, the greater certainty generators have about the future returns of any new generation capacity. Third parties advised that generators have very high costs and there are long lead times associated with their development and, as such, external finance is often required. The liquidity of the market therefore also affects the ability of generators to satisfy banks' lending rules to obtain finance for new projects. These comments are consistent with the EC's findings in EDF/BE, outlined earlier in this decision at paragraphs 48 and 49.
114. Market participants raised concerns that the BETTA system was inadequate and did not promote open, transparent trading. As such, third parties argued that the GB market's churn rate is very poor when compared to other markets in the EU, and there are not enough trades occurring two to three years out to give adequate price signals upon which base new investment decisions. Many market participants were concerned that the merger would exacerbate the pre-existing issues they saw with liquidity and therefore raise barriers to entry. These concerns have been addressed above.

THIRD PARTY VIEWS

115. The OFT's investigation attracted a great deal of interest from market participants, some of whom raised a number of concerns about the merger. The main concern related to the anticipated negative impact that the merger would have on liquidity by virtue of the combination of EDF/BE's apprehended net long position with Centrica's net short one. Concerns about liquidity in the market more generally were also expressed, although at least one market participant was upbeat about liquidity in the market and noted that it had been increasing recently.
116. A number of market participants also raised concerns that the Commercial PPA would be used by EDF to partially fulfil its commitments to the EC to trade a minimum volume of electricity into the GB market between 2012 and 2015. This, it was argued, was against the spirit of these remedies and would not promote liquidity and price transparency as they were

designed to do. The OFT did not consider these issues to be specific to the merger under its review.

117. There was a general unease in the market regarding the structural link between two of the 'Big Six' vertically integrated players in the market. Many market participants advised the OFT that they were concerned about increased structural ties between vertically integrated players in the market. Few third parties, however, were able to specify how they saw competitive harm occurring as a result.
118. Where relevant, these concerns from third parties have been addressed in the decision.
119. The OFT liaised closely with Ofgem throughout the course of its investigations. Ofgem advised that it has general concerns about liquidity in the wholesale electricity market which have been expressed in its recent discussion paper on the subject. With respect to the potential impact of the merger on liquidity, however, the OFT's approach and conclusions were supported by the discussions it had with Ofgem. Discussions with Ofgem also supported the OFT's approach and conclusions with regard to other potential concerns including NNB.

ASSESSMENT

120. The merger will result in Centrica acquiring a 20 per cent stake in Lake Acquisitions, entitling it to 20 per cent of the uncontracted output of BE and access to certain information pertaining to the operation of BE Generation. As part of the deal, the Parties have signed a Commercial PPA that will entitle Centrica to 18 TWh of electricity between 2011 and 2016.
121. Centrica will also gain material influence over BE via representation and veto rights with respect to Lake Acquisitions. Centrica and EDF will also form a JV for the purposes of NNB projects.⁵²
122. Some concerns were raised with respect to a potential reduction in strategic competition. The OFT examined whether the information that Centrica would receive by virtue of the merger would allow it, for example, to alter its output decisions or trade on the wholesale market with the effect of reducing competition. The evidence presented to the OFT cast doubts on this. Significantly, any information of material importance that Centrica will receive must be disclosed to the market very soon after Centrica receives it and it is far from clear that this would give it sufficient time to use it to its advantage. It was also unclear that Centrica would be able to trade on the information in a way that EDF could not do already by virtue of its pre-existing ownership of BE.

⁵² As noted in paragraph 14, above, the OFT did not find it necessary to conclude on whether it had jurisdiction to assess the NNB JV.

123. The OFT received concerns that the merger may have a detrimental impact on liquidity by (on a total generation versus supply basis) combining EDF/BE's perceived long position with Centrica's short one. However, market enquiries and analysis indicate that EDF is, in fact, effectively short in generation pre-merger, once various factors are taken into account. On the evidence available to it, the OFT also considers that EDF/BE would not, absent the merger, have been materially long in generation over the short or medium term.
124. Even if EDF/BE might have been slightly long over the medium term absent the merger, the evidence before the OFT suggested that Centrica would not have had the incentive to internalise the full volume it will receive from the merger, or even a substantial proportion of this volume. This reduced level of internalisation further reduces any risk of harm to liquidity from the merger. In addition, if the impact on liquidity is measured only by reference to residential load, which may drive liquidity to a greater extent than I&C load, the merger represents the combination of two companies that are long in generation relative to their residential demand.
125. Using both these methods, the OFT is not satisfied that there is a realistic prospect that the merger may have a material negative impact on liquidity. In the short-short scenario, the merger represents a transfer of electricity from one net buyer to another. Similarly, in the long-long scenario the merger represents a transfer between two net sellers of electricity. Although Centrica has historically traded more in the wholesale market than EDF, the decrease in Centrica's need to trade in the long-long scenario is not expected to have a material negative impact on liquidity.
126. Finally, the OFT examined whether the merger could give rise to concerns of a coordinated nature. According to some third parties, this could play out via the Parties not competing, or not competing as hard, for each other's customers in areas where each has a particularly strong presence. Nevertheless, the OFT does not consider there to be a realistic prospect of this occurring due to, inter alia, the apparent absence of any effective punishment mechanism within the JV to deter such behaviour, and the presence of other, well-resourced players in the market who would be likely to disrupt coordination.
127. Consequently, the OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

DECISION

128. This merger will therefore **not be referred** to the Competition Commission under section 33(1) of the Act.

ENDNOTES

- I** EDF operates in the UK through its subsidiary EDF Energy (UK) Limited.
- II** Lake Acquisitions is an indirect subsidiary of EDF S.A.
- III** BE's I&C business has now been transferred to EDF.
- IV** Plus two regions in Scotland.
- V** Disclosure to other employees of Centrica may only be for the purposes of managing Centrica's investment in Lake Acquisitions. Disclosure both to the board of Centrica and other employees of Centrica shall not take place if it would breach any laws or regulations, or if it contains technical nuclear information.
- VI** Figure relates to retail tariff demand.