

**June 2000**

**Introduction of the market abuse  
condition into the licences of  
certain generators**

**Ofgem's second submission to the  
Competition Commission**

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Note:

On 16 June 1999, the former regulatory offices, Ofgas and Offer, were renamed the Office of Gas and Electricity Markets (Ofgem). References in the text to documents and events before this date use the name of the original regulatory office.

# 1. Introduction

1.1 This second submission builds upon Ofgem's initial submission<sup>1</sup> and our first presentation to the Competition Commission. In the submission and presentation we explained the analytical framework which led Ofgem to consider that the unmodified generating licences of AES and British Energy can be expected to operate against the public interest. In this submission, we provide further evidence of historic market manipulation and present evidence as to the scope for AES and British Energy to exercise substantial market power under both the existing wholesale electricity trading arrangements and the New Electricity Trading Arrangements (NETA). The submission then goes on to consider, in more depth than previously, the solution to the problem of the potential abuse of substantial market power in wholesale electricity markets.

## *Background*

- 1.2 On 12 April Ofgem modified the generation licences of National Power, PowerGen, TXU (formerly Eastern), Edison Mission Energy and BNFL Magnox to include the 'market abuse licence condition'. The generation licence of London Electricity was modified in May. Two of the generators – AES and British Energy – withheld their consent for the modification of their generation licences. Ofgem's Electricity Act 1989 references are specific to the licences held by these two generators.
- 1.3 The references ask the Competition Commission to consider whether the matters set out in paragraph 1(a) of each reference operate or may be expected to operate against the public interest. In other words, the Competition Commission is asked to consider both the existing circumstances and circumstances that may be expected to prevail in the future.
- 1.4 The Director General of Electricity Supply (the 'Director General') has said that, if the Competition Commission concludes that the market abuse condition should not be included in the licences of either British Energy, AES, or both he will then consider whether it is appropriate for the condition to be removed

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<sup>1</sup> 'Introduction of the market abuse licence condition into the licences of certain generators; Ofgem's initial submission to the Competition Commission', Ofgem, May 2000.

from the licences of the other generators. Depending on the basis of the Competition Commission's conclusions, it seems unlikely that the condition will remain in the licences of the six generators who have consented to the market abuse licence condition and not in the licences of AES and British Energy. The Competition Commission's findings are therefore likely to have consequences not only in relation to AES and British Energy but also for the generation sector and wholesale electricity trading more generally.

- 1.5 In considering the future, the Competition Commission is looking at changes that will result both from the implementation of the Utilities Bill and from the introduction of NETA. A summary of NETA was provided as an appendix to Ofgem's first submission. In order to assist the Competition Commission, a brief summary of the main changes to generation licences that are likely to flow from the Utilities Bill is included in Appendix 1.

### ***Developments since Ofgem's initial submission document***

- 1.6 On 15 June 2000, Ofgem launched a formal investigation into the continuing withdrawal by Edison Mission Energy of 500 MW of generating capacity from the system as a possible breach of the market abuse licence condition. Ofgem has invited views from companies, customers and other interested parties on this matter. The consultation period expired on 22 June 2000 and Ofgem will announce its decision as soon as is reasonable after that date.

### ***Outline of this document***

- 1.7 Part I of this document outlines the problem i.e. the history of manipulation and the continuing scope for abuse of substantial market power in the wholesale electricity market. It is divided into three sections. We begin by discussing the general problem, and give examples of the scope for manipulation. We go on to describe why British Energy and AES are part of the problem (i.e. why we believe that they could have substantial market power) and then provide evidence as to the likely effects of any abuse of that substantial market power.
- 1.8 Part II of the submission deals with Ofgem's proposed solution to the problem of market abuse and why we do not believe that the other remedies are sufficient. This is again divided into three sections. First, we discuss why we do not

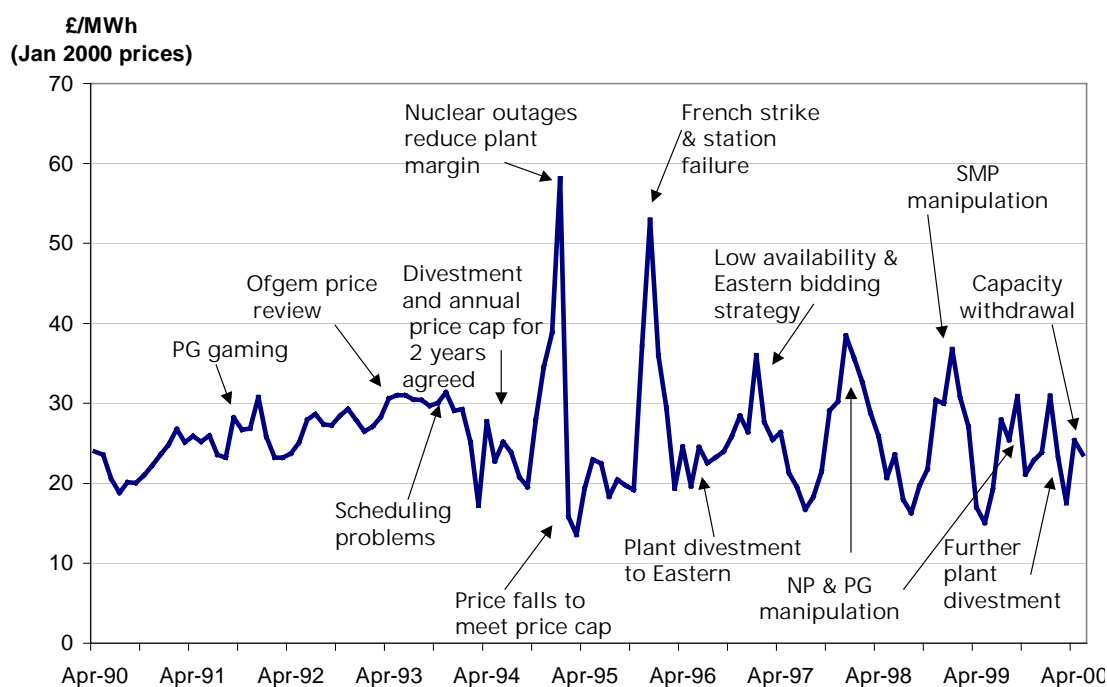
believe that further changes to generation market structure and wholesale electricity trading arrangements are not the entire solution. Second, we discuss why Ofgem considers we can not rely on the Competition Act 1998 and the Financial Services and Markets Act; and finally we conclude that the market abuse licence condition is an appropriate and proportionate response to the problem.

## 2. Part I: The Problem – (i) Description

### *Introduction*

2.1 In our initial submission, we highlighted that, since the introduction of the Pool in 1990, concerns about abnormal patterns of pricing, where price movements do not appear to reflect changes in demand and supply and underlying market conditions, have been a recurring issue. OFFER and Ofgem have launched a number of investigations into prices because of concerns about the levels and patterns of Pool prices over the last nine years. Figure 2.1 charts Pool prices since privatisation and highlights significant events that have influenced prices over that period, including some that have been the subject of OFFER/Ofgem investigations.

Figure 2.1: Pool prices since Vesting



2.2 The purpose of this chapter is to provide more detailed evidence of the scope for manipulation that exists under the current trading arrangements despite the reduction in generation market concentration. It also explains why Ofgem considers that this scope will remain even under the new electricity trading arrangements (NETA) which are due to be introduced in Autumn 2000.



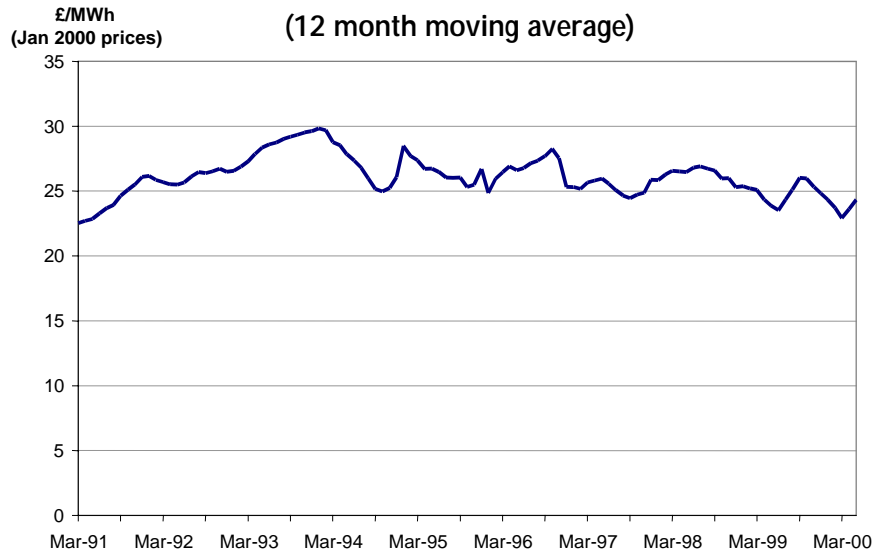
## *The Special Nature of Electricity*

- 2.3 The reason for this lies in the special nature of electricity. It requires moment to moment balancing of a system for a product that it is impossible to store. Whilst some other commodities have limited storage possibilities (either because the commodity is perishable e.g. fresh fruit, or because it becomes out of date e.g. newspapers), none of these requires the instantaneous matching of supply/generation and demand. If the system operator fails to balance the system, this can potentially have far more serious consequences than in other markets. If supply of perishable fruits is scarce, some demand goes unsatisfied and customers have to substitute for other comparable products. In electricity, failure to balance can lead to frequency excursions, damaging electrical equipment or in more extreme circumstances to a loss of part of or all of the market. If the grid fails all customers' demand is unsatisfied and there is very limited potential to switch to alternative fuel sources at short notice.
- 2.4 It is this feature, combined with the short-term inelasticity of both generation and demand that makes it possible for a generator that is not obviously dominant to exercise substantial market power, and there are many examples of this exercise of substantial market power by both large and small generators. This has been made easier by some special and injurious features of the Pool, but its fundamental cause arises from the special features of electricity itself.
- 2.5 The inelasticity of supply and demand in the short term means that the ability to influence prices under the present trading arrangements is not restricted to generators which set System Marginal Price (SMP). So-called "baseload" generators, who typically submit very low priced bids, may be able to influence prices indirectly by changing the capacity that they make available to the market.
- 2.6 The ability of generators (and potentially demand-side participants) to influence price setting is likely to continue to some extent under NETA. Changing the trading arrangements cannot alter the physical and economic characteristics of the wholesale electricity market that render it vulnerable to the exploitation of market power 'close to real time'. Nonetheless, we believe that some of the

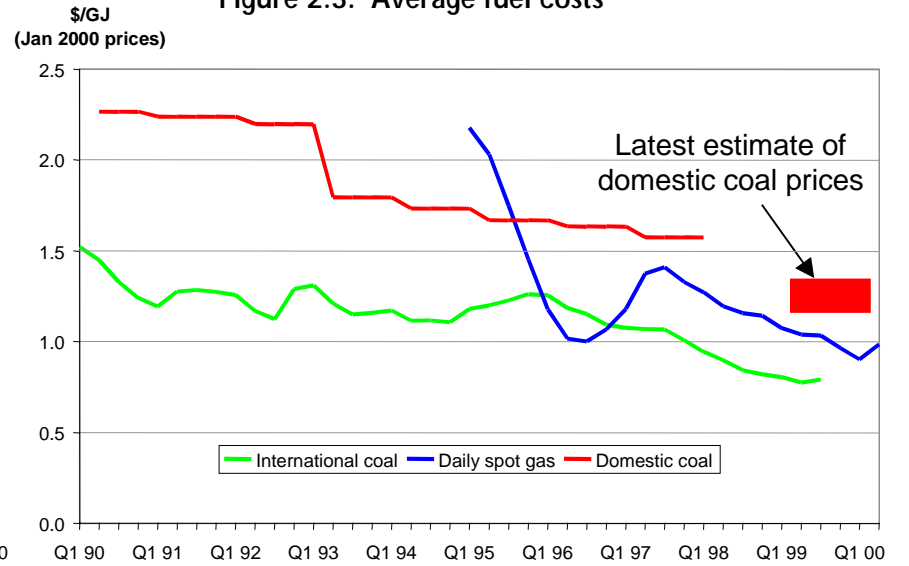
particularly injurious features of the market will disappear with the introduction of NETA.

- 2.7 The special nature of electricity compared to other commodities is implicit in the existence of an electricity specific regulatory regime, which is encompassed in the Electricity Act 1989 and the appointment of an industry regulator (the Director General of Electricity Supply). Typical commodities such as fruit and metals do not have specific primary legislation governing their trading arrangements nor do they have industry-specific regulators. The fact that they are considered necessary for electricity (and certain other commodities) is an indication that additional safeguards are required when considering the electricity market, including the wholesale electricity trading arrangements.

**Figure 2.2: Evolution of wholesale prices  
(12 month moving average)**

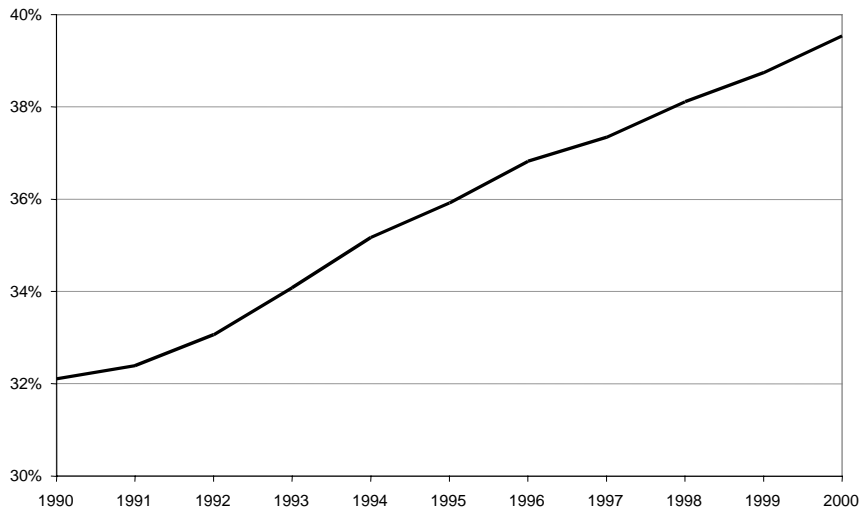


**Figure 2.3: Average fuel costs**



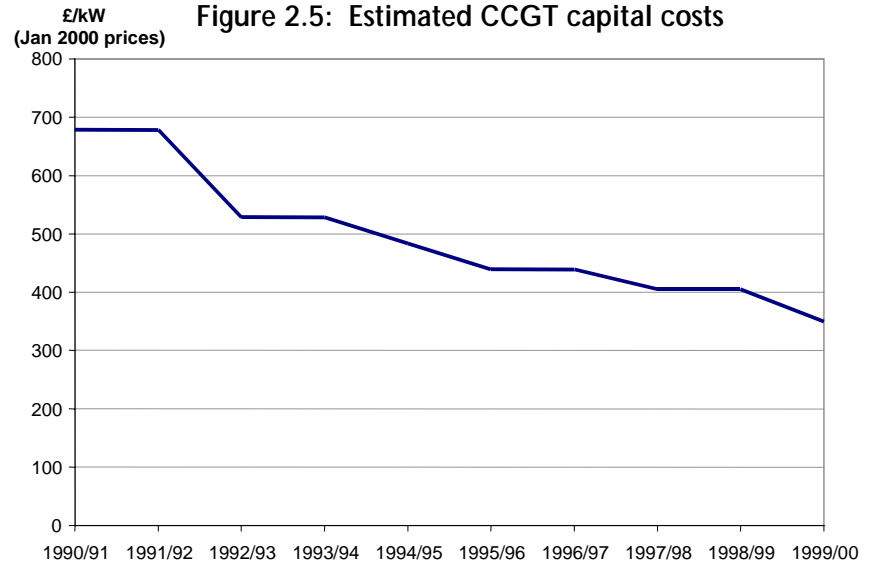
Sources: Spot gas prices: 12 month rolling average of daily prices from British Spot Gas Markets; International Coal: European Commission average price of steam coal imports; Domestic coal: RJB Prospectus & press reports

**Figure 2.4: Average plant efficiency**



Source: NGC Seven Year Statements on generating capacity, CEGB statistics and press reports

**Figure 2.5: Estimated CCGT capital costs**

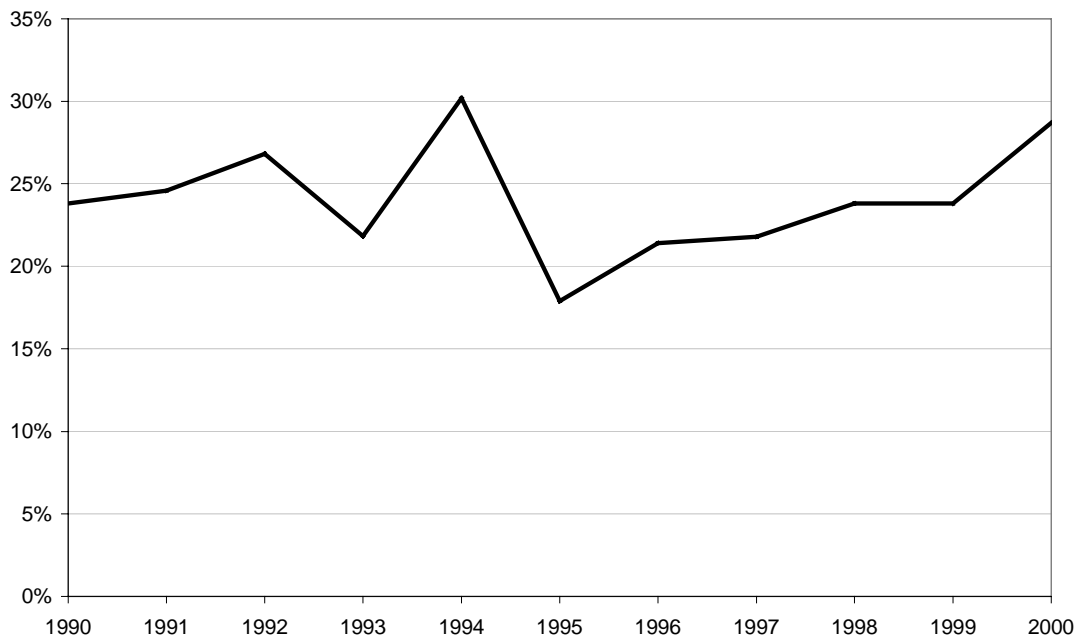


Source: Press reports

***Generic problem - prices have not fallen in line with supply and demand fundamentals despite falling costs***

2.8 On a twelve-month rolling average basis, prices have remained around £25/MWh (as shown in Figure 2.2) whilst substantial entry to and exit from the market have occurred and generation market concentration has declined. Neither input costs (Figures 2.3 to 2.5) nor supply and demand fundamentals (Figure 2.6) explain why this has occurred. More recently, although prices were comparatively low from December 1999 to March 2000, this trend has reversed and prices have returned to their former level (average prices during April and May 2000 were £24.8/MWh). Moreover, prices remain well above new entry cost levels, which most commentators estimate to be in the range of £17-20/MWh at a 90 per cent load factor.

**Figure 2.6: Supply-demand margin**



Source: NGC Seven Year Statements data on generating plant capacity and demand.

2.9 The overall costs of generation have fallen by around 40-50% over the period in which the Pool has been in operation. Fuel costs have declined substantially (Figure 2.3), the average conversion efficiency has risen (Figure 2.4) and the capital costs of new CCGTs have also declined sharply (Figure 2.5).

2.10 Other costs associated with electricity generation have also declined. Labour productivity has increased, in part due to the replacement of labour-intensive coal plant with lightly manned CCGTs in part due to de-manning and increased productivity's at existing plant. For example, National Power employed 72 power station staff per MWh generated in 1992/93 but this had fallen to 44 by 1994/95. Transmission charges have also fallen by 10 per cent in real terms.

### ***Examples of the scope for manipulation***

2.11 To give some indication of the scope for manipulation that exists and Ofgem believes will continue to exist, we outline below four examples of different types of manipulation. In each case, we provide instances of manipulation occurring in the Pool and explain why we consider that the scope for manipulation will continue under NETA.

#### **(a) Capacity withholding**

2.12 Examples of capacity withholding go back to the earliest days of the Pool. OFFER's first pool price report, published in December 1991, related to manipulation of capacity and to the closure and mothballing of capacity. Plant was declared unavailable by PowerGen at the time of bidding into the Pool, thus driving up capacity payments and, once capacity payments had been set, the plant was then re-declared available, allowing the generator to collect the benefits of the artificially raised capacity payment.

2.13 The increase in Pool prices and Electricity Forward Agreement (EFA) prices in April and May 2000 was, in part, a consequence of the decision by several generators temporarily to withdraw generating capacity from operation. The impact of this capacity withdrawal was to increase capacity payments in April to 20 times the level they would have been if this capacity had remained on the system. Ofgem is currently investigating the behaviour of Edison under the terms of its market abuse licence condition.<sup>2</sup>

2.14 Capacity withholding is a particularly powerful form of manipulation under the Pool since modest changes in capacity availability can lead to large changes in

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<sup>2</sup> 'Ofgem launches a formal investigation of Edison Mission Energy under the market abuse licence condition,' Ofgem, 15 June 2000.

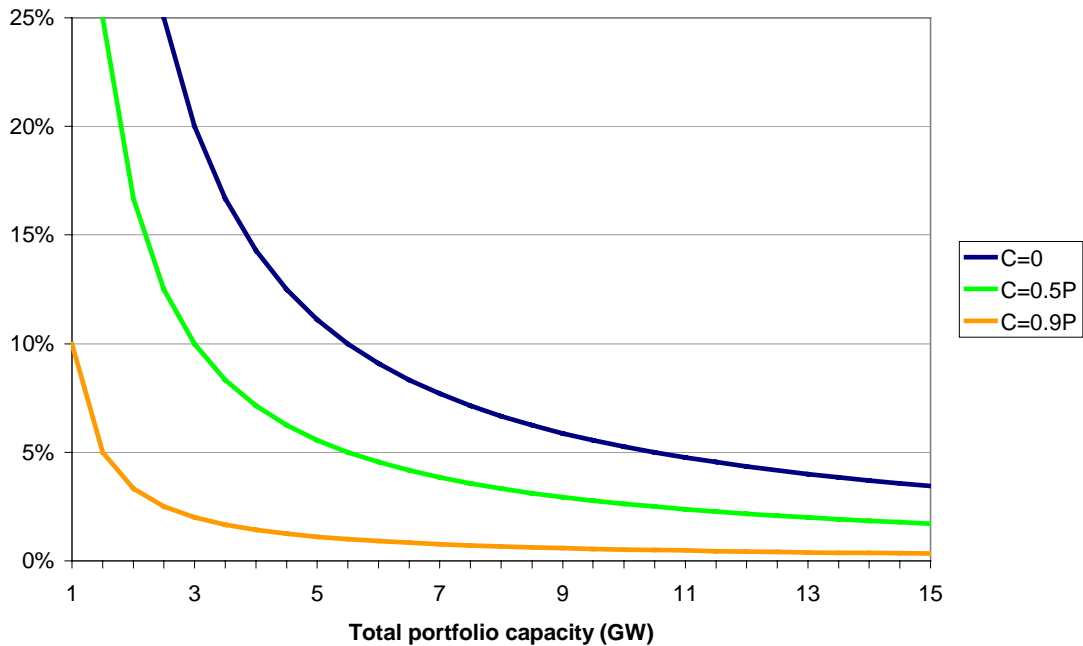
Pool prices, when the gap between demand and available generation is already quite tight. However, the potential for capacity withholding by portfolio generators, although mitigated by the removal of capacity payments, will remain under NETA.

- 2.15 In both the context of the Pool and under the NETA, it is possible to calculate the increase in prices that would be required for the withdrawal of one 500 MW set to increase the overall revenues of a portfolio generator under a number of simplifying assumptions.<sup>3</sup> It will only be profitable for a generator to withdraw a unit if the loss in revenues (less avoided cost) from the unit is more than offset by increased revenues for its remaining plant as a result of higher prices. The required price increases as a function of portfolio size are shown in Figure 2.7. The analysis does not seek to demonstrate that by withdrawing capacity a generator can increase prices (this will depend on the market conditions and competitors' response). It simply shows the price rise that would be necessary to make the strategy profitable for the generator withdrawing capacity.
- 2.16 The three lines shown on the graph illustrate the relationship between the price increased require and the avoided costs (C) of the plant withdrawn relative to the original price level (P). If the avoided costs of the withdrawn plant are ignored, "C=0", then a generator with a 5000 MW portfolio of plant would need prices to rise by 11% for the withdrawal of 500 MW to be profitable. However, if the avoided costs of the withdrawn plant were say 90% of the original price, "C=0.9P", the required increase would only be 1%.

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<sup>3</sup> The assumptions are that in the absence of a withdrawal, the entire portfolio capacity would be operating and that it is possible to ignore contractual consequences. The calculations also ignore the benefit of lower operating costs from reduced generation.

Figure 2.7: Capacity withdrawal



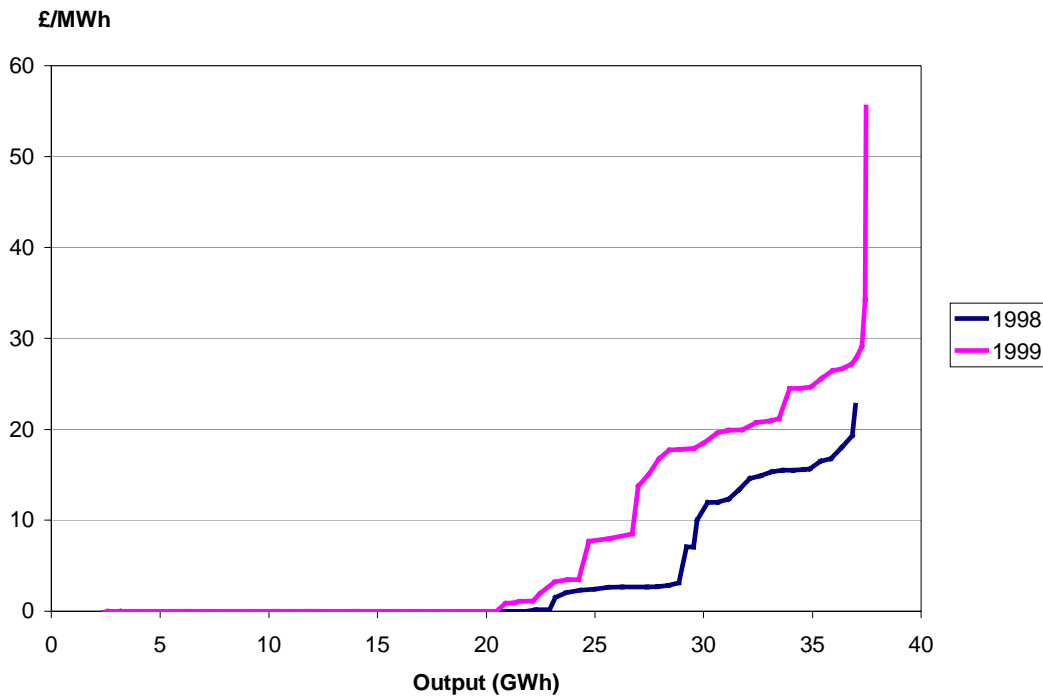
2.17 Under NETA, portfolio generators could withhold capacity from the forwards markets, the spot market, the Balancing Mechanism or all these. If enough capacity is withheld from the forward markets, the system may be short of energy at the start of the Balancing Mechanism. The SO will thus have to purchase electricity and the generator(s) manipulating the market will be aware of this fact and can offer to sell electricity at an inflated price in the Balancing Mechanism.

**(b) Bidding strategies**

2.18 The use of excessively high bids, with no movement in underlying costs, to exploit temporary market power was the focus of a recent Ofgem investigation (July 1999) and of the investigation into Pool prices in winter 1997/98. In both of these cases, National Power and PowerGen were found to have used their positions of market power to increase wholesale electricity prices by significant amounts, when other market conditions and costs remain unchanged. As an illustration of this change in bidding strategy, Figure 2.8 indicates how the bids submitted by generators varied between July 1998 and July 1999. It shows the prices, calculated from generators' bids, used to determine SMP at 17:30 on 20

July 1998 and 1999. In each case, the stack of prices ends at the point at which SMP was set (55.44 £/MWh in 1999 and 22.64 £/MWh in 1998).

**Figure 2.8: Stack of prices and volumes used to determine SMP at 17:30 on 20 July 1998 and 1999**



2.19 Manipulation is not just the preserve of the large or obviously dominant players - for example:

- ◆ TXU, during 1998 and 1999, set prices on average for 22% of the time. During this period, TXU accounted for 10% of capacity (it was the fourth largest generator by capacity).
- ◆ Brigg, an independent generator with a capacity of only 272 MW (well below 1% of capacity), set prices for 122 periods during December 1998 and January 1999.<sup>4</sup>

2.20 Generators have also used bidding strategies to exploit their local market power, which enables them to exploit local transmission constraints to considerable gain. The very short-term nature of many constraints means that the

<sup>4</sup> In total, Brigg has only set prices on 128 periods since 1 January 1998 and consequently does not meet Ofgem's criteria for the market abuse licence condition.



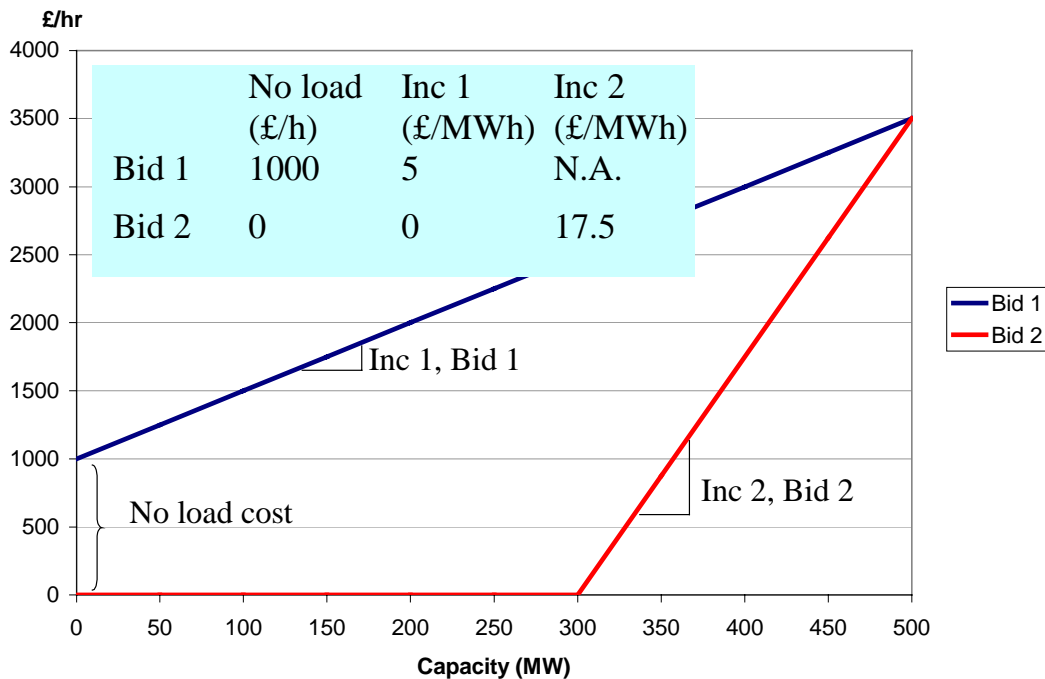
opportunities to exploit local market power are continually changing so that there is no fixed "constraints market" that can be defined on a continuing basis.

- 2.21 As outlined in Ofgem's first presentation to the Competition Commission, OFFER's 1992 investigation into the actions of PowerGen found that by significantly increasing the price for plant that had traditionally provided local system support, PowerGen was able to accrue £88 million of exceptional profit in 1991/92. The ability to exploit constraints will remain under NETA particularly until new transmission access and pricing arrangements are introduced (targeted for April 2001).
- 2.22 Some of the potential for manipulating prices via the exploitation of constraints should disappear with the introduction of new transmission access and pricing arrangements which will provide clearly defined access rights. It is proposed that a market in access rights should be set up for participants wishing to use the transmission network. As far as possible, National Grid Company (NGC) as System Operator (SO) would use this market rather than the Balancing Mechanism to resolve constraints. However, local market power may still exist.

**(c) Manipulation of complex rules**

- 2.23 The requirements for minute by minute balancing of electricity systems give rise to the need for complex rules and to the resulting opportunities for gaming that such rules create. Under the present Pool arrangements the bids which generators currently post at the day-ahead stage are extremely complex and contain a total of nine parameters, five of which are pricing characteristics. The structure of bids into the Pool was originally designed to reflect the operating characteristics of generating plant. However, these characteristics are used for commercial as well as operational reasons.

Figure 2.9: Examples of bidding strategies

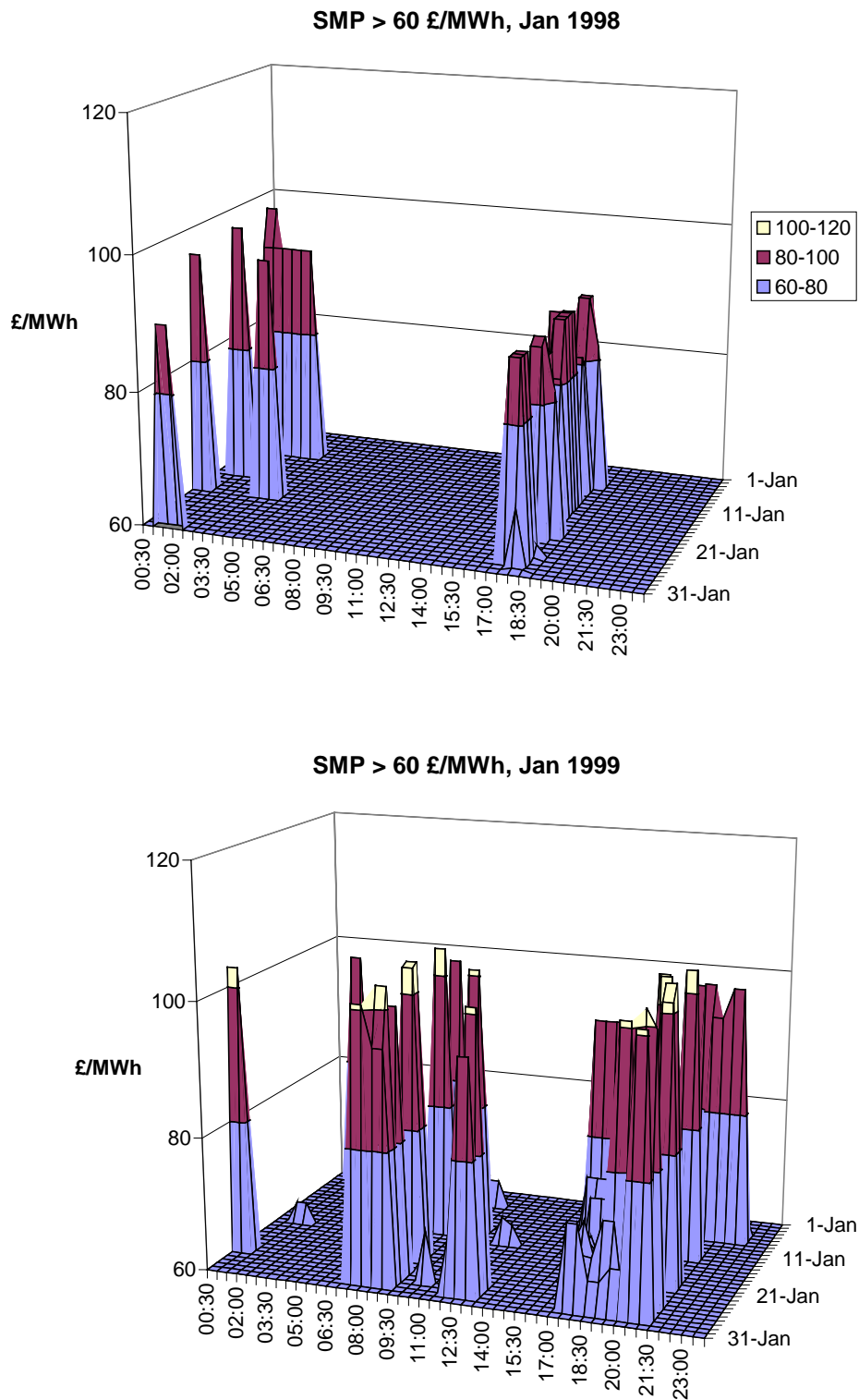


2.24 Figure 2.9 illustrates two different bidding strategies that both lead to the same total cost (£3,500 per hour) if the plant is operating at full output (500 MW). However, a plant using bid structure (Bid 2) is more likely to be included in the schedule because it is cheap to bring on-line – ignoring start-up costs, there are no costs to the system if the plant generates at an output of less than 300 MW. Once included in the schedule, the plant may then be called upon to load follow and increase its output above 300 MW. Nonetheless, at any output level above 300 MW, a plant with bid structure (Bid 1) would have a lower marginal price than one with bid structure (Bid 2) since its incremental price would be 5 £/MWh as opposed to 17.5 £/MWh.

2.25 As discussed in Ofgem’s initial submission, during Winter 1998/9, the incidence of price spikes<sup>5</sup> increased significantly (see Figure 2.10) because of the use of high incremental bids for the last few MW of output, in the manner set out above. These spikes resulted in Pool costs some £90 million higher than might have been expected during this period.

<sup>5</sup> Price spikes were defined as SMP greater than 60 £/MWh.

Figure 2.10: Price spikes in January 1998 and 1999



2.26 In the context of NETA, Ofgem has sought to simplify the Balancing Mechanism as far as practicable. However, the rules governing it are inevitably complex because they have to deal with balancing the system over very short timescales.

Participants will submit “bid/offer pairs” specifying the price at which they are prepared to move away from their declared position (their final physical notification or “FPN”) and also the price for undoing any action that the SO instructs. For example, a generator can say that it will increase its output from 100 MW to 120 MW for 10 £/MWh but will only pay back 8 £/MWh for reducing its output back down from 120 MW to 100 MW. Up to 10 bid/offer pairs (5 above the FPN and 5 below) can be submitted for each generating unit for each half-hour. Further information on Balancing Mechanism rules in relation to bidding strategies is provided in Appendix 2.

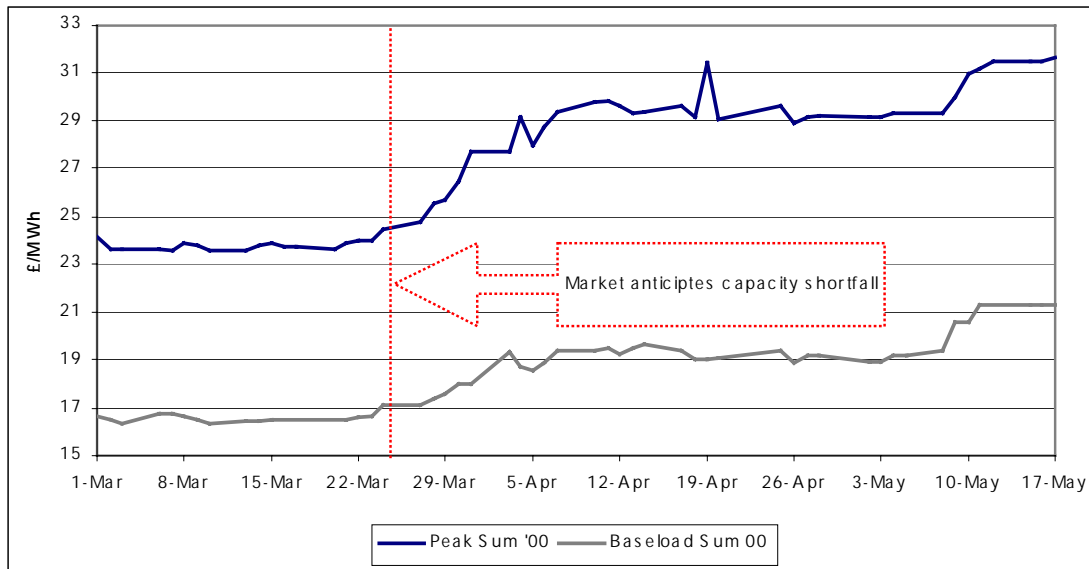
2.27 Thus, generators and suppliers could almost certainly identify find ways of exploiting the rules to their benefit. For example, the acceptance of a Balancing Mechanism action does not change the imbalance position of market participants, so in certain circumstances there can be incentives on participants to over- or under-deliver on Balancing Mechanism actions in order to move into energy balance. Over- or under-delivery of Balancing Mechanism actions will force the SO to take additional actions and thus affect the energy imbalance prices that out-of-balance participants face. This, in turn, could influence prices in forwards markets.

**(d) Influence of contractual position**

2.28 A generator’s contractual position has a strong influence upon its bidding and capacity availability strategies. Of major concern to Ofgem is the potential for the exploitation of market power using a mix of contractual and physical actions.

2.29 Generators might take a long energy position in the futures market and then raise spot or forward prices by increasing their bid prices or withholding capacity. Figure 2.12 shows the effect that the withdrawal of just over 3 GW of plant had on EFA prices during Spring 2000. In principle, it would have been possible for a generator withdrawing capacity to have bought contracts in the period preceding the capacity withdrawal (i.e. taken a long contract position) and subsequently sold them at a substantial profit (i.e moved into balance) when prices had risen following the capacity withdrawal.

Figure 2.12: Summer EFA prices 2000



2.30 A specific example of the influence of contract positions on spot prices was discussed in Ofgem's original submission. National Power and PowerGen were both under contracted in July 1999 and over a two-week period substantially increased pool prices, despite no change in either their fuel costs or operational parameters. Higher pool prices increased their profits by £13 million over a two-week period.

2.31 Although we would expect generators to contract ahead under NETA, there is a possibility that they could attempt to manipulate forward prices by withholding capacity in these markets. Not only might this of itself increase forward prices but, if enough energy is withheld, the SO may begin a half hourly trading period having to purchase electricity to balance the system thus increasing the System Buy Price. If the SO has to accept offers, this implies that there will be suppliers/customers who are unhedged and hence will be exposed to the excessively high System Buy Price. Pushing up the imbalance price by withholding capacity forward is analogous to increasing Pool prices to encourage suppliers/customers subsequently to contract at higher prices.

## ***Return on capital employed (ROCE)***

- 2.32 The Competition Commission has requested that Ofgem provide information concerning the return on capital employed (ROCE) for generators, and in this section we give examples of the ROCE for three generators – National Power, PowerGen and British Energy. However, we preface the examples by explaining why Ofgem believes that in the present context it is inappropriate to consider the ROCE. We also describe difficulties associated with ROCE calculations.

### **Why ROCE is an inappropriate measure**

- 2.33 Following substantial divestment of plant and changes of ownership determining the ROCE for a number of generators is circular. This circularity exists in the calculation of a ROCE when generation assets are acquired rather than built. This is because the acquisition price of the asset (and hence its asset value recorded on the generators accounts) will simply reflect the purchaser's forecast of the net present future profits for the remaining life of the plant. This forecast of future profits will depend on the purchaser's expectations of future wholesale prices. If the acquirer expects high prices this estimate of the value of the plant will be high and the acquisition price and the asset value will be high. If prices subsequently fall, the ROCE will be lowered but this simply reflects the fact that the acquirer may have overpaid for the asset.
- 2.34 Moreover, Ofgem believes that in markets, such as the England and Wales generation market, that are generally open to entry,<sup>6</sup> rates of return are not good indicators of either the existence or the exploitation of market power. This is emphasised by Yarrow<sup>7</sup> in a discussion of the problems of detecting horizontal agreements:

*"The (earlier) analysis ... indicated that price fixing sustains more firms in the market than would be the case under price competition, and that each firm only makes normal profits (a consequence of the free entry assumption). This*

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<sup>6</sup> Over the past two years, the government has operated a strict consents policy with regard to the building of new gas-fired power stations. Whilst to date this has not prevented entry to the market (because the plant currently being commissioned received consent earlier), it has set expectations of restricted entry in future. However, the government has announced its intention of relaxing this policy when NETA is implemented.

<sup>7</sup> George Yarrow, 'Competition Policies and Industrial Policies', in Mackintosh et al, Economics and changing economies, Open University/ITP, 1996.

*combination of relatively low concentration and normal profits clearly makes the equilibrium rather difficult to distinguish in practice from a competitive equilibrium. This suggests that a closer look at market conduct is required if collusion is to be detected."*

- 2.35 The problem is the same if the price fixing occurs as a result of unilateral action: for example, the weakness of price competition might show up in the form of *excess capacity* in the market, rather than in the form of high rates of return on capital employed. Yarrow points out that such excess capacity outcomes are doubly damaging: consumers suffer from high prices and costs are inflated (so that inefficient investment decisions are made).
- 2.36 Ofgem does make assessments of the average costs of an efficient new entrant, and these estimates have certain implications for the level of the (appropriately measured) return on capital being earned by incumbents. For example, a paper by Wolak and Patrick<sup>8</sup> suggests that rates of return on capital between 1991 and 1995 were artificially inflated by capacity withholding strategies. Wolak and Patrick derive a lower bound estimate of a 25% increase in the return on capital, corresponding to about a 5% increase in prices, as a result of these strategies, although this estimate is based upon a number of simplifying assumptions that are open to reasonable challenge.
- 2.37 In any event, Ofgem does not argue that the market abuse licence condition is required because generators have earned, and might continue to earn, returns on capital employed in excess of normal levels. Rather, the concern is with the power that generators have to *control* prices, and, more importantly, with the potential to abuse that power.
- 2.38 The Ofgem position is consistent with the general approach under competition law, which rejects defences of price fixing on the grounds that the prices set have been in some sense 'reasonable' (usually judged in relation to average costs, including a normal return on capital). An early and classic formulation of

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<sup>8</sup> Wolak and Patrick, 'The Impact of Market Rules and Market Structure on the Price Determination Process in the England and Wales Market', Stanford, 1997.

the relevant reasoning is set down in the US Supreme Court's judgement in the *Trenton Potteries* decision of 1927:<sup>9</sup>

*"The power to fix prices, whether reasonably exercised or not, involves power to control the market and to fix arbitrary and unreasonable prices. The reasonable price fixed today may through economic and business changes become the unreasonable price of tomorrow."*

- 2.39 Again, the same points apply equally well when prices can be controlled through unilateral actions. In Ofgem's view, the appropriate rate of return on capital in any period, whether high or low, should be determined by the competitive process, and policy should be targeted at ensuring that this process works effectively. This is what the market abuse licence condition seeks to do, by restricting the extent to which the power to control prices can be abused.
- 2.40 More specifically, whilst it is necessary for firms, when making investment decisions, to take a view on whether future prices are likely to yield at least a normal return on capital, it does not follow that it is acceptable that, once in the market and irrespective of the consequences for consumers and competition, generators exercise control over market prices so as to achieve this, or any other, target return on capital employed.
- 2.41 The Pooling arrangements set up at the time of privatisation were heavily influenced by the established planning procedures of the Central Electricity Generating Board, and they created a 'one-sided' market in which producer interests were predominant and in which consumer influence was largely absent. Among other things, NETA seeks to redress that balance by stimulating genuine, two-sided markets. The market abuse licence condition is intended to reinforce this shift by helping to create markets in which both prices and rates of return on capital are determined by normal, competitive interactions between generators and their customers.

### **Measurement problems**

- 2.42 The ROCE is defined as the ratio of the Profits before Interest and Tax (PBIT) to the capital employed. Broadly speaking, capital employed is defined as the sum

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<sup>9</sup> United States v. Trenton Potteries Co. 273 US 392 (1927).



of tangible assets, intangible assets and net current assets (current assets less current liabilities).<sup>10</sup>

- 2.43 There are a number of well-recognised measurement problems relating to the usage of ROCE figures and comparisons. These relate primarily to the appropriate valuation of capital and depreciation rates, the treatment of advertising and R&D expenditures, potential distortions relating to tax and gearing and the potential inclusion of capitalised monopoly profits. As Carlton and Perloff<sup>11</sup> note, most modern empirical approaches to measuring market power reject traditional measures (such as ROCE) on the grounds that they are significantly flawed due to accounting difficulties. Instead, researchers use both static and dynamic models to estimate market power, with some relying directly or indirectly on observations of marginal cost and price, others looking at the behaviour of output or price to see if it is consistent with the competitive model.
- 2.44 The calculation of ROCE for the major electricity generators is further complicated by their corporate structures. In several instances, importantly including TXU and AES, it is impossible to carry out the necessary calculations on the basis of published or audited information since the generation businesses are subsidiaries of US corporations and are not required to produce regulatory accounts for their generation businesses.

#### **ROCE calculations for National Power, PowerGen and British Energy**

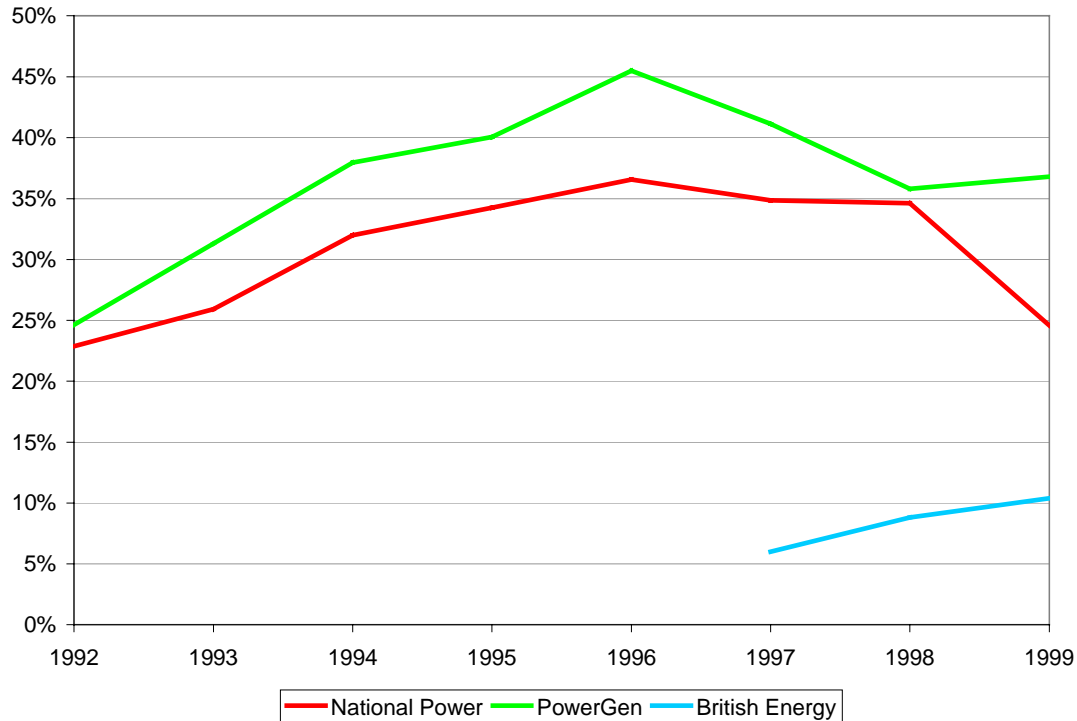
- 2.45 Figure 2.13 shows ROCE values for the generation businesses of National Power, PowerGen and British Energy. The figures have been calculated using the companies' regulatory accounts on the basis of the average capital employed throughout the year – the average of the year end capital employed for the current year and the previous year.

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<sup>10</sup> The precise assumptions made in calculating the ROCE are described in Appendix 3.

<sup>11</sup> Carlton, D.W & Perloff, J.M. (1994) (2<sup>nd</sup> ed) 'Modern Industrial Organization', New York, HarperCollins College Publishers.

**Figure 2.13: Return on capital employed for National Power, PowerGen and British Energy**



2.46 Both National Power and PowerGen saw a steady rise in ROCE from 1993 to 1996 as Pool prices rose and their operating costs fell. Since then their ROCE has fallen back to some extent with National Power's ROCE for the year ending March 1999 similar to that for 1993 at around 25% and PowerGen's ROCE remaining above 35%. British Energy's ROCE has steadily risen from its creation in 1996/97, albeit from a much lower base due to the very high costs of constructing Sizewell B (approximately £8 billion).

2.47 National Power reports that for 1999 its fall in profits, and hence ROCE, was due to the expiry of its five-year coal-backed sales contracts. Compared to 1998, it reported a reduction in gross margin of £130 million and reduction of £206 million from the sales of coal under the terms of its original divestment contracts.

2.48 This year, both National Power and PowerGen have further cut their costs and have written down their older assets and marked their gas contracts to market so other things being equal, their ROCE would increase next year.

## *Summary*

- 2.49 We have shown that there has been manipulation in the Pool and why we consider there is scope for abuse in the future. Examples of such manipulation are repeated and not in dispute, involving in particular withdrawal of capacity; gaming of the detailed trading rules; and the use of physical positions to benefit contract positions.
- 2.50 The reasons for this are various. The electricity market has special characteristics which are acknowledged by the existence of a specific regulatory regime. It requires moment to moment balancing of a system for a product that it is impossible to store. This makes it possible for a participant, which is not obviously dominant, to exercise substantial market power, and there are many examples of this exercise of substantial market power by a small generator. The potential for manipulation may be expected to persist during the last months of the Pool, and when the new electricity trading arrangements are introduced.

### 3. Part I: The Problem - (ii) Why BE and AES could be part of the problem

3.1 Under the current trading arrangements, Ofgem believes that companies which account for at least 5 per cent of output or of system marginal price setting may possess substantial market power and have the potential to abuse that substantial market power. This reflects our judgement that:

- ◆ at least in certain periods, modest changes in the level of output offered to the market can lead to substantial changes in market prices; and
- ◆ in the Pool, control of price setting enhances the degree of control that can be exerted over market prices as a whole.

3.2 Ofgem does not assume that a generator that accounts for more than 5 per cent of output or system marginal price setting will, in fact, possess substantial market power. Rather, the 5 per cent threshold is a mechanism for screening out generators who, under the existing trading arrangements, are unlikely to possess such power. The application of the market abuse condition to a class of generators is not discriminatory against that class. It is entirely consistent with Ofgem's general duties under EU Law and, in particular, with its obligations under those directives that apply to the electricity sector.<sup>12</sup>

3.3 In determining whether a generator met the criteria for the market abuse licence condition, Ofgem took into account all generation assets in which a company holds a controlling interest. This is because management structures within corporate groups are capable of change at short notice. Moreover, whether a company is operating its generation assets as a portfolio is not transparent. Whilst many of the companies that do so have highly visible energy management centres, a company could do so through a series of telephone calls between station managers, or through a series of contracts between the stations that aligned incentives and encouraged co-ordinated behaviour. Thus, we do not believe that it is credible to argue that generators, who at a particular point

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<sup>12</sup> See Council Directive 90/547/EEC of 29 October 1990 on the transit of electricity through transmission grids and Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity.

in time appeared to operate units independently, should be judged to be independent when determining whether or not they could have a position of substantial market power.

3.4 Following their recent acquisitions of plant, British Energy and AES are likely to satisfy both the output and system marginal price setting criteria. Table 3.1 shows what the output and SMP setting shares of the two companies would have been in 1999/00, assuming that they owned Eggborough and Drax respectively throughout the year and operated these plant in a similar fashion to National Power.

**Table 3.1: Adjusted output, capacity and SMP setting shares for British Energy and AES in 1999**

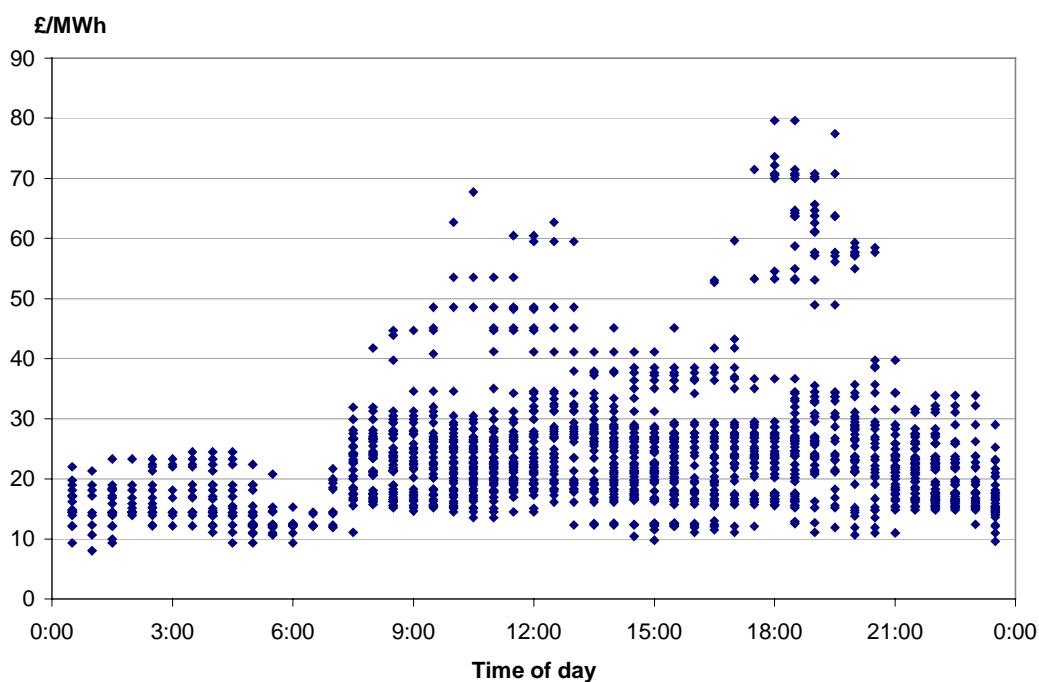
Company	Output share (%)	Capacity share (%)	SMP setting share (%)
<b>British Energy</b>	<b>17.8</b>	<b>15.5</b>	<b>8.8</b>
<b>AES</b>	<b>8.3</b>	<b>7.3</b>	<b>17.0</b>

3.5 However, while each of the companies may, at certain times possess substantial market power, neither of them can be said to be obviously dominant (as defined, for example, in the Office of Fair Trading’s Guidelines to the Competition Act). Despite the fact that British Energy is now the largest generator in England and Wales, its market share (whether of capacity, output or SMP setting) is below 20%. AES is only the 6th largest generator and thus is even less likely to meet the criteria for dominance.

***British Energy***

3.6 British Energy now owns six nuclear plant and one coal-fired plant, totalling 9623 MW of capacity. Thus British Energy can potentially indirectly influence prices significantly via the availability declarations for its nuclear plant and directly influence prices via the prices it bids for Eggborough. For example, the four sets at Eggborough set system marginal prices over 8% of the time in 1999 and have continued to set prices for a similar percentage of the time since British Energy took control of the plant in March 2000.

Figure 3.1: System marginal prices set by Eggborough during 1999



3.7 While most of the SMPs set by Eggborough during 1999 were below £30/MWh (see Figure 3.1), it set prices above 60 £/MWh on 34 occasions during winter evening peaks. This was largely due to changes in its bidding strategy. Table 3.2 compares the bids submitted by Eggborough Unit 4 on two days in early 1999 when it set SMP at 18:30 at 79.6 £/MWh and 15.6 £/MWh respectively.

Table 3.2: Bid prices for Eggborough Unit 4 on two days when it set SMP at 18:30

Date	No load cost (£/hour)	Incremental cost 1 (£/MWh)	Incremental cost 2 (£/MWh)	Incremental cost 3 (£/MWh)	Start-up cost (£)	Declared maximum availability (MW)	SMP set at 18:30 (£/MWh)
16.02.99	9721	24.5	24.5	24.5	5050	505	79.62
14.04.99	1732	10.7	10.7	10.7	4950	495	15.56

3.8 Given the short time interval between the two days, it is reasonable to suppose that the costs of the unit had not changed substantially, whereas the no load costs submitted on the two days is a factor of five different. This suggests that,

given appropriate market conditions, Eggborough is able to adjust its bidding strategies and influence prices, in part by exploiting complex market rules.

- 3.9 The size of British Energy's portfolio makes the potential benefits from capacity withholding large. On the same basis as the calculations shown in Figure 2.8 and ignoring operating cost savings, British Energy would only have to raise prices by 5% for the withdrawal of a 500 MW unit to be profitable. There is plenty of evidence from the Pool to show the significant effect that nuclear outages can have on Pool prices (see Figure 2.1), although we are not suggesting that such instances are evidence of past manipulation.
- 3.10 Under NETA, the risks faced by inflexible plant, such as nuclear plant, are likely to increase. They will no longer be able to act as price takers (offering low or zero bids to run and then being paid the system marginal price) and their inflexibility may increase their exposure to energy imbalance prices. Thus, the incentives on the owners of inflexible plant to manipulate the market may increase. For example, if an inflexible plant is likely to spill energy onto the system (because its contract position does not match its physical position), it would be advantageous to endeavour to increase the System Sell Price that it will be paid for the spill. This might be achievable by changing the bid prices submitted into the Balancing Mechanism for more flexible plant owned by the company with the inflexible plant. Thus, the incentive for British Energy to adopt this strategy with regards to its Balancing Mechanism bids for Eggborough may exist.

### **AES**

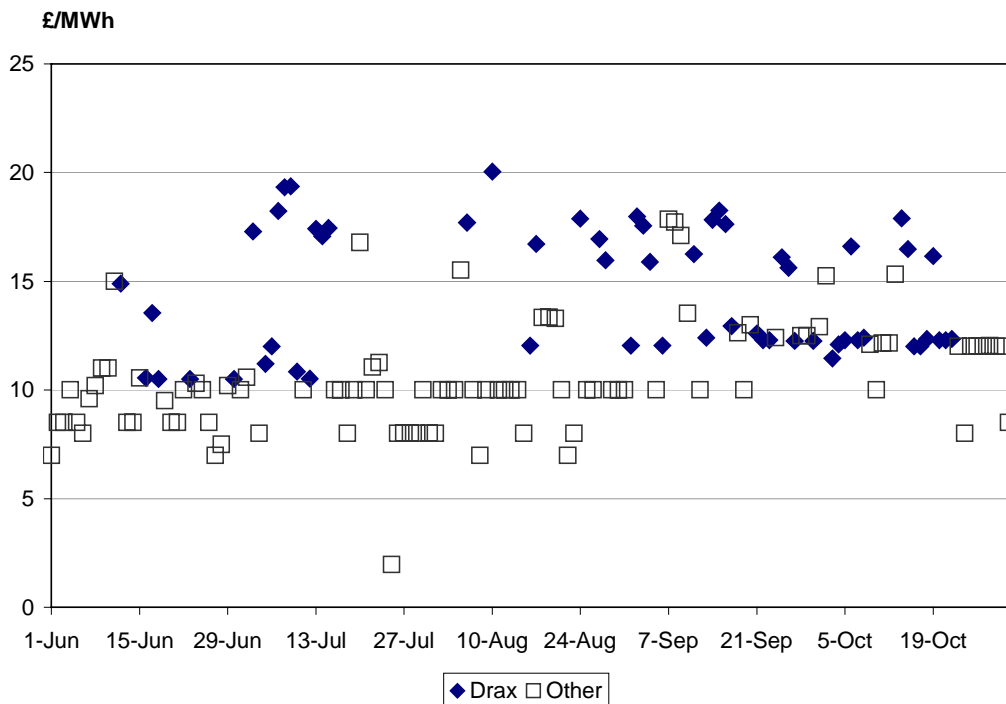
- 3.11 AES owns three plant in England and Wales: AES Barry, AES Drax and AES Indian Queens. Barry is a 230 MW combined cycle gas turbine plant (CCGT), Drax is the largest (3945 MW) and one of the most efficient large coal stations on the system, and Indian Queens is a 140 MW peaking open cycle gas turbine plant (OCGT). AES is also shortly set to begin operating a newly refurbished small coal plant AES Fifoots Point (393 MW).
- 3.12 The three existing plants are separately licensed and run as three separate companies, although all are wholly owned by AES Corp of the US. (AES Fifoots Point will also be separately licenced and operated as a stand-alone company.)

However, for the reasons discussed above, and in the light of their corporate structure, the three AES companies have been treated as a single company for the purpose of determining whether or not the market abuse condition should apply. In this context, we note that two people, including the managing director of AES Electric Group (which is responsible for all AES' GB operations), are members of the board of each of AES Barry, AES Drax and AES Indian Queens. There are strong incentives on generators to operate their assets as a portfolio and AES is notably one of the only generators to operate its stations independently.

- 3.13 Given the mix of plant in AES' portfolio, the potential exists for AES to exercise substantial market power in relation to bidding strategies, exploitation of complex rules and capacity withholding. With regard to bidding strategies, all three plant now owned by AES have set prices in the past: between 1 January 1998 and 30 April 2000, AES Barry set SMP 78 times, AES Indian Queens 178 times and Drax 5913 times. These figures suggest that AES does have the potential to influence prices, particularly now that it owns Drax. To give an example of this potential, Drax, before it was sold to AES, was responsible for setting consistently higher than average prices overnight in the Pool, when prices are usually very low as a result of low demand. This is illustrated in Figure 3.2. Since AES took control of Drax in December 1999, the frequency with which this plant sets SMP has not changed significantly – between January and April 2000 inclusive, Drax set prices for nearly 12% of the time compared to under 11% of the time during the same period of 1999.



Figure 3.2: Overnight SMP setting by Drax



3.14 The very flexible nature of AES Indian Queens, combined with its favourable location from the perspective of resolving transmission constraints, provides it with the potential for exploiting local and temporal market power both now and under NETA. This potential may be greater under NETA given the short timescales involved in the Balancing Mechanism, which does not open until three and a half hours before the start of a trading period although NGC will be able to contract ahead to mitigate this risk.

3.15 The combined capacity of the existing three AES stations is 4315 MW. This is sufficiently large for capacity withholding potentially to be an attractive strategy. On the same basis as the calculations shown in Figure 2.8 and making no allowance for the avoided operating costs, AES would have to raise prices by 12% for the withdrawal of a 500 MW unit to be profitable.

**Summary**

3.16 Ofgem believes that both AES and British Energy have the potential to exercise substantial market power under the present trading arrangements and under NETA with regard to bidding strategies, manipulation of complex rules and

capacity withholding. It is for this reason that Ofgem is seeking to introduce the market abuse condition into the generation licences held by these companies.

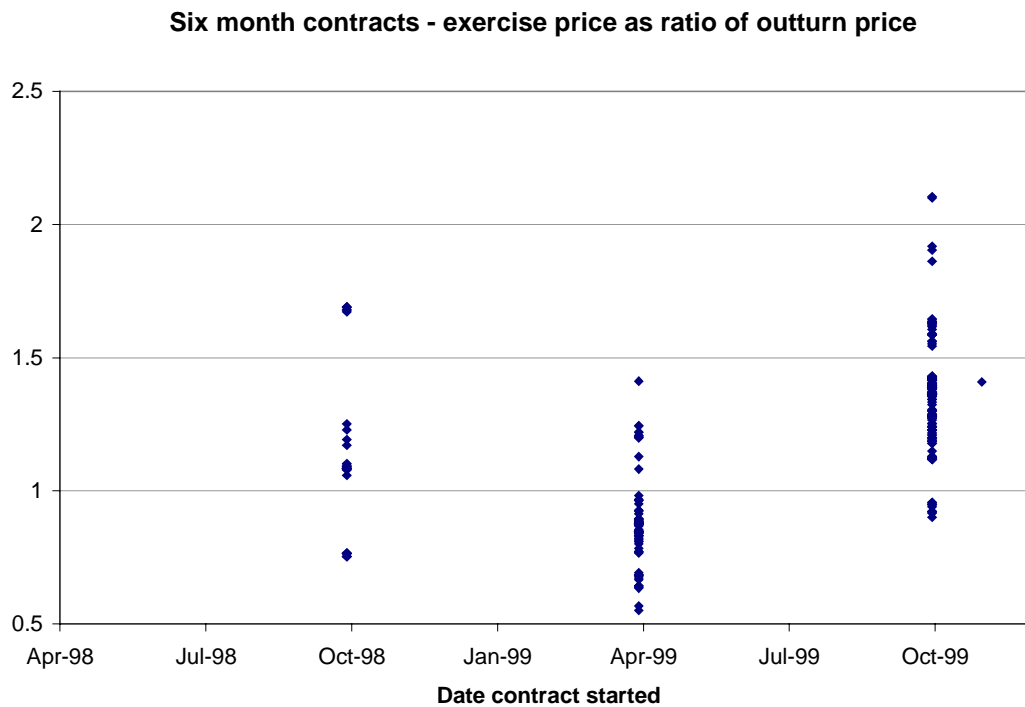
## 4. Part I: The Problem - (iii) Its effects

- 4.1 The most obvious effect of price manipulation, namely that average prices remain high relative to costs, has already been discussed. This has affected the prices paid by all consumers. Large customers, who choose to purchase some or all of their electricity on Pool-related terms, clearly suffer directly from prices that are unjustifiably high. However, even domestic customers are directly affected since wholesale prices account on average for some 50 per cent of their bill.
- 4.2 Examples of excessively high prices to suppliers (as measure against prices in previous years when market conditions were similar) include:
- ◆ £88 million of exceptional profits identified in PowerGen's accounts for 1992 (arising from exploitation of local market power),
  - ◆ £90 million of increased Pool price costs in January 1999 (arising from the exploitation of complex market rules), and
  - ◆ £13 million increase in profits for National Power and PowerGen during two weeks in July 1999
- 4.3 Note that in all the examples above the contention is not that the prices or profits were excessive per se but simply that they were higher than they would have been in a competitive market not open to manipulation or abuse. Similar effects, and the potential for them to occur, have been a concern in other liberalised markets such as California, Australia and Spain.
- 4.4 The costs faced by NGC, as System Operator (SO), in balancing the electric system, have also been directly affected by the scope for manipulation of prices. Again this is a concern in other liberalised electricity markets, as well as in the UK. Since the bulk of system operations costs are passed through to customers, it is they who ultimately suffer most from the problem.

### *Effect on contract prices*

- 4.5 The scope for manipulation of wholesale prices has several inter-related effects on contract prices and hence on the prices paid by all consumers.
- 4.6 Electricity purchasers have generally been unwilling to rely upon the spot market (the Pool) for any significant proportion of their purchases (typically 90% or more of demand is covered by contracts). This reflects the fact that the risks faced by suppliers, most of whose customers are supplied under fixed price contracts, are greater than for generators, who can choose not to generate when prices are low whereas the suppliers cannot choose not to supply when prices are high. Since purchasers of wholesale electricity believe that generators can exercise significant market power if they choose to do so, they are prepared to pay a premium for certainty that reflects this belief. In other words, the fixed:floating premium is generally higher than it should be.
- 4.7 In the short-term there is a strong correlation between the degree of contract cover that a generator has achieved and its incentive to move Pool prices up or down. Generally speaking, generators that are long energy have a direct incentive to increase prices whilst those who are short energy have an incentive to reduce (or at least not increase) prices.

Figure 4.1: Fixed:floating premium



Source: Based on Ofgem's confidential information.

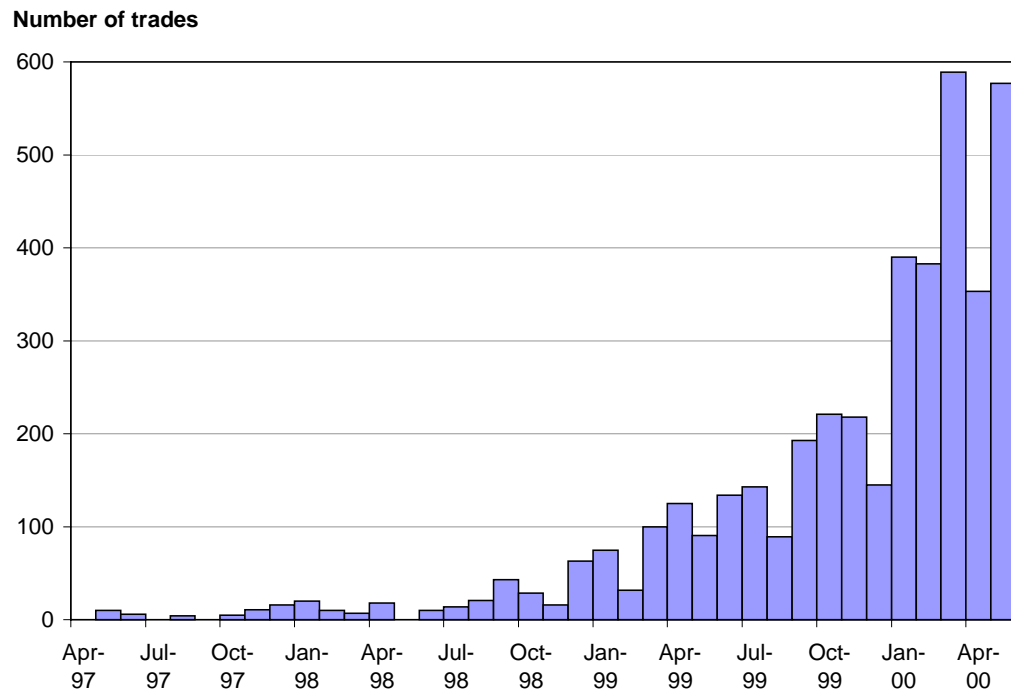
4.8 Both these effects can be seen in Figure 4.1, which compares the exercise prices in baseload Contracts for Differences (CfDs) struck against the Pool Purchase Price and lasting for six months against the time-weighted outturn prices. For contracts signed to cover the six month periods October 1998-March 1999 and October 1999-March 2000, the majority of contracts signed have turned out to be profitable for the seller of the contract (the generator). The average premium achieved for these two rounds of contracts was 13% and 34% respectively. If the buyers of the contracts had based their decisions on average prices over the same six months of the previous year, then they would implicitly have been willing to pay 8% and 20% (in nominal terms) above the average prices that had been seen.

4.9 The fact that contract prices for the period March-October 1999 were generally below outturn prices is further evidence of the extent to which Pool prices were manipulated in that period. Moreover, the average contract price paid was around 16% lower than the time-weighted price during March-October 1998, indicating that at least some generators expected prices to be lower in 1999 than

1998, possibly as a result of an increase in the supply-demand margin forecast by NGC.

- 4.10 A final effect of the scope for manipulation is that the volatility of prices is higher than it should be. The link between contract prices and spot prices provides generators with a strong incentive to increase the volatility of prices. For the reason discussed above, suppliers are generally more risk-averse than generators and hence an increase in volatility is likely to increase the fixed:floating premium that they are prepared to pay.
- 4.11 The scope for manipulation of prices has restricted the development of traded markets for electricity. The determination of the prices at which contracts are closed out plays a crucial role in futures markets: the threat of manipulation by players with physical positions discourages trading and liquidity in contract markets, and serves to restrict the variety of traded products on offer. As noted in Ofgem's initial submission, it is notable that, despite the early UK lead in liberalisation of electricity markets and the position of London as a leading financial centre, it has taken until June 2000 for the UK to have a power exchange. This is in stark contrast to other countries where liberalisation of electricity markets occurred later but power exchanges have emerged much faster. The prolonged absence of a power exchange has contributed to a lack of transparency in contract markets, and liquidity in futures markets only started to develop strongly when proposals to replace the Pool with new trading arrangements were announced (see Figures 4.2 and 4.3 below).

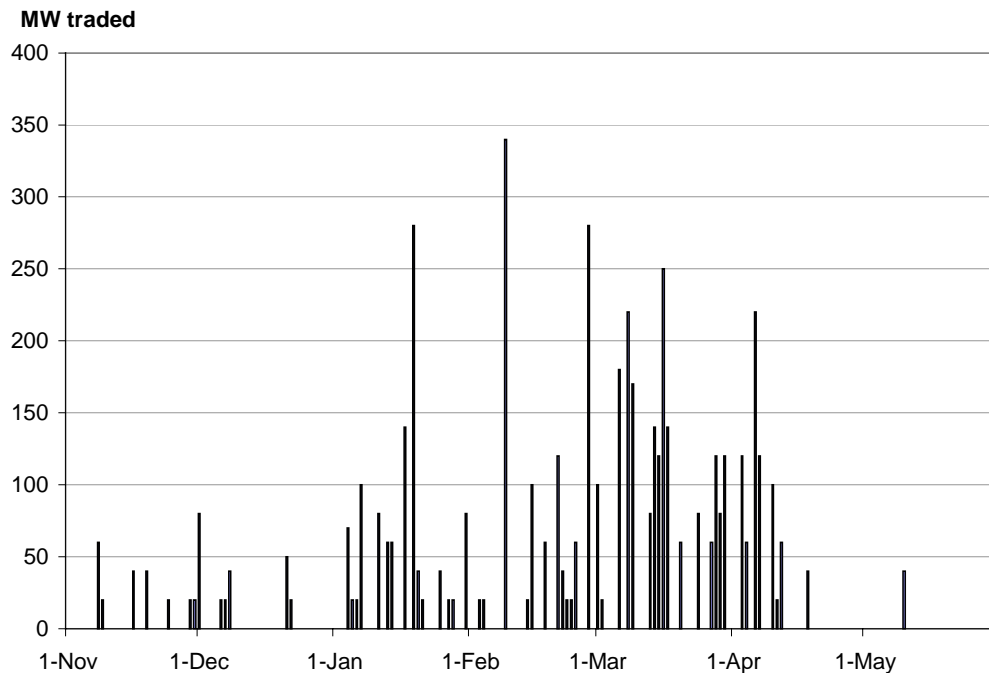
Figure 4.2: Electricity Forward Arrangements trades



Source: Heren's European Daily Electricity Markets & Platt's European Power Daily.

4.12 Although overall liquidity in the EFA market has increased in recent months, there is still a lack of confidence in the market and the volumes traded in particular products can collapse when there are concerns about market conditions. This is illustrated in Figure 4.3, which shows how the traded volumes of baseload summer contracts fell away when capacity was withdrawn at the beginning of April and spot and short-term forwards prices rose.

Figure 4.3: Traded volumes of baseload summer 2000 contracts



Source: Platt's European Power Daily.

- 4.13 It has been argued that liquidity in traded markets has been dampened by other distortions to the market. Examples of possible distortions that have been raised include the supply contracts that backed the coal contracts entered into by the major generators, the allowed pass through of Pool costs under the supply price controls of the RECs and the Pool price cap imposed for 1994/95 and 1995/96.
- 4.14 Coal-linked supply contracts accounted for at least 48% of the market until March 1993 and this may indeed have depressed liquidity in the contracts market. However, by 1996/97, coal linked contracts accounted for only 25% of the market, with a further 11% covered by long-term contracts with new entrants. Thus, participants could freely trade 64% (around 183 TWh) and choose to sign CfDs with the major generators for the majority of this volume (approximately 143 TWh). Similarly, the share of demand covered by the RECs' supply price controls and not open to competition has declined sharply over time. From April 1994 onwards, the franchise market has only accounted for approximately 50% of total demand and the franchise disappeared completely over the course of 1998-1999. Finally, although the price cap set expectations



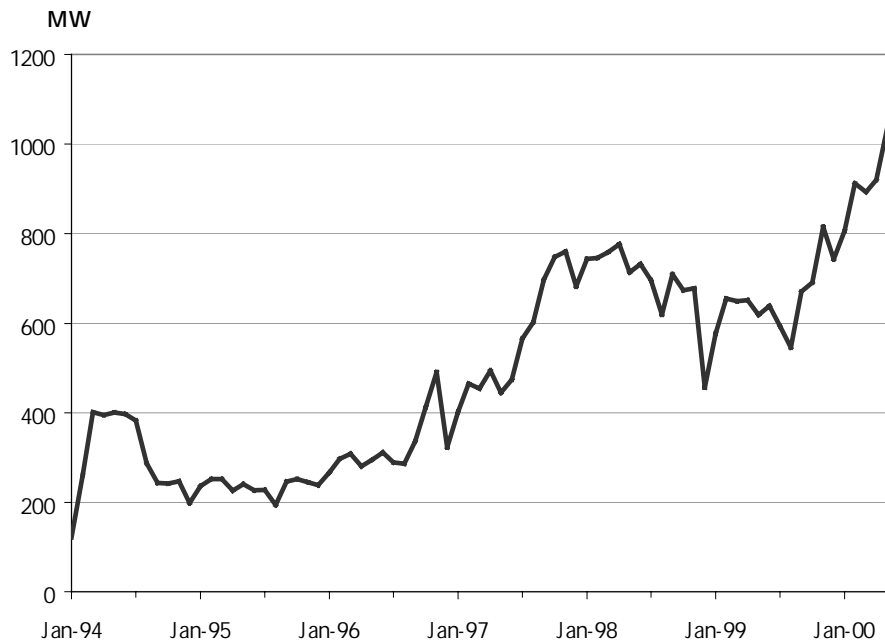
with regard to annual prices for the two years that it was in place, it did not suppress the possibility of within year volatility and the consequent need to contract to guard against this.

- 4.15 More generally we consider that, although liquidity may have been depressed for reasons other than the fear of Pool price manipulation, this cannot entirely account for the fact that the range of products traded and the volumes traded has remained very low until 1999. Indeed traders have explicitly stated that the scope for manipulation has been the main reason underlying their reluctance actively to trade electricity in England and Wales. The IPE has additionally been sceptical about the launch of products due to concerns about the ability for generators to manipulate the market.

***Lack of demand-side participation***

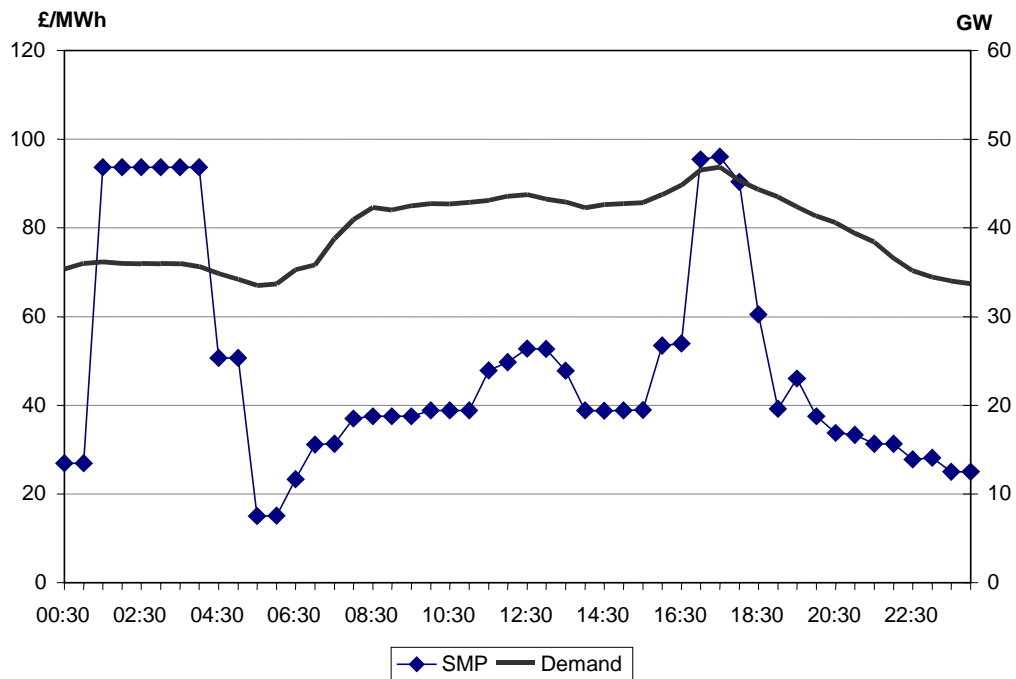
- 4.16 The scope for the manipulation of prices has artificially lowered demand-side elasticities and contributed to the reluctance that large customers have shown to participate actively in the market.
- 4.17 Since December 1993, it has been possible for a limited number of large customers to bid load reductions directly into the Pool. Figure 4.4 shows the very limited extent to which this form of demand-side participation has developed since January 1994. Although the volume of load reduction made available to the Pool has increased over time, it still only accounts for approximately 1000MW, representing 2 per cent of winter peak and around 3.5% of summer peak. Moreover, the influence that demand-side bidding has had in terms of a countervailing competitive force has been minimal. Demand-side bidders have only set prices during twenty half-hours, with the last occasion being in November 1996.

Figure 4.4: Monthly average demand-side availability bids



4.18 It might also be expected that, in addition to the direct participation in the market described above, customers might have participated indirectly by shifting their demand to benefit from lower prices. However, the manipulation of prices has meant that shorter-term price movements (seasonal, daily, hourly) do not always reflect the underlying variations in supply and demand. For example, average prices during the summer of 1999 (June to September) at £26.9/MWh (Apr 99 money) were £1.3/MWh or 5% higher than those during the winter (November 1999 to February 2000), whereas demand was 20% lower. Another example is shown in Figure 4.5, which compares prices and demand over the day for 8 January 1998. Prices were only just under £3/MWh below their peak between 1am and 4am although demand was nearly at its lowest level during the day. These unpredictable fluctuations in prices have discouraged time-shifting of demand.

Figure 4.5: SMP and demand on 8 January 1998



**Summary**

- 4.19 A number of potentially adverse effects on the public interest can be identified when a generator manipulates prices as outlined in this chapter. These include: the direct impact of higher prices on some customers; indirect impacts on contractual markets and consequently on customers; and a lack of development of traded markets.
- 4.20 The effects are contrary to the public interest given their detrimental effects on consumers and on competition.

## 5. Part II: Solutions – (i) Generation market structure and trading arrangements

5.1 Ofgem has considered a number of possible remedies to the potential abuses and their adverse effects identified in Part I. In this chapter we set out the possible remedies Ofgem has considered in relation to changing the market structure or trading arrangements. Other possible remedies using competition or financial services legislation are discussed in the next chapter. However, we have concluded that none of these possible remedies can provide a complete solution and that a market abuse licence condition is necessary and proportionate to the problem we have identified. The market abuse licence condition is discussed in Chapter 7.

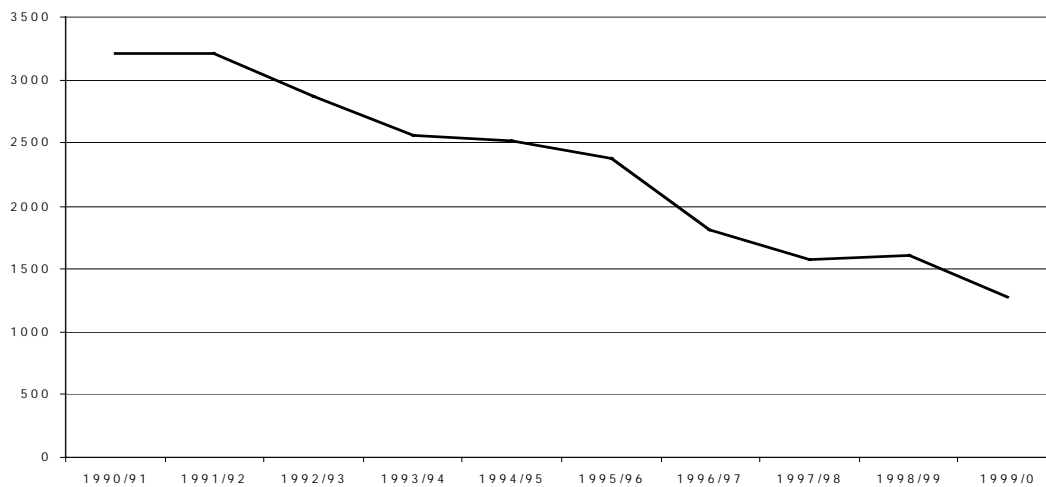
### *Generation Market Structure*

5.2 Market concentration in the generation market has been substantially reduced since privatisation. On conventional measures, concentration has fallen to levels that would normally be classified as moderate to low<sup>13</sup> (see Figure 5.1). But as recent events show, the scope for manipulation has not declined accordingly. Real competition will only develop when there is genuine rivalry amongst competitors; reduced concentration is not enough.

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<sup>13</sup> A market with an HHI below 1000 is normally classified as having a low aggregate market concentration.

**Figure 5.1: Hirschman/Herfindahl Index for generation capacity**



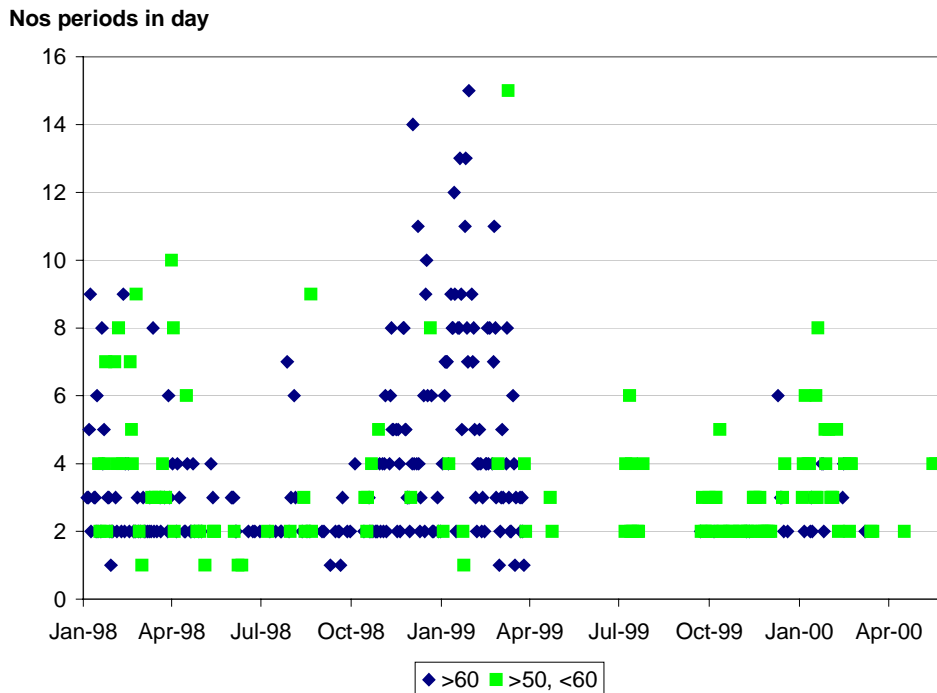
- 5.3 The current moderate to low level of market concentration evident for generation capacity is apparent whatever market definition is chosen e.g. annual generation output, half-hourly generation output, half-hourly available capacity or SMP setting. For example, the HHI for SMP setting so far this year is 1338. Thus, under no definition of the market is it possible to identify obviously dominant companies and yet both analysis and evidence indicate that, at certain times (especially close to 'real time'), it will remain possible to exercise substantial market power.
- 5.4 Further restructuring, including by new entry, has some role to play in limiting the existence of substantial market power and its potential abuse in the future. But we do not believe that it would be desirable or feasible to pursue structural remedies, such as further plant divestment, to the extent that would be required, to address the problem.
- 5.5 In any event, the ability of generators to enter into contracts for output can quickly reverse the economic effects of any given plant divestment. Such contractual relationships already exist, as set out in the confidential appendix, and are likely to persist over at least the medium term. The effect of the contracts is varied. Some are designed effectively to limit the output of a plant, others are tolling arrangements that give the contract holder the right to control the output of the plant, whilst yet others essentially remove the plant from the market since they cover all the output of the plant. In all cases, the overall effect

is to give bidding incentives similar to those that would apply if the market were more concentrated.

### ***Rule Modification***

- 5.6 The existing Pool Rules are highly complex and the Pool rule modification process is slow and cumbersome, as demonstrated in Appendix 4.
- 5.7 Ofgem has given careful consideration to the new rules under NETA in order to minimise their complexity and to put in place governance arrangements that will speed up the rules modification process once the new arrangements are introduced.
- 5.8 However, there are three fundamental problems with relying solely on rule modifications to address market manipulation. First, there will always be the necessity for complex rules governing the last minute balancing of the system. Past experience indicates that, as a result, when one rule loophole through which market power can be exploited is closed, market participants can readily find other ways in which similar effects can be achieved. Thus, relying on rule modifications inevitably means that a game of 'catch-up' is perpetually being played. An example of this occurred last year. Following the increased incidences of SMP spikes (prices set over £60/MWh) a change to the Pool rules was made to remove, under certain circumstances, price spikes over this level. However, as figure 5.2 below shows, this has had the effect of increasing the incidence of price spikes just below this value (between £50/MWh and £60/MWh).

Figure 5.2: SMP setting over £50/MWh Jan 98-May 00



- 5.9 Second, if the market rules are perpetually changing, participants may be reluctant to take positions based on the current arrangements in case these arrangements change in a way that would adversely affect them. Constant rule change can stifle innovation and damage competition.
- 5.10 Third, it is generally undesirable for rule modifications to be retrospective in nature since this can further increase the uncertainty to which participants are exposed and thus is likely to dampen trading liquidity and to disadvantage participants who had not been manipulating the market. However, if rule modifications are not retrospective, a participant that manipulates the rules will retain the benefits of that manipulation to the detriment of consumers and potentially of other participants, and will not be discouraged from finding and exploiting other loopholes in the rules to its benefit and to the cost of competition and customers.
- 5.11 A further consideration with regard to relying on rule modifications to address the problem of the abuse of substantial market power is that, in general, the Director General cannot initiate rule modifications but only make

determinations on rule modifications that are referred to him.<sup>14</sup> This applies under the current trading arrangements and will continue to apply under NETA. This restriction on Ofgem's ability to initiate rule changes means that the Regulator cannot rely on this remedy as the solution to the problem of potential market power abuse.

- 5.12 Although we do not believe that it would be desirable to rely solely on rule modifications to address the problems of the electricity market, we recognise that, in some instances, they may have a useful role to play. For example, there may be occasions when changes in a participant's bidding strategy, not driven by a desire to manipulate the market, may have unforeseen and undesirable consequences. In such circumstances, changing the trading rules might well be appropriate.

### ***NETA***

- 5.13 As explained in Ofgem's initial submission, the introduction of NETA will mark a radical change. The new trading arrangements will deliver significant advantages over the present arrangements. They will deliver more efficient and more competitive trading of electricity and a greater choice of markets and products to trade. Generators and suppliers will not be tied to participation in a single spot market, as under the existing arrangements, but will be free to contract bilaterally for contracts of varying durations.

- 5.14 As noted in the July 1999 report on The New Electricity Trading Arrangements:<sup>15</sup>

"The NETA proposals have been developed neither in the expectation that they will, in and of themselves, be sufficient substantially to curb market power nor as a means of tackling specific abuses of market power."

- 5.15 Nonetheless, Ofgem believes that NETA will address many of the problems that, over the years, have been identified in relation to the operation of the compulsory Pool. More specifically, compared to the current arrangements, NETA should:

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<sup>14</sup> The Director General has limited powers to put proposals for modifications to the Pool and it is currently proposed that he will have powers to direct the Balancing and Settlement Code Panel to address specific issues for a limited period following the introduction of NETA.

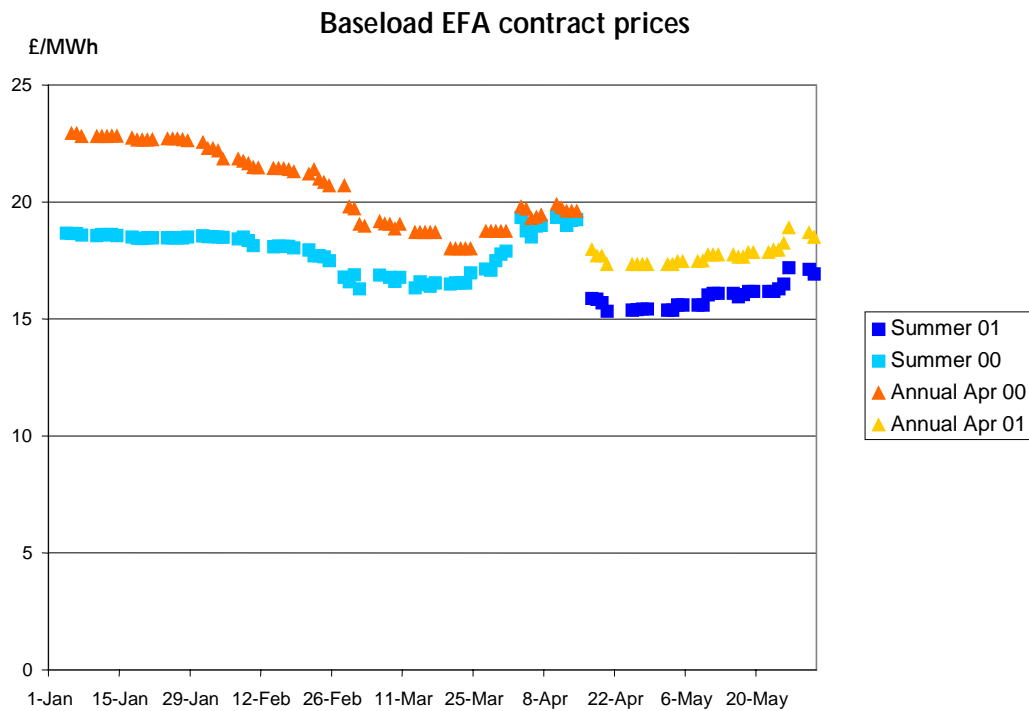
<sup>15</sup> 'The New Electricity Trading Arrangements, Volume 1' Ofgem, July 1999.



- ◆ be less vulnerable to abuse by participants with market power except close to real time;
- ◆ encourage innovation;
- ◆ allow more effective monitoring of anti-competitive practices;
- ◆ strengthen the influence of the demand-side on the wholesale market;  
and
- ◆ be more flexible and adaptable to changing economic conditions.

5.16 It is expected that features of the new trading arrangements such as the removal of a mandatory one-sided market, the move away from SMP to “pay as bid” and the reliance on bilateral contracting via a range of forward markets will reduce the opportunities for the abuse of market power. In addition, demand side participation in price determination could increase significantly under NETA thus increasing competitive pressures. There is some evidence from the forwards market to support the view that participants do indeed expect NETA, along with other market developments, to increase competitive pressures. For example, as shown in Figure 5.3, annual baseload EFA prices starting April 2001 and those for Summer 2001 are significantly below the prices that were traded for annual April 2000 and Summer 2000 although the volumes traded for next year have been small.

Figure 5.3: Comparison of EFA prices for 2000/01 and 2001/02



5.17 Nevertheless, as discussed in Chapter 2, NETA will not solve all the problems of the electricity market. 'Close to real time' market power is likely to remain a particularly intractable issue and the possibility of 'capacity squeezes' will continue.

**Summary**

5.18 All of the possible remedies relating to market structure and trading arrangements discussed above can contribute to the solution of the problem of abuse of substantial market power. Further new entry into the generation market may help to develop effective competition in generation, changes to the trading rules may help to mitigate the exercise of market power once a particular abuse has been identified and NETA will help to overcome many of the problems specifically associated with the Pool. However, no feasible market structure or set of trading arrangements can change the fundamental physical and economic conditions of electrical systems close to real time. It is for this reason that we are convinced that these possible remedies will not be sufficient.

## 6. Part II: Solutions – (ii) Other legislation

### *Introduction*

- 6.1 Ofgem has also given careful consideration to the existing legal powers available to it or to other regulatory agencies. The concurrent powers of the Director General under the Competition Act 1998 represent a significant extension of the Director General's powers under general competition law. The Director General has welcomed the extension of his powers and expects to make full use of them. However, Ofgem is concerned that there could be serious cases of manipulation of the wholesale electricity market by generators with substantial market power which is the target of the market abuse condition, which will not clearly be prohibited by the Act. The Financial Services Authority (FSA) will also have new powers under the Financial Services and Markets Act to deal with conduct which compromises the integrity of financial markets. It will be working in close co-operation with Ofgem. But it is not concerned with abuse of market power in the wholesale electricity market per se. In view of this potential gap the market abuse licence condition is required in order to impose a clear obligation on generators with the ability to exercise substantial market power not to abuse that market power.

### *Overview of the Competition Act 1998*

- 6.2 The Competition Act 1998 prohibits agreements or concerted practices which restrict, distort or prevent competition (the Chapter I prohibition) and conduct on the part of one or more undertakings which amounts to the abuse of a dominant position (the Chapter II prohibition). The Act requires that the prohibitions should be applied consistently with corresponding EC law and specifically so as to avoid inconsistency with the case law of the European Court of Justice.

### *Chapter I Prohibition*

- 6.3 Chapter I prohibits anti-competitive agreements and concerted practices between or amongst generators. It will therefore prohibit collusion between generators in relation to their conduct in the wholesale electricity market. If at any time there is evidence that two or more generators are reaching prior

agreement or otherwise colluding in their behaviour in the market Ofgem would expect to apply the Chapter I prohibition to such conduct. However, there is no evidence available to Ofgem which suggests that such collusion has occurred or is the cause, or an important factor underlying, repeated manipulation in the Pool. The complex trading rules and the way the market has operated and is expected to operate provide a framework in which price manipulation, particularly through gaming of the rules, can occur without the need for collusion.

### ***Chapter II Prohibition – Abuse of Dominant Position***

- 6.4 Given that the price manipulation and other abuses of market power which are the target of the licence condition and have been outlined in Part II of this submission result from unilateral conduct by generators, it is the Chapter II prohibition, which prohibits conduct which amounts to the abuse of a dominant position, which is clearly most likely to be applicable. Ofgem will, as it is required to do by the Electricity Act, consider in every situation in which abuse of market power is at issue whether the Chapter II prohibition is applicable and is likely to provide a more appropriate way of dealing with particular conduct.
- 6.5 The concept of a dominant position derives from Article 82 (formerly Article 86) of the EC treaty and must be interpreted consistently with case law under that Article as well as developing case law under the Chapter II prohibition. EC case law is dynamic and is likely to develop over time. It will also clearly be open to Ofgem to apply the Chapter II prohibition to situations which may not previously have been the subject of UK or EC case law. However, if it does so it will be open to challenge if it is considered to be acting inconsistently with existing EC case law.
- 6.6 Ofgem has issued (currently still as a draft) a guideline on the application of the Competition Act to the energy sectors.<sup>16</sup> This guideline provides advice and information about the factors which the Director General of Gas and Electricity Markets will take into account in exercising his powers under the Act. The guideline identifies characteristics of the gas and electricity sectors which affect the application of the Act to these sectors. As one would expect, these include a

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<sup>16</sup> 'The application of the Competition Act to the energy sectors', Office of Fair Trading, 1 June 2000.

number of the characteristics which have been highlighted previously by Ofgem to the Competition Commission and elsewhere in this submission as special characteristics of wholesale electricity markets:-

- ◆ the limited storability, which limits opportunities for substitution between time periods;
- ◆ the inelasticity of demand over short periods;
- ◆ the relative inelasticity of supply; and
- ◆ the complexity of the Pool rules (and more generally of codes and agreements required for safe and efficient balancing).

6.7 The guideline highlights the relevance of these factors to various aspects of the application of the Act, of which the following are particularly relevant in the context of market abuse in wholesale electricity markets:-

- ◆ market definition: the guideline notes that the absence of substitutability constraints may mean that in some circumstances the appropriate definition of the market may be limited to a much shorter duration than is typical in other industries; and
- ◆ the assessment of market power, dominance and joint dominance: the guideline identifies that firms may have the ability substantially and persistently to influence prices, and therefore act independently of customers, even though their market shares fall below normal thresholds for dominance.

6.8 The guideline indicates Ofgem's commitment to making full use of its new powers under the Competition Act to tackle abuse of market power in wholesale electricity markets where it can reasonably be considered to amount to the abuse of a dominant position. It indicates that where appropriate Ofgem will look closely at the temporal dimension of markets and at the reality of market power which may not fully be revealed through proxies such as market share. However, in applying the Chapter II prohibition to unilateral abuse Ofgem must act in a manner consistent with EC and UK case law and with the interpretation in that case law of concepts of dominance and abuse.

- 6.9 Responses so far to the draft guideline have indicated that industry parties consider that Ofgem's approach may be inconsistent with established decisions of the UK and EC authorities. These run contrary to the assertion that has been made in relation to the market abuse licence condition that Ofgem can satisfy and should rely on the Competition Act to deal with manipulation: rather they argue against the dynamic interpretation and application of competition law which would be needed if the Competition Act were to be used to counter these abuses. Against this background Ofgem considers that there are likely to be instances of abuse of market power which will not fall within the scope of the Competition Act and that the seriousness of the potential effects warrants the adoption of a specific test for market power.
- 6.10 It should be stressed that the adoption of a specific test is not a unique step. There are many precedents for the adoption of specific market power related controls and thresholds in the regulated utility sectors. One example is the "market influence" threshold which was introduced into licences of public telecommunications operators last year. In its 'Guidelines on Market Influence Determinations' (March 2000), Oftel indicated that the reason for the adoption of the 'market influence' threshold was to prevent licensed operators using a position of market power to behave in an anti-competitive manner and that the power to determine that an operator had market influence was regarded as complementary to the powers of the Competition Act. Oftel notes in the Guidelines that the key difference between dominance and the regulatory concept of market influence is that a dominant operator will possess a substantial degree of market power that is in excess of any market power held by its competitors, whereas market influence does not require that an operator is able to act independently of its rivals.
- 6.11 At a European level in telecommunications, although the European Commission is now proposing that the specific regulatory threshold of significant market power should be brought into line with the competition law concept of dominance, in proposals originally put forward last year the need for a different threshold was accepted and many of the regulators who responded to the consultation expressed support for a wider concept of market power for regulatory purposes.

- 6.12 The need for special measures to deal with market power differentiates the regulated utility sectors from the rest of the economy. There are already effectively specific controls on exercise of actual or potential market power in some electricity generation licences (non-discrimination conditions, provisions relating to capacity withdrawal). The characteristics of electricity generation which require it to be subject to regulation (the need for balancing and for a system operator) justify a sector specific test for market power which would not be appropriate for other sectors of the economy.
- 6.13 It is not appropriate for Ofgem to prejudge the application of the Competition Act to specific conduct by specific generators. However there are, on the other hand, features of the case law under Article 82 and, on the other hand, characteristics of wholesale electricity which call into question the applicability of the Chapter II prohibition to price manipulation and other abuses of market power in electricity generation described elsewhere in this submission. These are summarised below:-

***The established definition of dominance implies substantial ability to prevent maintenance of competition***

- 6.14 The established definition of a dominant position is:-
- “a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers”.<sup>17</sup>
- 6.15 This definition has been restated in subsequent cases under Article 82, sometimes with slight variations or further elaboration. For example, “a dominant position is a position of economic strength enjoyed by an undertaking which enables it to hinder the maintenance of effective competition on the relevant market...”.<sup>18</sup>
- 6.16 The definition indicates that a dominant position is just a position of market power but a sustained position of economic strength which allows a dominant

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<sup>17</sup> Case 85/76 Hoffman-La Roche v EC Commission [1978] ECR 461 at para 38.

<sup>18</sup> Case 322/81 NV Nederlandsche Banden Industrie, Michelin v EC [1983] at paragraph 6.

undertaking to prevent maintenance of competition on a relevant market. In the wholesale electricity sector however, one or more generators may (independently) have the ability to manipulate prices, independent of market conditions, but could not be characterised as having the ability to prevent effective competition being maintained.

***Dominance is associated with a very substantial market share***

6.17 Dominance must be established in the context of the relevant economic market and definition of the relevant market has been established by case law as an important step in establishing dominance. Market share within the relevant market has also been established to be an important, if not the most important, indicator of dominance. Thus:

- ◆ in Hoffman La Roche it was considered that: “the existence of a dominant position may derive from several factors which taken separately, are not necessarily determinative but among these factors a highly important one is the existence of very large market shares.”<sup>19</sup>
- ◆ in AKZO<sup>20</sup> it was stated that “with regard to market shares the Court has held that very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position...That is the situation where there is a market share of 50% such as is found to exist in this case.”
- ◆ the OFT guidelines, reflecting case law and practice under Article 82 state that “it is unlikely that an undertaking will be individually dominant if its market share is below 40%, although dominance could be established below that figure if other relevant factors (such as the weak position of competitors in the market) provided strong evidence of dominance.”

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<sup>19</sup> Case 85/76 Hoffmann-La Roche v EC Commission [1978] ECR 461 at paragraph 39.

<sup>20</sup> Case 62/86 AKZO Chemie V EC Commission [1991] I-3359 at paragraph 60.



- ◆ at the other end of the scale, in Metro the Court stated that a market share of between 5 and 10% ruled out the existence of a dominant position unless there were exceptional circumstances.<sup>21</sup>

6.18 Although all these cases make clear that market share alone is not determinative of the existence of dominance and countenance the possibility that a relatively low share of the relevant market could be consistent with a dominant position, they place emphasis on a very high relative market share or market share trend sustained over a period of time, which is indicative of the ability to prevent the development or maintenance of competition. In this regard the case law is reflective of the fact that “a dominant undertaking will possess a substantial degree of market power that is in excess of any market power held by its competitors” (taken from Oftel Market Influence Guidelines).

6.19 In any event in the wholesale electricity supply sector, due to the features previously stressed, there is a pattern of recurrent short term market power exercised by generators who account for relatively low proportions of total output. Even within a very narrow temporal market (for example a single half an hour, or succession of half hours) a generator may be able to manipulate price in disregard of market conditions but account for a small proportion of output in the relevant period. As noted above, the opportunity for exercise of short term market power is continuing to arise notwithstanding the sharp decline in industry concentration indicated by a significant fall in the HHI.

***Joint or collective dominance implies conduct of a single entity***

6.20 The case law of the Court of Justice in relation to joint or collective dominance under Article 82, as opposed to the developing case law under the EC Merger Regulation, indicates that undertakings may be regarded as having been jointly dominant where they are bound together by such economic links that they present themselves on the market effectively as a single entity.

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<sup>21</sup> Case 26/76 Metro SB-Grossmarkte v EC Commission [1977] ECR 1875 at paragraph 3.

6.21 In the recent judgement in *Compagnie Maritime Belge*<sup>22</sup> the Court stated that:

“a dominant position may be held by two or more economic entities legally independent of each other, provided that from an economic point of view they present themselves or act together on a particular market as a collective entity.”

6.22 The concept of collective dominance has been interpreted more widely in the context of the EC Merger Regulation by the EC Commission and the Court of Justice. In the case of *Gencor*, the Court stated that:

“In assessing whether there is a collective dominant position, the Commission is obliged to establish using a prospective analysis of the relevant market, whether the concentration in question would lead to a situation in which effective competition in the relevant market would be significantly impeded by the undertakings involved in the concentration and one or more undertakings which together, in particular because of factors giving rise to a connection between them, are able to adopt a common policy on the market and act to a considerable extent independently of their competitors, their customers and, ultimately, of consumers.”<sup>23</sup>

6.23 The judgement referred to the possibility that collective dominance could arise where there were economic links in the form of a relationship of interdependence between the parties to a tight oligopoly where those parties were in a position to anticipate one another’s behaviour and therefore strongly encouraged to align their conduct in the market, in particular to maximise their joint profits by restricting production with a view to increasing prices. The Court stated that this was particularly pertinent with regard to the control of concentrations, whose objective is to prevent anti-competitive market structures from arising or being strengthened.

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<sup>22</sup> Cases 395/96/P and 396/96/P *Compagnie Maritime Belge Transport, Compagnie Maritime Belge and Dafra Lines v Commission*, Judgement of 16 March 2000.

<sup>23</sup> Case T-102/96 *Gencor v EC Commission* at paragraph 163.

6.24 In the recent decision of Airtours/First Choice the Commission went on to say that:

“Furthermore...it is not a necessary condition of collective dominance for the oligopolists always to behave as if there were one or more explicit agreements (e.g. to fix prices or capacity, or share the market) between them. It is sufficient that the merger makes it rational for the oligopolists, in adapting themselves to market conditions, to act, individually, in ways which will substantially reduce competition between them, and as a result of which they may act, to an appreciable extent, independently of competitors, customers and consumers.”<sup>24</sup>

6.25 This latter decision is being appealed to the Court of First Instance. It is in any event currently far from clear to what extent the evolving case law under the merger regulation will be applied in cases under Article 82. The *Compagnie Maritime Belge* judgement, decided after the *Gencor* case, makes no reference to case law under the merger regulation and the *Gencor* judgement itself makes clear that there is a distinction between the objective of a forward looking merger assessment and a retrospective assessment for the purposes of Article 82.

6.26 In the wholesale electricity sector two or more undertakings may, simultaneously, independently have the ability to bring about a substantial change in wholesale prices, whether by bidding strategy, capacity withholding or price discrimination. But the undertakings in question will not present themselves as a single entity on the market or otherwise demonstrate the existence of economic links suggesting the existence of a joint dominant position as defined in the cases referred to above.

6.27 In summary, there is significant uncertainty about the extent to which market power exercised by generators will be within the scope of the Chapter II prohibition. The Joint Opinion of Jeremy Lever QC and Daniel Beard at Appendix 5 confirms both the likelihood that the Chapter II prohibition will not be held to apply on the basis of established EC case law and the length of time it might take to obtain a firm view on the boundaries of application of the Competition Act.

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<sup>24</sup> Case IV/M.1524 – Airtours/First Choice at paragraph 54.

## *Financial Services*

- 6.28 The Financial Services regime is currently undergoing a period of change. The Financial Services and Markets Act ("FSM") has just received Royal Assent, but will not come into force until after the introduction of NETA.
- 6.29 Ofgem is currently working with the FSA to clarify the extent to which financial services regulation will apply to the trading of electricity once the FSM Act has come into force and once NETA has been introduced. Ofgem accepts that, to some extent, financial services regulation will apply to the trading of electricity. However, the aim of financial services regulation is fundamentally different from the objectives of the Director General; and the extent to which financial services regulation will cover electricity trading is not clear. For these reasons, Ofgem does not consider financial services regulation to offer a comprehensive solution to the problems explained above.
- 6.30 The two key issues in considering the application of the financial services regime are:
- ◆ the extent to which those trading electricity will be regulated under the financial services regime; and
  - ◆ the extent to which the provisions in the FSM Act relating to market abuse, which apply to all parties, whether or not regulated, will address and remedy the problems that we have identified.
- 6.31 Whilst discussions with the FSA and the Treasury are continuing, Ofgem believes that it is likely that the operation of the Balancing and Settlement Code (in effect the balancing market) under NETA will be subject to Ofgem, and not FSA, regulation.
- 6.32 Neither pool contracts nor balancing services trades under NETA are investments. Those who enter into them do not require authorisation under the Financial Services Act 1986; nor will they once the FSM Act comes into force. Therefore, if a generator confines its activities to the Pool (and, in the future, to balancing services) it will not need to be authorised. As a result, much of the body of financial services regulation (including any rules made by the FSA to

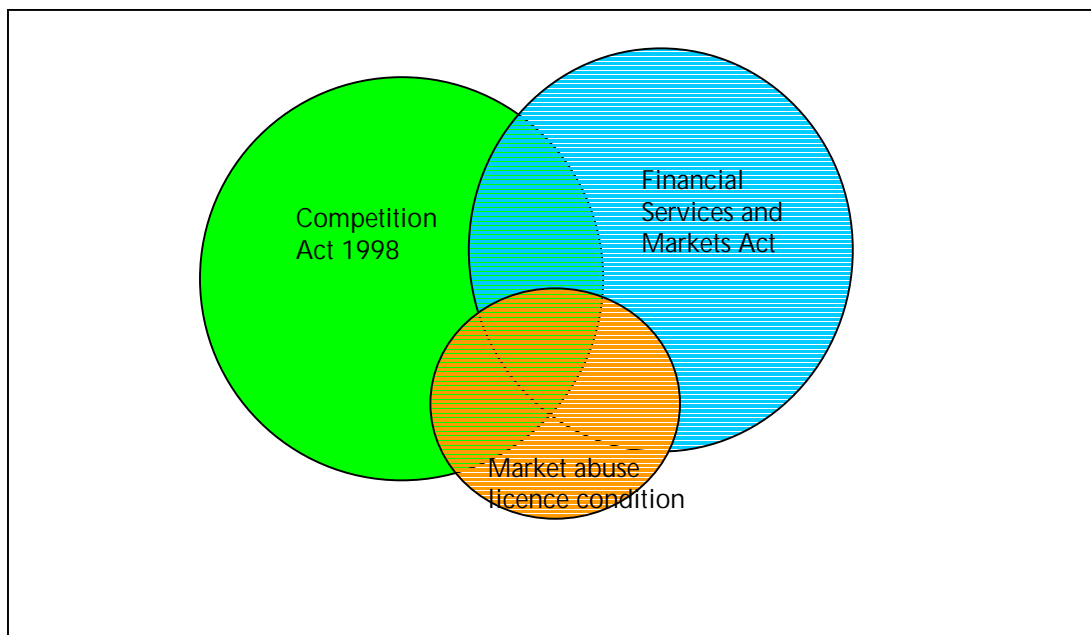
combat market abuse which apply only to authorised persons) will not apply to it.

- 6.33 Even under the new regime of the FSM Act a generator could organise its investment activities so as to benefit from an exemption under the financial services regulation.
- 6.34 The position of generators trading in the forwards and futures markets is not settled. In particular, the position of those generators trading in those markets solely for commercial purposes is not yet clarified. Those markets themselves will be subject to FSA regulation.
- 6.35 The FSM Act will also introduce a new civil (as opposed to criminal) regime to combat market abuse of certain investment markets; this will apply to everyone, whether authorised or not. Ofgem has recognised – and indeed welcomed – that the FSA’s market abuse jurisdiction may entail some power to intervene in price formation under the Balancing and Settlement Code.
- 6.36 In summary, behaviour in a physical market may amount to abuse of an investment market under this regime if it both:-
- distorts the relevant exchange traded futures market or creates a misleading impression in the price or value of investments; and
  - falls short of the standards of behaviour regular users of the exchange traded futures market would expect of a person in the position of a generator.
- 6.37 This new market abuse regime will be supplemented by a statutory Code of Market Conduct. Behaviour that conforms with that described in the Code will not be susceptible to action by the FSA.
- 6.38 Given the interaction between physical and futures prices, there is clearly a need for co-ordination between the FSA and Ofgem. We are and will be working closely with the FSA in the regulation of these closely related markets. However, Ofgem and the FSA use different criteria to assess market abuse in relation to trading activity, and are focused on preventing abuses in different markets.

- 6.39 Ofgem is concerned with the implications of particular conduct of licensed undertakings for consumers and for competition. These concerns arise from the Director General's duties, which are currently set out in section 3 of the Electricity Act 1989 and which are of importance to the Competition Commission in considering the public interest. As a result, Ofgem's focus is on those companies that have substantial market power.
- 6.40 In contrast, the FSA is concerned with behaviour that compromises the integrity of financial markets and the risk of wider systemic failure flowing from the actions of any company. Its focus is therefore market confidence, and is not limited to those companies that have substantial market power.
- 6.41 In conclusion, FSA regulation does not necessarily apply to the abuse by generators of substantial market power in wholesale electricity markets. It has different objectives and is not intended to replace the regulation of underlying markets. Whilst the FSA and Ofgem share a common concern about market manipulation and abuse, they do so for different reasons and with different objectives.

### ***Summary***

- 6.42 In this section Ofgem has sought to demonstrate why we believe that the other powers that we have under other legislation are not sufficient at the present time to deal with market abuse in the wholesale electricity market.



- 6.43 This diagram shows the overlapping jurisdictions applicable to electricity trading. Not all instances of abuses of substantial market power will fall under the Competition Act, the financial services regulatory regime or in the area of overlap between them. Rather, a similar action by the same person may in different circumstances appear anywhere on the diagram. The boundaries between the different jurisdictions will not be as clear as this diagram suggests. But the Joint Opinion of Jeremy Lever QC and Daniel Beard (Appendix 5) highlights (in paragraph 3.18) the length of time it might take to obtain a definitive ruling on the boundaries of the Competition Act.
- 6.44 It is our submission that it is possible for there to be actions which fall in the market abuse circle, but outside the other two circles and which are to the public detriment. Such actions cannot be regulated under either the Competition Act or financial services regulation. It is our submission that the public interest requires that they be subject to effective regulation. This diagram shows the overlapping jurisdictions applicable to electricity trading. Not all instances of abuses of substantial market power will fall under the Competition Act, the Financial Services regulatory regime or in the area of overlap between them. Rather that the same action by the same person may in different circumstances appear anywhere on the diagram.

## 7. Part II: Solutions – (iii) Market Abuse Licence Condition

### *Introduction*

- 7.1 Ofgem believes that a market abuse licence condition is both an appropriate and a necessary solution to the problems that have been discussed in this submission. No other effective solution has been identified, either by Ofgem or by respondents to the consultations that have taken place on the introduction of the licence condition.
- 7.2 In the absence of the condition, Ofgem seeks to apply a mix of other measures, which could be expected to be less well targeted on the relevant market power problems and possibly more intrusive. With the condition in place in licences, not only will such incremental measures be unnecessary but also it will be possible to simplify, and possibly remove, some existing licence conditions, such as the licence condition concerned with information gathering for capacity withholding and those concerned with discrimination, thus reducing regulation.

### *Criteria for inclusion and the test for substantial market power*

- 7.3 In chapter three of the document we described the criteria for the inclusion of the market abuse licence condition which has led Ofgem to the opinion that the British Energy and AES generation licences in an unmodified form operate against the public interest.
- 7.4 These inclusion criteria are based on a licensee's output and SMP setting market shares (and in the case of corporate groups, on the combined shares). These criteria were developed in the context of the present trading arrangements. They were designed to select the group of licensees to whom the condition should apply as a second best solution in the absence of a collective modification process.
- 7.5 The Electricity Act 1989 does not allow modification of a group of licences. Ofgem would have to have sought the consent of each individual licensee (there are at present over 40 generation licensees). Rather than embarking on the slow and cumbersome process Ofgem decided to set a criteria designed to capture



those generators who, under the present arrangements, are most likely to possess a position of substantial market power.

7.6 The market abuse licence condition has a two stage test as shown in appendix 6. It must first establish whether a licensee has a position of substantial market power and then whether an abuse has occurred. The test for substantial market power will be applied in relation to the circumstances prevailing when conduct under investigation occurs or occurred. The condition recognises that a licensee may have a position of substantial market power in some periods but not in others. For example, if a large amount of capacity is withdrawn from the system this may result in a licensee enjoying a position of substantial market power. It is therefore the case that qualification for the inclusion of the market abuse licence condition does not equate to a licensee possessing substantial market power.

7.7 A position of substantial market power is defined as the ability to bring about substantial changes in wholesale electricity prices independently of changes in market or cost conditions. In the guidelines on the market abuse licence condition to help licensees and third parties understand the concept of 'substantial changes in prices' it is stressed that this is a function both of the magnitude and the duration and that a substantial change could be:

- ◆ 5 per cent or more for a cumulative duration of more than 30 days (1440 half hours) in any one year;
- ◆ 15 per cent over 480 half hours in a one year period (10 days in total); or
- ◆ 45 per cent over 160 half hours in a one year period (i.e. a little less than 1 per cent of the time)

### ***A transitory measure***

7.8 The proposed licence condition is a transitory measure, designed to cover the end period of the life of the Pool and the first period of the operation of NETA.

- 7.9 This is a period of major change, during which the advantages of a general condition are likely to be particularly pronounced.<sup>25</sup> For example, detailed rule modification targeted at market power – which in any event is not under Ofgem’s control, either in the Pool or under NETA – would be particularly problematic: it would take too long to do anything effective in the Pool, and further rule change would increase the uncertainties and burdens on market participants in the first stage of NETA.
- 7.10 NETA already represents a very major reform of market rules, and adjustments will almost certainly have to be made to deal with technical issues that arise during the first period of the operation of the new arrangements. Even if rule changes could be targeted at the problems identified, which Ofgem does not believe to be the case, it should be recognised that over-frequent amendments to market rules can create uncertainty and hinder market developments, particularly developments requiring investment. Rules that are constantly changing cease to be effective rules.
- 7.11 For the longer term, Ofgem has come to the view that a general condition will continue to be a necessary feature of the licencing regime, at least for so long as there continues to be a distinction between the Competition Act concept of dominance and the concept of substantial market power. At the appropriate time, therefore, it is Ofgem’s current intention to propose to the Secretary of State that a market abuse licence condition<sup>26</sup> be included in the standard conditions in the licences of electricity generators and suppliers, which are to be determined by the Secretary of State under the Utilities Bill.
- 7.12 If, after consultation, the Secretary of State accepts this proposal, the current market abuse licence condition will have been a stepping stone to that longer-term position. If the Secretary of State rejects the proposal, the condition will have been a transitory measure, providing a necessary degree of protection to consumers and to the competitive process during a period of major reform in

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<sup>25</sup> A brief summary of the changes to generation licences which will result from the implementation of the Utilities Bill is at Appendix 1.

<sup>26</sup> Although the Ofgem proposal would embody similar principles to the existing market abuse licence condition, it will be for consideration whether the precise form of the standard condition should be identical in all respects to the existing condition. Amongst other things, Ofgem will take account of the views of the Competition Commission on the existing condition, experience gained of its operation in the intervening period, and the fact that a standard condition will encompass a more varied mix of licensees, including licensees operating on the demand side of wholesale markets.

trading arrangements that can be expected to have far reaching implications for conduct in wholesale electricity markets.

### ***Standards vs rules***

- 7.13 The market abuse condition sets a general standard for conduct – positions of substantial market power should not be abused – rather than a detailed rule book to govern conduct. This is consistent with the approach embodied in the Competition Act.
- 7.14 There is not a black-and-white distinction between the two approaches. Guidelines and precedents will provide greater detail as to the boundaries between acceptable and prohibited conduct. Again, this is similar to what is happening under the Competition Act.
- 7.15 It will, however, remain the case that generators will have to ask themselves some new questions concerning their commercial conduct. They will need first to consider under what circumstances they are likely to possess substantial market power, and second, if they do, whether any of the actions that they are considering taking would amount to exploitation of that power in a way that causes material harm to consumers and competitors.
- 7.16 Ofgem believes that this is neither a heavy nor an uncertain obligation to place on generators. Licensees know the market well, and have shown themselves capable of developing sophisticated bidding and trading strategies. The information required to check compliance with the condition is, to all intents and purposes, the same information that an efficient generator will require to maximise shareholder value (e.g. the effects of its action on market price, on volumes sold, on customers, on its competitors). What is new is that, when a generator does possess substantial market power, it will, in order to comply with the condition, be required explicitly to consider the possibility of potential harm being caused to consumers or competition.

### ***Certainty***

- 7.17 Ofgem believes that, in considering issues concerning certainty, it is necessary to compare the two alternatives of:

- ◆ introduction of the condition, coupled with consequential simplification and/or removal of other licence conditions; or
- ◆ reliance on other measures, with the consequential increases in regulatory activity in other areas.

7.18 Given the problems identified, the “do nothing” alternative is, in our view, not a relevant benchmark, although a number of the responses from generators to the consultations concerning the condition implicitly based their reasoning upon this benchmark.

7.19 In Ofgem’s view, there is no reason in principle why the introduction of the market abuse licence condition should significantly increase uncertainty as compared to the realistic alternatives. For example:

- ◆ Generators will already have to make similar assessments in order to ensure that they comply with the Competition Act.
- ◆ Relatively precise, quantitative guidance is provided on the new concept that licensees will, additionally, now have to take into account (i.e. substantial market power), and the relevant boundary here is more certain than that defined by the concept of dominance (Ofgem fully recognises that there are uncertainties concerning the meaning of dominance in the specific circumstances of wholesale electricity markets).
- ◆ The exemplary abuses relate to issues that will be familiar, from experience, to licensees operating in the wholesale electricity market (efficient system balancing, capacity and output withholding, price discrimination), and that are already addressed, albeit in ways that Ofgem does not consider are fully adequate, in existing licence conditions of companies operating in the energy sector.
- ◆ Guidelines to the condition have been issued to provide further clarification.

- ◆ An Advisory Body, comprising independent, distinguished experts, has been established, to provide licensees with protection against inappropriate application of the condition by Ofgem.
- ◆ The Director General is required to consider whether the use of the Competition Act is more appropriate than the licence condition and has stated that he will use the Competition Act, in preference to the market abuse licence condition, where he can reasonably conclude that, in the relevant market circumstances, a licensee enjoys a dominant position (whether individual or collective).

7.20 Ofgem would stress the second of these points in particular. The major difference between the Competition Act, with which generators already have to comply, and the market abuse licence condition lies in the distinction between substantial market power and dominance, which are the triggers for the imposition of extra obligations on companies and which, as is explicitly recognised in the OFT guidelines, are different, though related, concepts.

7.21 Ofgem believes that, in the specific circumstances of wholesale electricity markets and given existing interpretations of dominance, the boundary between dominance and non-dominance is *more* uncertain than the boundary defined by the concept of substantial market power in the market abuse licence condition. Thus, not only will the condition provide necessary, additional protection to consumers and to the competitive process, but it will also contribute to greater certainty. If, as has been suggested, Ofgem were to seek to apply the Competition Act 1998 to all cases of market abuse it would be likely to lead to a much greater degree of uncertainty as to the application of that Act.

### ***Enforcement of the condition***

7.22 As is the case for institutions responsible for market supervision in all liberalised electricity systems, Ofgem engages in market surveillance and analysis. This process encompasses a number of activities:

- ◆ Detailed monitoring of prices and, more specifically, price movements, down to the level of half-hourly movements.
- ◆ Investigation of any apparently anomalous prices or price movements (e.g. unusual within-day patterns, reversals of normal summer-winter differentials, etc.)
- ◆ Where apparent anomalies are detected, detailed analysis of system conditions, to assess whether the patterns can be explained by changes in those conditions in circumstances of normal competition.
- ◆ Where the issue is still not resolved, further detailed analysis of bidding behaviour and unit availability.

7.23 As a result of this analysis, it may be concluded that any apparent anomalies are consistent with normal competitive behaviour. Where this is not the case, Ofgem then needs to consider possible response actions, amongst which opening an investigation under the market abuse condition will be one alternative, leading to the process shown on the chart in Appendix 6.

7.24 Recourse to the market abuse licence condition is, however, not the only possible response action. As stated, where the Director General can reasonably conclude that anomalous prices or price movements are the result of conduct by a licensee or licensees that hold dominant positions, reliance on the Competition Act will be the first port of call. In other circumstances, it may be clear that the anomalies are connected with some or other failure of the market rules, in which case Ofgem might give priority to the option of seeking appropriate modification of those rules.

7.25 In respect of rule modification, however, it should be stressed again that the Director General has no power to change market rules. All that Ofgem can do is to identify and publicise the problem and its consequences, in the hope that this helps stimulate a market participant to bring forward appropriate proposals for modification. Ofgem would also stress that compliance with market rules does not imply, in and of itself, that a licensee has complied with the market abuse licence condition: for licensees with substantial market power, there may be both abusive and non-abusive ways of complying with those rules.

- 7.26 If, ultimately, the Director General is satisfied that a licensee is, or is likely to be, in breach of any licence condition (including the market abuse condition), he is bound under the Electricity Act 1989 except in specified circumstances, including where he is satisfied that the most appropriate way of proceeding is under the Competition Act 1998, to initiate enforcement action. That Act sets out procedure to be followed in those circumstances, which includes requirements to give detailed notices and periods for representations or objections to be made to the Director General, which the Director General is required to consider before making a final order or confirming a provisional one. These statutory procedures are in addition to the additional, non-statutory ones that Ofgem has said that it will follow in respect of the market abuse condition. The current regime does not provide for financial penalties.
- 7.27 The Utilities Bill will introduce powers for the Director General to impose financial penalties on licensees in respect of past or present (but not future) breaches. The Bill sets out the procedures which the Director General must follow before imposing such a penalty. Those procedures are separate from the licence enforcement procedures referred to above. They include a requirement to give detailed notice and to consider representations or objections. The Bill also provides that a licensee may appeal a penalty to the Court; in which case the Court, where it considers it appropriate to do so in all the circumstances of the case, may either quash or reduce a penalty.
- 7.28 The Human Rights Act 1998 comes fully into force later this year. Government Ministers have certified the Bill as compliant with Convention rights, as they are required to do so under the Human Rights Act.
- 7.29 The provisions of the Electricity Act 1989 set out clearly what may or may not be included in conditions of licences granted under that Act. It also defines modifications which may be made to those conditions, either by agreement or following reference to the Competition Commission. Those modification processes have not changed since 1989. Ofgem rejects the proposition that the class of modification has been narrowed as a result of either the Utilities Bill or the Human Rights Act 1998.

## 8. Conclusion

- 8.1 The Director General's statutory duties include a duty to promote competition in generation and to protect the interests of electricity consumers. Ofgem believes that the market abuse licence condition is necessary to satisfy these statutory responsibilities.
- 8.2 In this submission we have described the problem; that there has been past manipulation of wholesale electricity prices and that there is scope for future abuse of the wholesale electricity market under both the present electricity trading arrangements and under NETA. This is demonstrated by the fact that all the main generation input costs have fallen significantly, while generating output prices have remained essentially unchanged. We have shown that there are a number of different ways in which prices can be manipulated. These include capacity withholding, the use of complex bidding strategies, the gaming of complex rules, and playing contractual positions off against physical positions.
- 8.3 The reason that such manipulation can occur lies in the special nature of electricity. The electricity system has to be balanced instantaneously. Failure to balance an electricity system can, in extreme circumstances, result in a loss of part or all of the system. In this event, customers' demand for essential services such as lighting and heat will be unsatisfied. The need for instantaneous balancing, coupled to the fact that electricity cannot be stored and demand and supply is relatively unresponsive to price changes close to real time, provide the opportunity to manipulate the market.
- 8.4 The potential for a generator to possess substantial market power is not limited to obviously dominant companies. Under certain market conditions, for short periods of time, even quite small participants may be able to manipulate prices. It is for this reason that Ofgem considers that it would be contrary to the public interest for AES and British Energy not to be subject to the market abuse licence condition.
- 8.5 Before deciding to introduce a market abuse licence condition, Ofgem considered a number of possible remedies to the potential abuses and their adverse effects that we have identified. These included further restructuring of



the electricity generation market, changing the trading arrangements and relying upon competition or financial services legislation.

- 8.6 Whilst each of these remedies has an important role to play, Ofgem considers that none of them can provide a complete or an adequate solution. We have concluded therefore that to enable the Director General to discharge his statutory duties, the market abuse licence condition is necessary and proportionate to the problem we have identified.

## Appendix 1 Changes to generation licences under the Utilities Bill

- 1.1 The Utilities Bill contains a number of provisions which, if enacted, may result in changes to generation licences. This appendix summarises the most important.

### ***NETA***

- 1.2 The Bill will give the Secretary of State (not the Director General) power to make modifications to any licence granted under the Electricity Act “where he considers it necessary or expedient to do so for the purpose of implementing, or facilitating the operation of, new arrangements relating to the trading of electricity”. The power may only be exercised within a period of two years beginning with the commencement of the section containing the power; however, it may be used more than once during that period.
- 1.3 The Secretary of State must consult before making modifications. Consultation conducted before the enactment of the section explicitly satisfies this requirement. Once standard conditions have been introduced into Electricity Act licences (see 2 below) the NETA power may be used to modify either the conditions of a particular licence or the standard conditions of a class of licences.
- 1.4 A consultation on the initial NETA licence modifications has already been carried out in anticipation of the Bill receiving Royal assent at the end of July. It is expected that those modifications, including modification to generation licences, will be made shortly after enactment; probably in the first half of August.

### ***Standard Conditions***

- 1.5 The Bill provides for the Secretary of State (not the Director General) to determine standard conditions for each type of licence issued under the Electricity Act 1989, including generation licences. He may only do so before

the commencement of the clause that provides for the separation of distribution and supply and may only do so once in respect of each type of licence. Standard conditions are deemed to be in a licence, unless and to the extent that they have been expressly removed. A licence that contains standard conditions may also contain special conditions or may contain standard conditions modified in their application to that licence.

- 1.6 The Bill gives the Secretary of State a power to make a scheme for securing that the standard conditions of generation licences are incorporated into existing generation licences.
- 1.7 Standard conditions may also be modified by the Director General unless the modifications are objected to by a proportion of relevant licence holders. The proportion, expressed both by reference to all relevant licence holders and by market share, is to be prescribed by the Secretary of State. Standard conditions may also be modified, in certain circumstances, following a reference to the Competition Commission.
- 1.8 The text of the proposed standard conditions for generation licences has already been published for initial consultation.<sup>27</sup> It is likely that a further text will be published in the early autumn, taking into account those modifications made under the NETA power which should become standard conditions. It is currently expected that the Secretary of State will determine the standard conditions at the end of this year or early next year, with a view to making a scheme, introducing standard conditions into generation licences during the first half of 2001.

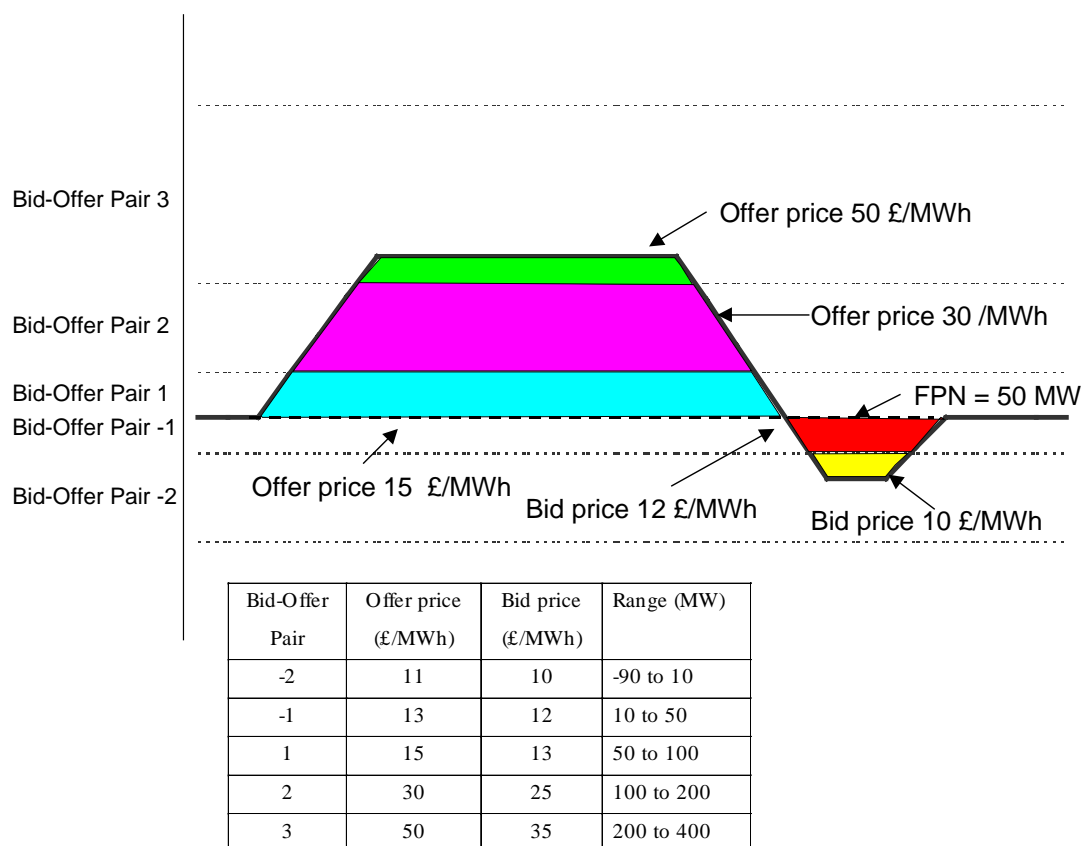
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<sup>27</sup> 'The New Electricity Trading Arrangements: Proposed licence conditions', Ofgem/DTI consultation paper, June 2000.

## Appendix 2 Balancing Mechanism trading

2.1 Figure A1 shows an example of the type of action that the SO might ask a participant to take and the consequent payments that would be made to the participant. The participant submitted a flat FPN of 50 MW and the set of bids and offers shown in the table. The SO instructed the participant to increase its output during the early part of the period and decrease it later on (the thick black line indicates the instructions given) with the result that the participant gets paid for the increase and pays for the decrease at the various prices indicated in the differently coloured areas of the diagram. Figure A1 illustrates that there will be significant complexity in the Balancing Mechanism and in the payments that will be made and hence that the potential for manipulation of bids and offers in the Balancing Mechanism will remain.

**Figure A1: Example of a Balancing Mechanism action**



## Appendix 3 ROCE calculations

3.1 In the calculations that have been made, the Historic Cost Accounting method has been used. For each company, ROCE has been calculated for the Generation Business using published Regulatory Accounts. The following table lists the assumptions that have been made in the determination of the capital employed.

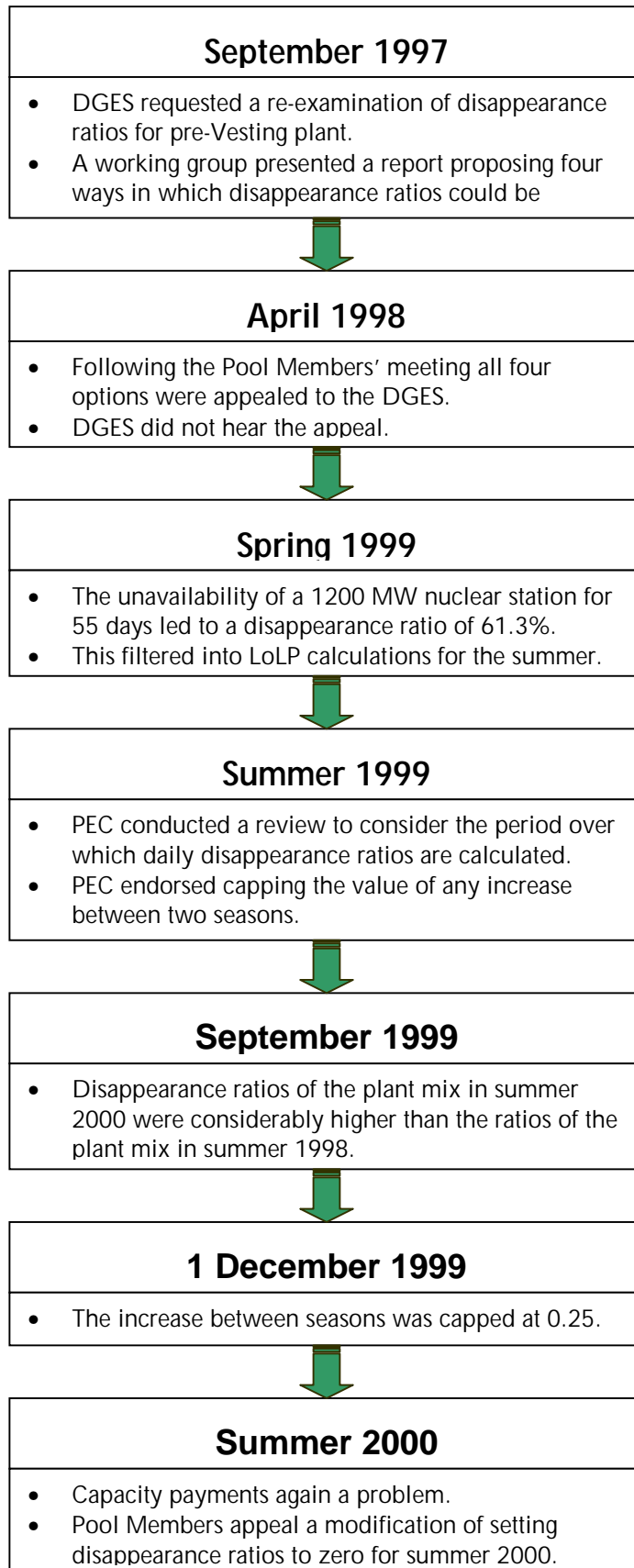
Capital employed	Items
<i>Intangible assets</i>	Goodwill, brand name
<i>Tangible fixed assets</i>	Land and buildings
	Plant and machinery
	Oil and gas assets
	Plant spares, fixtures and fittings
	Other assets
	Fuel security stocks
<i>Current assets</i>	Fuel stocks, work in progress, stores
	Debtors: due within the year
	Trade debtors, other debtors, prepayments and accrued income, current tax, amounts owed by subsidiary companies
	Debtors: due after a year
	Other debtors
<i>Current liabilities</i>	Creditors: amounts falling due within the year
	Trade creditors, payments on account, amounts owed to related companies, other creditors including taxation and social security
	Accruals and deferred income, corporation tax, advanced corporation tax, taxation and social security, dividends declared
	Creditors: amounts falling due after more than one year
	Payments received on account, trade creditors, bills of exchange payable, amounts owed to related companies
	Other creditors (including taxation and social security), accruals and deferred income

<b>Profit before Interest and Tax</b>	Items
Profit before interest and tax /less	Income from shares in related companies and income from fixed asset investments

3.2 The ROCE is calculated on the average capital employed – the average of the current year and the previous year.

- 3.3 Profits are treated as operating profits on continuing activities excluding exceptional items.
- 3.4 For the years 1991/92 and 1992/93, OFFER's calculations undertaken for the 1994 MMC referral have been used.
- 3.5 For British Energy, nuclear liabilities have been considered as part of current liabilities only if they are under a year in duration and only regular contributions of £16 million to the decommissioning fund have been considered as part of the current assets.

## Appendix 4 Disappearance Ratio Example



## Appendix 5 Joint opinion of Jeremy Lever QC and Daniel Beard

### *Summary*

- 5.1 We understand that an objection has been raised to the Market Abuse Condition proposed by Ofgem for inclusion in the Electricity Act licence of certain generators to the effect that the Condition is unnecessary since the Chapter II prohibition imposed by the Competition Act 1998, it is said, already provides adequate protection from the mischief at which the proposed Condition is aimed.
- 5.2 We have not seen the reasoning, if any, with which those who have raised that objection support their conclusion and we would be willing to reconsider our own – contrary – conclusion in the light of any such reasoning if it can be made available to us. However, for reasons that we explain below and on the basis of the facts as they have been explained to us, our own conclusion is that the mischief feared by Ofgem could not safely be left to be dealt through application of the Chapter II prohibition.

### *The relevant facts and the feared mischief*

- 5.3 Ofgem believes that, because of the unusual features of the British market for electricity, even under the New Electricity Trading Arrangements, it will be possible even for generators with market shares that are low, both absolutely and perhaps also relative to their competitors, so to conduct their affairs, in particular in relation to the operation of the Balancing Mechanism, as to raise their realised price to a level substantially higher than the price that would yield them a normal profit in respect of the supply in question and at which therefore they could be expected to bid in conditions of normal competition.
- 5.4 Ofgem believes that even if, without precedent, the relevant market were very narrowly defined in temporal terms, e.g. so as to look at “half-hour markets”, the market shares of generators capable of so conducting themselves would still be less – often much less – than 20 per cent and often also less than the market shares of their competitors during e.g. the half-hour in question. Finally Ofgem



believes that use by such generators of futures is capable of reinforcing the incentives that the generators have to engage in the feared conduct.

### ***The Chapter II prohibition***

- 5.5 Despite the fact that the Chapter II prohibition has been introduced only recently, there is considerable case law and decisional practice, as well as academic literature, that are relevant to its scope and application. That that is so is a consequence of section 60 of the Competition Act 1998 (which is applied to Ofgem by section 54 of, and Schedule 10 to, the Act), which makes provision for ensuring that questions arising under the relevant part of the Act in relation to competition within the United Kingdom are dealt with in a manner which is consistent with the treatment of corresponding questions arising in Community law in relation to competition within the Community.
- 5.6 The Chapter II prohibition is the UK national law equivalent of the prohibition of abuse of a dominant position imposed by Article 82 (previously Article 86) of the EC Treaty.
- 5.7 It would represent a radical departure from the established case law and decisional practice – in a manner not foreshadowed in the academic literature – to hold that:
- (i) the relevant market was to be defined in temporally highly restricted terms (e.g. as each of a series of “half hour markets”) – and this despite the indisputable existence of a market for electricity not so restricted temporally; and
  - (ii) that an undertaking was individually dominant in a narrowly defined market of that kind notwithstanding that its market share even in that narrow market was –
    - (a) substantially less than 20 per cent even in the narrowly defined market;
    - (b) even less in a normally defined British market for electricity; and

- (c) often substantially less than one or more other undertakings' shares of the narrowly defined market or the normally defined market.

5.8 Equally nothing in the established case law or decisional practice points to characterization of the situation feared by Ofgem as constituting an abuse by the undertaking concerned of a position of dominance held by it *jointly* with other undertakings in the market (again whether one looks at the normally defined electricity market or the temporally restricted market).

5.9 The question whether the situation to which the proposed Market Abuse Condition is intended to apply would be treated by European Community law as an abuse of a dominant position (so that it should be treated as a breach of the Chapter II prohibition) is a question that could and probably would be referred to the European Court of Justice ("the ECJ") by the Appeal Tribunal or the UK courts before which the question arose (as to the referability of the question to the ECJ even though EC law applies only indirectly as a result of its application by national law, see Case C-28/95 *Leur-Bloom* [1997] ECR I-4161). But whether the question fell to be answered by the ECJ or a UK court or tribunal, we think that both the use of a temporally narrowly defined market as the relevant market and the characterization of the responsible undertaking as dominant would be highly problematic.

***Narrow definition of the relevant market in temporal terms***

5.10 We have found no authority to support the proposition that a relevant market can be temporally transitory. On the contrary, it is unclear whether one of the standard approaches to market definition, viz. the Small but Significant Non-transitory Increase in Price ("SSNIP") test would be workable in relation to very short period markets where the price rise would, necessarily be transitory due to the timescales involved. If, rather than using a SSNIP-type hypothetical test, a court sought to assess the relevant market by reference to the cross-elasticities of demand, it is doubtful whether any meaningful data could ever be obtained over the short time period which, it has been suggested, could form the relevant market for the generators in question.

5.11 Similarly, it may be difficult to apply the standard approach to supply-side substitutability in relation to temporally narrow markets. Supply-side substitution will be held to be a competitive constraint where competing suppliers are able to switch their production to the relevant products and market them in the short term. However, where the duration of a relevant market might be an afternoon or half an hour, it is unclear that even short term supply-side switching could ever happen fast enough to offer any competitive constraint and the test would, therefore, be rendered irrelevant.

5.12 Indeed the definition of the relevant market in transitory terms is inconsistent with the traditional approach to dominance as a non-transitory phenomenon. Thus, in Case 87/67 *Hoffmann-La Roche v. Commission* [1979] ECR 461 the ECJ said (at [1979] ECR page 521)

“An undertaking which has a very large market share and holds it *for some time*, by means of the volume of production and the scale of the supply which it stands for – without those having much smaller market shares being able to meet rapidly the demand from those who would like to break away from the undertaking which has the largest market share – is by virtue of that share in a position of strength which makes it an unavoidable trading partner and which, already because of this secures for it, *at the very least during relatively long periods*, that freedom of action which is the special feature of a dominant position” (emphasis added).

5.13 We conclude that, at the very least, it could not be safely assumed that, even in the context under consideration, the relevant market would be defined in the temporally restricted terms hypothesised by those who contend that the Chapter II prohibition would be applicable.

#### ***Use of market shares as determinative of dominance***

5.14 Entirely independently of the definition of the relevant market that is adopted, the absolutely and relatively low market shares of undertakings to which the Market Abuse Condition is intended to apply present a major obstacle to characterization of those undertakings as “dominant”.

5.15 The relevance of market shares to an assessment of dominance is summarized as follows in the draft Chapter on Abuse of Dominant Position in the edition of Bellamy & Child on the Common Market Law of Competition in course of preparation, which we gratefully adopt (footnote references omitted):-

“[It] appears that a market share of below 30 per cent in a correctly defined market would not be evidence of a dominant position save in exceptional circumstances and in the light of other factors. Percentages varying between 30 per cent and 40 per cent also seem to fall below the level at which dominance would be assumed and evidence would be required of substantial disparities in market share, significant impediments to entry and so on before dominance could be established. It seems that percentages above 40 per cent would be regarded as relevant and significant in an assessment of dominance, depending upon: (i) changes in the absolute level over time; (ii) the level relative to that of the nearest competitors and (iii) the presence of other factors tending to entrench the leading position or, conversely, to threaten it. For example, in *AKZO*, emphasis was placed on AKZO’s belief in its position as a world leader in the peroxide market, on its highly developed marketing organisation, and on its superior technological knowledge.”

5.16 The “general caution about market shares” that follows the above passage is concerned with the fact that even a high market share does not conclusively demonstrate dominance rather than that a low market share may be compatible with it. On the contrary, the lowest market share that has, so far as we are aware, ever been even mentioned in the present connection is the figure of 25 per cent referred to in Recital (15) to the Merger Regulation 404/90 which reads as follows:

“Whereas concentrations which, by reason of the limited market share of the undertakings concerned, are not liable to impede effective competition may be presumed to be compatible with the common market; whereas, without prejudice to Articles 85 and 86 of the Treaty, an indication to this effect exists, in particular, where the market share of

the undertakings concerned does not exceed 25 per cent either in the common market or in a substantial part of it;"

- 5.17 Moreover whether for the purposes of the Merger Regulation or otherwise an undertaking with a market share as low as 25 per cent has never been held to be dominant. On the contrary, the recently published EC Law of Competition, ed. Faull and Nikpay states at paragraph 1.154:

"For a firm to be considered dominant, it must have a large market share, conventionally more than 50% of recent sales."

- 5.18 We know of no case where a single undertaking has been found to be dominant where another competing undertaking had a larger share. Rather, the extent to which the allegedly dominant undertaking's share exceeds that of its "nearest competitors" (see point (ii) in the quotation at paragraph 3.11 above) is relevant when assessing the significance of its absolute market share. Thus an undertaking's market share of less than 10 per cent, even though greater than that of any of the undertaking's competitors, was held to be "*too small to be regarded as evidence of a dominant position*": case 75/84 *Metro v Commission ("SABA II")* [1986] ECR 3021 at page 3094, paragraph 86.

- 5.19 Economists may sometimes express regret at the weight attached by competition authorities and courts of law to market shares but such shares provide fairly easily understood rules of thumb. Rejection of the use of those rules of thumb even in unusual circumstances would cast doubt on the validity of the criteria with which Community industry and its advisers are now familiar and which provide a generally satisfactory framework for the application of the rules on competition of the EC Treaty (and hence for the application of the Chapter I and Chapter II prohibitions). Moreover to discard the traditional criteria and to treat as dominant generators with relatively low market shares, often lower than those of competitors, would open up a wide gap between "legal dominance" and dominance as ordinarily understood. This is not to say that there are not intellectually respectable arguments for treating economic power of the kind with which the proposed Market Abuse Condition is concerned as amounting to dominance in exceptional circumstances such as might be held to exist in the

British electricity market. Nevertheless, we think that the Courts would be most reluctant to go down that road.

### ***Dominance and economic power***

- 5.20 An alternative though related objection to the application of the Chapter II prohibition in the circumstances under consideration is that it is perfectly possible for an undertaking to possess economic power and therefore to conduct itself in an anti-competitive way that has a significant adverse effect in the market (as presupposed by the draft Market Abuse Condition) without being dominant as that term has been interpreted by the Courts.
- 5.21 Similarly here, in the present context, the ECJ or other the Court that comes to rule on the matter will have in mind that a finding that the apprehended conduct does not fall to be condemned as an abuse of dominant position will not exclude the peculiar circumstances of the case being looked after by rules specifically designed for the purpose since, the British electricity industry being a regulated industry, a licence condition can readily be imposed.

### ***The time frame for testing the legally based objections to the Market Abuse Condition***

- 5.22 If Ofgem fails to get the Market Abuse Condition that it has proposed and its failure is attributable to a belief that the Chapter II prohibition provides a satisfactory safeguard against the mischief that Ofgem apprehends, Ofgem may decide to try to use the Chapter II prohibition for the purpose. However, it should be appreciated that in those circumstances, it may well take up to five years to obtain a definitive ruling on the questions considered above, given that neither Ofgem nor the OFT can make references to the ECJ and that even if a reference is made by the Appeal Tribunal rather than the Court of Appeal or the House of Lords, one must probably think of a period of three years after the determination of the initial, administrative procedure. Even if at the end of that time, contrary to what we think is probable, the ECJ's judgement enables the Chapter II prohibition to be applied to the circumstances under consideration, the situation will not have been satisfactorily remedied in the meanwhile; and if, as we think probable, the ECJ's judgement has the effect of excluding the

application of the Chapter II prohibition, the delay will have been completely pointless.

JEREMY LEVER QC

DANIEL BEARD

## Appendix 6 Market licence condition abuse process

