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# STATE AID — UNITED KINGDOM

# Invitation to submit comments pursuant to Article 88(2) of the EC Treaty, concerning aid C 52/03 (ex NN 45/03) — Restructuring aid in favour of British Energy plc

(2003/C 180/03)

By means of the letter dated 23 July 2003 and reproduced in the authentic language on the pages following this summary, the Commission notified the United Kingdom of its decision to initiate the procedure laid down in Article 88(2) of the EC Treaty concerning the abovementioned measures.

Interested parties may submit their comments on measures in respect of which the Commission is initiating the procedure within one month of the date of publication of this summary and the following letter to:

European Commission Directorate-General for Competition Directorate H Rue de la Loi/Wetstraat 200 B-1049 Brussels Fax (32-2) 296 98 16.

The comments will be communicated to the United Kingdom. Confidential treatment of the identity of the interested party submitting the comments may be requested in writing, stating the reasons for the request.

#### SUMMARY

# I. PROCEDURE

On 9 September 2002 the United Kingdom ('UK') Government put in place a rescue aid package for the UK electricity company British Energy plc ('BE'). The Commission took a decision not to raise objection on this case on 27 November 2002 (1). Under this decision, the UK authorities had until 9 September 2003 to submit a restructuring or liquidation plan for BE, or to demonstrate that the aid had been repaid. On 7 March 2003 the UK authorities notified a restructuring plan to the Commission. Information was requested by the Commission and submitted by the UK authorities, for the latest time on 2 May 2003. On 11 July 2003, the UK authorities informed the Commission that they considered the notification as complete, gave notice to the Commission that they would implement the measures unless the Commission would take a decision about them in a period of 15 working days, in application of Article 4(6) of Council Regulation (EC) No 659/1999.

# **II. DESCRIPTION OF THE MEASURES**

The restructuring plan aims at restoring the viability of BE, that has been in difficulty since September 2002, in particular because of the large drop in wholesale electricity prices that followed the introduction of the new electricity trading arrangements in England and Wales. The package contains seven measures:

- A. The undertaking by the UK Government to assume the funding of historic nuclear liabilities, in particular with respect to the management of fuel loaded prior to the restructuring and to the decommissioning of BE's nuclear plants. The benefit of this measure for BE is estimated to GBP 3 298 million.
- B. The renegotiation of fuel supply and spent fuel management contracts with British Nuclear Fuel Limited (BNFL), leading to a decrease of prices charged by BNFL to BE for these services. The benefit of this measure for BE is very hard to estimate. It may range from a few hundred million GBP to more than GBP 1 000 million.
- C. The achievement of a standstill on BE's debts towards its major creditors, including BNFL, plus the possibility that part of these debts be finally waived. The cash saved by BE through the standstill is estimated to GBP 642 million.
- D. A number of financial restructuring arrangements with major creditors.
- E. The introduction of a new trading strategy for BE, aimed at improving its hedging against wholesale electricity prices fluctuations.
- F. The disposal of assets in North America to generate cash.
- G. A 3 months deferral of about GBP 4 million business rates by local authorities.

<sup>(&</sup>lt;sup>1</sup>) OJ C 39, 18.2.2003, p. 15.

# **III. ANALYSIS OF THE MEASURES**

At least part of the measures in question concern issues covered by the Euratom Treaty and therefore have to be assessed accordingly. However, to the extent that they are not necessary for or go beyond the objectives of the Euratom Treaty or distort or threaten to distort competition in the internal market, they have to be assessed under the EC Treaty.

The Commission notes that the restructuring plan confers BE a selective competitive advantage in a sector where there is intracommunity trade. Measures A and G directly involve the UK central or local authorities' budgets, hence State resources. They are State aid within the meaning of Article 87(1) of the EC Treaty. It is also possible that Measure B, and, at least partly, Measure C, involve State resources to the extent that the publicly owned company BNFL would not have acted following the private investor in a market economy principle. At this stage of its assessment, the Commission thinks that these measures, too, are State aid within the meaning of Article 87(1) of the EC Treaty.

The Commission has analysed the aid in the light of the Community Guidelines on State aid for rescuing and restructuring firms in difficulty (<sup>2</sup>) (hereafter 'Guidelines').

This analysis has led the Commission to the following doubts as regards the compatibility of the aid with the common market:

- The Commission has doubts as to whether the plan will result in a restoration of BE's viability in a reasonable timeframe. Indeed, some of the measures have a very long time span (until at least 2086). Furthermore, the improvement of BE's position would seem to be only due to external support conceded by the Government and major creditors, rather than from physical internal restructuring. Besides, should it be State aid, the renegotiation of fuel supply and spent fuel management prices with BNFL could be viewed as a life long operating aid for nuclear stations, which would be incompatible with the requirement that BE faces the market with its own forces alone after the restructuring is over, and to the polluter pays principle.
- The Commission has doubts as to whether the aid can be authorised without any compensatory measure being offered in order to offset the impact of the aid on competitors. In this respect, the Commission acknowledges that it is likely that there is no or very small structural overcapacity on the relevant market. However, the Commission considers that, in view of the highly competitive nature of this market and of the important amount of the aid, it is likely that some sort of compensatory measure would be necessary for the aid to be compatible, even if this compensatory measure does not consist in irreversibly closing power plants.
- The Commission has doubts as to whether the aid is restricted to the minimum. In this respect, the Commission notes that the plan provides for a mechanism by which BE will participate to the restructuring costs via a percentage of its free cash flow. However, in view in particular of the

large uncertainties as to the amounts of aid to be granted, the Commission is not in the position to assess whether this aid is limited to the minimum at this stage.

Taking into account the foregoing considerations, the Commission concludes, at this stage, that there are doubts whether the restructuring plan complies with the criteria laid down in the Guidelines and whether the measures awarded and to be awarded by the UK Government to BE can be considered as compatible with the Common Market. The Commission has therefore decided to initiate the procedure laid down in Article 88, paragraph (2), of the EC Treaty.

This decision is without prejudice to the application of the Euratom Treaty. Some measures, notably measures A and B, have to be assessed in view of the objectives of the Euratom Treaty. Therefore, the Commission requests the United Kingdom to provide all such information as may help to assess the measures, notably measures A and B, in the light of the objectives of the Euratom Treaty.

In accordance with Article 14 of Council Regulation (EC) No 659/1999, all unlawful aid can be subject to recovery from the recipient.

# TEXT OF THE LETTER

The Commission wishes to inform the United Kingdom that, having examined the information supplied by your authorities on the measures referred to above, it has decided to initiate the procedure laid down in Article 88(2) of the EC Treaty, while in particular examining to which extent measures A and B are necessary to fulfil objectives of the Euratom Treaty.

# I. PROCEDURE

1. On 9 September 2002, the United Kingdom ('UK') Government put in place a rescue aid package for the UK electricity company British Energy plc ('BE'). The Commission took a decision not to raise objection on this case on 27 November 2002 (3). Under this decision, the UK authorities had until 9 March 2003 to submit a restructuring or liquidation plan for BE, or to demonstrate that the aid had been repaid. On 7 March 2003, the UK authorities notified a restructuring plan to the Commission. The submission by the UK Government was registered under State aid NN 45/2003 since certain restructuring measures possibly containing aid had already entered into force. Further information dated 10 March 2003 was submitted and registered on 13 March 2003. A meeting between representatives of the Commission and of the UK authorities took place on 28 March 2003. The Commission sent the UK authorities a request for information on 21 April 2003, to which the UK authorities replied on 2 May 2003. On 11 July 2003, the UK authorities informed the Commission that they considered the notification as complete, gave notice to the Commission that they would implement the measures unless the Commission took a decision about them in a period of 15 working days, in application of Article 4(6) of Council Regulation (EC) No 659/1999.

<sup>(&</sup>lt;sup>2</sup>) OJ C 368, 23.12.1994, p. 12.

<sup>(&</sup>lt;sup>3</sup>) OJ C 39, 18.2.2003, p. 15.

# **II. DESCRIPTION OF THE MEASURES**

# 2.1. Beneficiary of the aid

- 2.1.1. The British Energy plc group
  - 2. BE is an electricity generator. It was privatised by the UK authorities in 1996. Except for three special shares held by the UK authorities (one in BE and one in each of its two principal UK subsidiaries), BE is now wholly owned by private investors.
  - 3. At the time of privatisation the primary components of BE's business were six nuclear power stations in England and two nuclear power stations in Scotland. BE continues to operate these stations which have a total registered capacity of 9 820 MW, of which 7 281 MW is in England and Wales ('E & W') and 2 539 MW is in Scotland. BE is the only private-sector-owned operator of nuclear power stations in the UK. It supplies electricity to the wholesale market and to certain large industrial and commercial ('I & C') customers but not otherwise by retail.
  - 4. Since privatisation, BE has entered into a 50:50 joint venture in the United States of America (called Amergen) to purchase and operate American nuclear generating plants and acquired an 82,4 % interest in the lease of Bruce Power LP in Ontario, Canada. In the UK, BE acquired in 1999 the retail supply business of South Wales Electricity (subsequently sold in 2000) and, in 2000, the 1 970 MW Eggborough coal-fired station to get greater flexibility and a measure of security against outage of its nuclear plants.
  - 5. Of the eight UK BE nuclear stations, seven are advanced gas-cooled reactors ('AGRs'), a design and technology unique to the UK. The eighth, Sizewell B, is a pressurised water reactor ('PWR'), a design and technology widely adopted internationally.
  - 6. BE's principal UK subsidiaries are:
    - British Energy Generation Ltd ('BEG'), which owns and operates the six nuclear power stations in England and holds the supply licence for the direct supply business,
    - British Energy Generation (UK) Ltd ('BEGUK'), which owns and operates the two nuclear power stations in Scotland,
    - Eggborough Power (Holdings) Ltd ('EPL'), which owns and operates the Eggborough coal-fired power station in England, and
    - British Energy Power and Energy Trading Ltd ('BEPET'), which sells all of BE's output (other than in relation to the direct supply business) and manages market risks.

# 2.1.2. The recent developments

7. As a consequence of the substantial fall in electricity prices in the market in which BE operates coupled with

BE's lack of hedging and the unplanned power station outages, revenues generated by BE's power stations decreased markedly during 2002. The high proportion of non-avoidable costs (<sup>4</sup>) in BE's cost structure in its nuclear power stations has also given it little opportunity to respond to lower prices by reducing costs.

- 8. A price fall of GBP 8,56/MWh, that has occurred in the last two years, is equivalent to an annual reduction of income of GBP 642 million p.a. on output of 75 TWh (the output of BE's power stations in the financial year). Neither electricity trading contracts nor the direct sales business has sufficiently mitigated the effect of this price fall on BE's income.
- 9. As a result of these factors, BE's cash position deteriorated significantly during the summer of 2002, with cash balances reducing from GBP 231 million at the beginning of April 2002 to only GBP 78 million at the end of August 2002, with the decline accelerating from the end of June 2002. In addition to the significant reduction in cash balances, BE anticipated substantial cash outflows in the period from September 2002 to March 2003. These outflows included payments to British Nuclear Fuel Limited ('BNFL') under its spent fuel management contracts, significant capital expenditure at BE's Bruce Power facility in Canada and the repayment of the first tranche of its bonds, due on 25 March 2003.
- 10. In September 2002, in the light of a failed bond offering in the summer and concern about its ability to access its undrawn bank facilities, BE's Board received on 5 September 2002 legal advice that the Company would not be able to draw down credit facilities. Indeed, as the directors would not be in the position to state that they believe that the Company could repay them, drawing down these facilities would have been equivalent to trading without any reasonable prospect of avoiding insolvent liquidation. This led BE to seek financial support from the UK authorities in order to avoid insolvency proceedings. That financial support was approved as rescue aid by the aforementioned Commission decision of 27 November 2002.
- 11. As is underlined in the said Commission decision, the UK Government undertook to notify a liquidation or a restructuring plan or proof that the facilities have been reimbursed in full and/or that the guarantee has been terminated to the Commission no later than six months after the rescue aid has been authorised. On 7 March 2003, the UK Government notified BE's restructuring plan to the Commission.

#### 2.2. The restructuring plan

# 2.2.1. Origin of BE's difficulties

12. The UK Government has identified the origin of BE's difficulties to be as follows.

<sup>(4)</sup> That is, those costs which cannot be avoided by ceasing to generate or by shutting down stations.

BE's unhedged position

- 13. Unlike the other large private sector generating companies, BE does not own a retail customer business that provides a natural hedge for its wholesale electricity price risk. BE instead sells its electricity primarily in the wholesale market and a small share to large I & C Consumers.
- 14. BE's position in the market for retail supply to large I & C Consumers did not provide a hedge against the fall in wholesale prices. This market has been fully open to competition since 1994. It is competitive with price sensitive consumers. Prices in this market have also fallen. These are largely passed directly through to customers. Accordingly, there has been no increase in retail margins to offset the effects of falling wholesale prices.

BE's high proportion of non-avoidable costs

- 15. The cost structures of nuclear plants are characterised by very high non-avoidable costs and low avoidable costs (<sup>5</sup>).
- 16. Some of BE's non-avoidable costs are unique to nuclear power stations. Firstly, nuclear decommissioning liabilities are unrelated to output, except in respect to their timing, which is based on the timing of station closures. Secondly, spent fuel management costs — the costs of reprocessing, storage and final disposal of spent fuel — are also not avoidable for fuel that has already been loaded into the reactor.
- 17. On the other hand, avoidable costs of nuclear plants are below those of other plants on the system, including other baseload power stations.
- 18. The fall in market prices has led to a large reduction in the margin BE earns above its avoidable costs. Consequently the funds available to meet its high non-avoidable costs, being mainly financing costs and nuclear liabilities arising from past actions, have been greatly reduced. This has led to difficulties in meeting payments to creditors, which has required a financial restructuring of the business.
- 19. In addition to long term non-avoidable costs arising from the nuclear liabilities, BE also suffered from high shorter term non-avoidable costs in the form of financing expenses, increased as a result of its return of capital to shareholders and its Eggborough and North American acquisitions, and the cost of out-of-the-money power purchase agreements.

Significant unplanned outages at BE's nuclear stations

20. BE's loss of income following the drop in electricity wholesale prices was further exacerbated by significant unplanned outages at BE's Torness 2 and Dungeness B stations. On 13 August 2002, BE announced that, following the unplanned outages at Torness, the target for nuclear output in the UK had been reduced from 67,5 TWh to 63 TWh (± 1 TWh).

# 2.2.2. The restructuring measures

- 21. The restructuring package consists in the following seven measures, that were agreed between BE, its major creditors (including the publicly owned nuclear fuel processing company BNFL), and the UK Government:
  - measure A: measures linked to the funding of nuclear liabilities,
  - measure B: measures concerning fuel cycle agreed with BNFL,
  - measure C: standstill measures,
  - measure D: significant creditors restructuring package,
  - measure E: introduction of a new trading strategy,
  - measure F: asset disposals to help finance the restructuring,
  - measure G: local tax deferrals.
- 22. These measures are described in further detail below.

# Measure A: measures linked to the funding of nuclear liabilities

The nuclear liabilities

- 23. Nuclear liabilities arise primarily from the need to reprocess or store and ultimately dispose of spent nuclear fuel ('back-end liabilities') and from the need to decommission nuclear power stations at the end of their commercial lives ('Decommissioning Liabilities').
- 24. For some of the back-end liabilities, BE has contracts for the provision of spent fuel management services by BNFL ('contracted liabilities'). Contracted liabilities represent amounts that BE is contractually liable to pay to BNFL in the future for the reprocessing and/or storage of AGR spent fuel and other services in connection with the management of the spent fuel. The contracts cover reprocessing and storage of spent fuel and associated waste products for the lifetime fuel arisings of the AGR stations up to at least 2 038 or 2 086. These contracts are primarily for a fixed price with all the technical risks associated with the storage and reprocessing of spent nuclear fuel residing with BNFL. Title to all spent fuel and most associated wastes remains with BE throughout the life of the contracts.
- 25. There are other back-end liabilities, which may or may not be associated with the same spent fuel, for which no contract for services currently exists ('uncontracted liabilities'). Uncontracted liabilities principally relate to final disposal of spent fuel, plutonium, uranium and wastes arising from the reprocessing of AGR fuel, the storage and final disposal of spent PWR fuel, including the construction of a dry store at Sizewell B, and the storage and disposal of operational wastes.
- 26. Decommissioning liabilities relate to the costs of defuelling, decontamination and dismantling of the nuclear power stations after the stations have ceased to generate electricity. Normally decommissioning is described as three stages:

<sup>&</sup>lt;sup>(5)</sup> That is, those costs which can be avoided by ceasing to generate or by shutting down stations.

- stage 1: defuelling the reactor shortly after station closure and removing the fuel from the power station,
- stage 2: dismantling redundant ancillary buildings and making the reactor complex secure and weather proof, following which it is maintained and monitored, usually over long periods, and
- stage 3: dismantling the reactor to allow the site to be reused (at least 85 years after the end of generation for AGR stations and up to 50 years for PWR stations).
- 27. Until now several arrangements have been put in place for funding the nuclear liabilities. At the time of privatisation, a separate fund, the Nuclear Decommissioning Fund ('NDF') was established in the form of a company limited by shares owned by an independent trust. Its purpose has been to accumulate a segregated fund, to be applied to discharge part of the decommissioning liabilities. Funding of all other nuclear liabilities has been expected to be met out of operational cash flows from BE's ongoing business. However as a consequence of the fall of BE's revenues, these existing arrangements are not sufficient for the funding of nuclear liabilities.
- 28. The UK Government has included in its restructuring plan a number of instruments in order to take on the financial responsibility for at least part of the nuclear liabilities funding. These new instruments will be established along with new arrangements for the contribution of funds by BE towards the nuclear liabilities costs together with the management of BE's nuclear liabilities.

# The creation of a new fund

- 29. The restructuring plan provides for the existing NDF to be enlarged into, or supplemented by, a new fund, the nuclear liabilities fund ('NLF'). The NLF is intended to be a company limited by shares owned by an independent trust. The NLF is intended to meet the costs of uncontracted liabilities for:
  - all AGR fuel that has been loaded into BE's reactors prior to the date where all the conditions precedent to the restructuring are fulfilled, including the Commission decision on the Restructuring plan ('the restructuring effective date') for all PWR fuel, as well as the storage and disposal of operational wastes from the power stations,
  - all stage 1 decommissioning liabilities of BE, and
  - all stage 2 and 3 decommissioning liabilities of BE to the extent that the accrued value of the NDF is insufficient to meet the stages 2 and 3 decommissioning liabilities as payments fall due.
- 30. Once the restructuring is put in place, BE will contribute to the NLF/NDF, in paying:
  - fixed decommissioning contributions of GBP 20 million per annum — indexed to the retail price index ('RPI') — but tapering off as stations close,
  - GBP 150 000, indexed to RPI, for every tonne of PWR fuel loaded into the Sizewell B reactor after

the date where all the conditions precedent to the restructuring effective date. According to the UK authorities GBP 150 000 per tonne is comparable to international costs for spent fuel management,

- GBP 275 million of new bonds to the NFL. The terms of the new bonds have not been finalised yet but they will be high ranking and unsecured,
- payments initially amounting to 65 % of BE's consolidated net cash flow after tax and financing costs and after funding cash reserves ('the NLF payments'). The trustees of the NLF will also have the right, from time to time, to convert all or part of the NLF payments into a number of ordinary shares of BE. For so long as these shares were held by the NLF, they would be non-voting to the extent they would otherwise carry 30 % or more of the voting rights of BE.
- 31. The percentage of cashflow on which the NLF payments are based may be adjusted from time to time on a fair and reasonable basis, so that shareholders benefit from retained cash flow and proceeds of new subscriptions for shares of BE and so that the NLF and shareholders are not adversely affected by any demerger, issue of securities to shareholders or other corporate actions.
- 32. Payment of the fixed contributions of GBP 20 million per annum (indexed and tapering as stations close) to the NLF or NDF for decommissioning liabilities will be accelerated to a net present value basis (discounted at a discount rate appropriate to the NLF or the NDF, as the case may be) and become immediately due and payable in the event of the insolvency of BEG or BEGUK. The accelerated payment(s) will be guaranteed by all principal companies in the BE Group and secured by charges on their assets.
- 33. The trustees of the NLF will have no roles or duties apart from the management of the fund and its investments and making payments against qualifying expenditure. This will include assessing whether it would be beneficial for the NLF to defer any NLF payments or convert the NLF payments into equity. The trustees of the NLF will not have any powers to review liabilities, funding requirements or set the contributions of BE.

Aid from the UK Government in relation to the funding of nuclear liabilities

34. The UK Government will take the four following measures in relation to the funding of nuclear liabilities.

UK Government assuming the responsibility for BE's liabilities under historic spent fuel contracts

35. The UK Government undertakes to assume responsibility for BE's liabilities under contracts between BE and BNFL BNFL (the 'historic spent fuel contracts'), concerning (i) the reprocessing and/or storage of AGR spent fuel loaded into reactors before the restructuring effective date; and (ii) other services relating to flask maintenance, oxide management and rail transport under existing contracts with. EN

36. This undertaking does not cover the payments for fuel loaded into the AGRs after the restructuring effective date, whose costs will continue to be borne by BE under new contracts which have resulted from the commercial negotiations between BE and BNFL. It does not cover payments in respect to PWR fuel, as PWR is not reprocessed by BNFL, but managed directly — as a matter of fact stored — by BE.

# UK Government undertaking to cover any shortfall in NLF funding for stage 1 decommissioning liabilities and uncontracted liabilities.

37. The UK Government undertakes to cover any shortfall in funding within the NLF for stage 1 decommissioning liabilities and for uncontracted liabilities (including the cost of building the Sizewell B dry store and ultimate fuel disposal).

UK Government's undertaking to cover shortfall in NLF funding for Stages 2 and 3 decommissioning liabilities

38. The UK Government undertakes to cover any shortfall in funding within the NLF in relation to Stages 2 and 3 of decommissioning.

# Specific tax disregard

- 39. The aforementioned undertaking by the UK Government will be accounted for as an asset on the BE balance sheet with a corresponding credit to the profit and loss account. Under normal circumstances, the undertaking would be taxable. According to the UK Government, this would require the UK Government to 'gross up' the level of aid provided to BE in the restructuring process by the amount of tax arising on the grant of the undertaking in order to ensure that BE is solvent post restructuring.
- 40. In order to avoid this, the UK authorities are in the process of introducing specific tax disregard legislation via the Electricity Bill. Without this tax disregard legistaxable receipt of lation, approximately а GBP 3 152 million would arise. According to the UK Government, the tax disregard legislation has been drafted in a manner that aims to ensure that no asymmetrical tax relief is given to BE in the future. Any subsequent increases in the value of the undertaking, whether due to price changes or revalorisation, will be taxable, thereby matching the tax relief received by BE when the extra expense is recorded in the profit and loss accounts.
- 41. Table 1 contains a valuation by the UK authorities of the instruments of aid described above. These estimates of the value are subject to considerable uncertainty. Both the costs of the nuclear liabilities relieved and BE's contribution to those costs are highly uncertain. Indeed, the discharge of the liabilities will occur over extremely long time periods. For example, BE would not expect to begin dismantling an AGR until at least 85 years after a station has ceased generating, while spent fuel management must continue indefinitely. In addition,

there are many tasks, including the decommissioning of AGRs, for which there is to date no direct experience.

#### Table 1

#### Valuation of the measure A aid instruments (1)

		(in GBP million)
	NPV (discounted at 5,4 % nominal (²))	Total future cash payments (undiscounted)
Undertaking for historic spent fuel contracts	2 185	3 218
Undertaking for uncontracted liabilities	750	3 166
Undertaking for decommis- sioning liabilities	879	4 917
Amounts contributed by BE to NLF/NDF	- 1 432	- 1 845
Net amounts payable by Secretary of State	197	6 238
Tax disregard	916	946
Total	3 298	10 402

(1) Alls amounts are in December 2002 values.

 $(^2)$  The discount rate is the 5,4 % nominal rate recommended as the reference rate from 1 January 2003 in accordance with Commission notice 97/C 273/03.

# Measure B: measures concerning fuel cycle agreed with British Nuclear Fuel Limited (BNFL)

- 42. BNFL both provides nuclear fuel to BE for all its AGR reactors and processes this fuel when it is spent (<sup>6</sup>).
- **43**. As a part of the restructuring plan, BNFL, which is BE's largest single creditor, has agreed to modify its contracts with BE both as regards fuel supply and as regards processing of spent fuel.

#### Measures concerning fuel supply

- 44. Pre-restructuring fuel supply agreements between BE and BNFL dated from 1997 and 1995 for BEG and BEGUK respectively. They were supposed to continue in force until 31 March 2006, but with the intent to renegotiate and extend these contracts from that date in respect of BEG and an option to extend in respect of BEGUK.
- 45. Charges for the supply of fuel comprised an annual fixed charge and an additional variable charge per fuel element delivered. The charges were defined, subject to an adjustment in accordance with an inflation index.
- 46. The renegotiated fuel supply terms have come into effect from 1 April 2003 by way of addenda to the prior agreements. The new terms will also form the basis of new lifetime agreements for AGR fuel supply after 31 March 2006, to come into effect on 1 April 2006.

<sup>&</sup>lt;sup>(6)</sup> BE purchases the fuel for its only PWR nuclear plant from another party, and has no contract for PWR spent fuel as it stores it on site.

- 47. Under the new conditions, the fixed annual payment under the prior agreements will be reduced by GBP 5 million a year and there will be a further discount, linked to baseload electricity prices, but subject to a cap of GBP 15 million (both at 2003 prices and subject to RPI indexation). Prices will otherwise remain as in the prior contracts.
- 48. In respect of fuel supply from 1 April 2006, and subject to at least four of the seven AGR stations remaining open, the fixed charge payable by BE will be GBP 25,5 million, less the discount described above, with a variable charge (as per the existing contracts) equivalent to GBP 191 000 per tonne of uranium. These prices are at July 2002 money values and will be indexed in accordance with RPI.
- 49. For the period when only three or fewer power stations remain open, the price will be set on the basis of recommendations of a joint BE and BNFL team, following a study of the end-of-life optimisation programme of BNFL's fuel fabrication plant.

#### Measures concerning spent fuel

- 50. In 1995, the legal predecessors of BEG and BEGUK (Nuclear Electric and Scottish Nuclear respectively) entered into long-term contracts with BNFL for the storage and reprocessing of irradiated AGR fuel and related services. BEGUK (then Scottish Nuclear) entered a further contract in 1995 for the long-term storage of all AGR fuel arisings in excess of the quantity already contracted for reprocessing. In 1997, BEG also signed a further contract for spent fuel management services, which dealt with all lifetime arisings of irradiated AGR fuel in excess of those delivered under the 1995 contract from BEG reactors. All the contracts referred above will be referred to hereunder as 'the existing spent fuel management agreements'. They provide services through to at least 2 038 or 2 086 (depending on the category of waste).
- 51. Under the existing spent fuel agreements, BE retains title to all spent fuel. Eventually, BEG and BEGUK will be required to receive from BNFL's stores the vitrified high level waste, spent fuel, certain intermediate level waste and reprocessed uranium and plutonium to fulfil their responsibilities for the disposal of such high level waste, spent fuel, intermediate level waste and reprocessed uranium and plutonium.
- 52. Pricing for these agreements are essentially fixed, subject to adjustment for inflation and, in the case of the storage and reprocessing commitments, based on the tonnages of fuel delivered. The pricing of the initial 1995 contracts also incorporates amounts in respect of the decommissioning of THORP (the thermal oxide reprocessing plant) at Sellafield, in which AGR fuel is being reprocessed. Given the nature of the services provided by BNFL, BE is committed to make continuing payments in respect of fuel delivered whether or not it terminates the contracts in respect of undelivered fuel.
- 53. The payment streams for the 1995 storage and reprocessing contracts are fixed and run through to completion of the contracts in 2086, with payments

made monthly. The payment stream for the 1997 contract is based on the timing and tonnage of fuel deliveries to BNFL.

- 54. The renegotiated spent fuel management agreement (hereunder 'the new spent fuel management agreements') apply differently depending on whether the managed fuel was loaded prior to or after the restructuring effective date.
- 55. The significant revisions for fuel loaded prior to the Restructuring Effective Date will be as follows:
  - the payment scheduling will be foreshortened, in such a way that the net present value of future payments, computed using the UK public sector discount rates, is unchanged,
  - the contracts' termination clauses will be modified in such a way that, should BE become insolvent despite the restructuring, the contracts would terminate without recourse to BE. The UK authorities have indicated that, in this case, it would be likely that this fuel would have to continue to be managed at BNFL's site at Sellafield and that the UK Government or the NLF would need to enter into contractual arrangements with BNFL, or any successor company, to do this. In this event, the UK authorities have indicated that they would expect these new arrangements to be based on a review of all the relevant circumstances at the time, including existing contractual terms.
- 56. The significant revisions for fuel loaded on or after the restructuring effective date will be as follows:
  - title to the spent fuel will pass to BNFL at the time it takes on the risk for managing the spent fuel (i.e. on delivery of the spent fuel to BNFL), after which point BE shall have no further liability in respect of it,
  - payment for the spent fuel services will be payable in relation to the time of loading the unirradiated fuel to BE's reactors, rather than at any later stage (e.g. on delivery of the spent fuel to BNFL) and will be based on a loading plan with an annual reconciliation,
  - the base price for spent fuel will be GBP 150 000 per tonne of uranium, payable on loading of the unirradiated fuel, at 2003 prices. Thereafter it will be indexed to RPI. In each year an upwards or downwards adjustment will also be made according to a formula based on the amount of electricity generated by the AGR power stations and the value of baseload electricity in E & W, thereby offering BE protection from fluctuations in the price of electricity. The base price for spent fuel management approximates to GBP 0,6/MWh, before the upwards or downwards adjustment.

Fuel supply and reprocessing measures impact

57. Table 2 shows the effect for BE of changes to BNFL fuel supply contracts, as estimated by the UK authorities under three possible scenarios for the evolution of the electricity market.

# Table 2

# Effect of changes to BNFL fuel supply contracts

				(in GB	P million)
Computation of fuel supply savings					
Year to 31 March	2004	2005	2006	2007	2008
Pre-restructuring costs					
- Bank case and upside case	221	247	232	203	213
— Downside case	216	241	227	198	208
Post restructuring costs					
— Bank case	206	231	218	188	201
— Upside case	207	231	227	198	207
— Downside case	200	220	205	176	186
Savings					
— Bank case	15	16	14	15	12
— Upside case	14	16	5	5	6
— Downside case	16	21	22	22	22

58. The UK authorities have submitted that giving precise estimates of the savings by BE after 2006 would be difficult, as the pre-restructuring fuel supply contracts were planned to end in 2006. Any estimate of the benefit for BE of the changes would therefore have to take account in some way of the benefit to BNFL of the prolongation of the contracts until the end of BE's plants' lifetime, which is reflected in the new contracts' prices. Bearing in mind these uncertainties, the UK authorities have indicated that BE's internal estimate of the cost savings over the lifetime of the plants would be GBP 239 million (undiscounted) and GBP 140 million (discounted at a real rate of 3,5 % (<sup>7</sup>)).

59.

60. Table 3 hereunder shows the effect for BE of changes to BNFL AGR spent fuel contracts, as estimated by the UK authorities, under the same three possible scenarios (8). The net present value is computed using the UK public sector discount rate of 3,5 % real. This table addresses only the impact of price changes in contracts for fuel loaded on or after the restructuring effective date. Impact of changes in contracts for fuel loaded prior to the restructuring effective date is difficult to quantify, at it would materialise only in the event that BE becomes insolvent. Besides, the benefit for BE of the transfer of title of spent fuel, and liabilities attached to it, to BNFL, is difficult to estimate, according to the UK authorities. The UK authorities have nevertheless submitted that a subjective estimate of the benefit for BE of this transfer of title would be at around GBP 1 421 (undiscounted) and GBP 148 million (discounted at 5,4 % nominal). This benefit is not included in the table hereunder.

#### Table 3

# NPV impact of changes to future AGR spent fuel contracts (1)

		(in GBP million
	NPV	Undiscounted total payments
Pre-restructuring		
— Bank case	592	1 117
Post-restructuring		
— Bank case	418	558
— Upside case	881	1 204
— Downside case	3	4
Savings		
— Bank case	174	559
— Upside case	- 289	- 87
— Downside case	589	1 113

 This assumes that the restructuring effective date is 1 April 2004; NPV at March 2003.

Measures concerning uranics

- 61. Originally, the companies that are now BEG and BEGUK both themselves acquired uranics for transfer to BNFL and used by it in the production and fabrication of nuclear fuel for their AGR plants. The company that is now BEGUK then transferred to BNFL its uranics procurement contracts. Those pre-existing contracts were long-term and, in any event, sufficient only for the relatively small quantities of material required by BEGUK, and therefore that change gave BNFL only a limited base for the development of a uranics procurement and supply business unit.
- 62. As part of the renegotiation between BE and BNFL of the contracts for the future supply of fabricated nuclear fuel by BNFL to BE, it was agreed that BEG should also transfer its uranics procurement contracts to BNFL which thus becomes responsible for the making of future arrangements for the procurement of uranics for nuclear fuel for BEG's AGR plants.
- 63. At the same time, BNFL will purchase from BEG its uranics stocks, the estimated book value of which is up to GBP 67 million.
- 64. The UK authorities submit that, because of the larger quantity of material used in BEG's AGR plants and the shorter duration of the transferred pre-existing procurement contracts, that change will give BNFL a much stronger base for the development of a uranics procurement and supply business unit and, as such, is a favourable commercial opportunity for BNFL.

<sup>(7)</sup> This percentage corresponds to the public sector discount rate.

<sup>(8)</sup> The definition of these three scenarios is given at point 150.

# Measure C: standstill measures

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- 65. As part of the restructuring plan, BE has reached agreements (hereunder 'the standstill agreements') in relation to a standstill, subject to certain conditions, of payments due to BNFL and a number of significant financial creditors (hereunder 'the significant creditors') which comprise the holders of the majority of the 2003, 2006 and 2016 sterling bonds issued by BE (hereunder 'the Bondholders'), the Eggborough bank syndicate including the Royal Bank of Scotland as letter of credit provider (hereunder 'RBS') (together 'the Bank Lenders') and counter-parties to three out of the money power purchase agreements ('PPAs') and contracts for differences: Teaside Power Limited ('TPL'), Total Fina Elf ('TFE'); and Enron (hereunder collectively 'the PPA Counterparties').
- 66. Under the standstill agreements, the standstill period commences on 14 February 2003 and ends on the earliest of 30 September 2004 or the occurrence of a termination event or the completion of the restructuring. During this period, BNFL and significant creditors have agreed with BE that they will not take any steps to initiate administration proceedings or demand or accelerate any amounts due and payable by BE.
- 67. BE's and BNFL and significant creditors' obligations under the standstill agreements are described hereunder.
- BE's standstill obligations
- 68. Under the standstill agreements:
  - interest will continue to be paid to bondholders and the Eggborough banks in accordance with existing arrangements, except that following the payment of the normal annual coupon to bondholders on 25 March 2003, subsequent interest payments will, subject to appropriate resolutions being passed by the Bondholders, be made on a six-monthly rather than an annual basis,
  - interest at 6 % per annum will be paid to RBS (in respect of its letter of credit) on an amount of GBP 34 million and to the PPA Counterparties on their claim amounts (RBS GBP 37,5 million; TPL GBP 159 million; TFE GBP 85 million; Enron GBP 72 million),
  - EPL will be paid amounts attributable to its operating costs and capital expenditure,
  - BE will continue to purchase power from TPL at fixed prices at levels based on the current forward price curve for electricity until completion of the restructuring,
  - interest will accrue to BNFL in respect of the amounts owed under the existing spent fuel management agreements from 1 April 2003 and will be waived if the restructuring takes place. Amounts accruing under the existing spent fuel management agreements in respect of fuel loaded prior to the restructuring effective date will be stood still to the extent they

exceed the amounts that would have been payable had the new spent fuel management agreements been effective from 1 April 2003 and will be waived if the restructuring takes place.

BNFL and significant creditor standstill obligations

- 69. Under the standstill agreements:
  - from November 2002 up to 1 April 2003, BNFL will stand still all payments due under the existing spent fuel management agreements; from 1 April 2003, BNFL will stand still the difference between payments due under the existing and the new spent fuel management agreements,
  - Bondholders will, assuming passing of the necessary bondholder resolutions, stand still principal due under the 2003 bonds,
  - Eggborough banks will stand still principal repayments and other payments due under the capacity and tolling agreement ('CTA') except those included in BE's continuing obligations,
  - RBS will stand still all amounts in respect of the RBS counter-indemnity, composite guarantee or letter of credit, and
  - the PPA counterparties will stand still all amounts arising under the PPAs except those included in BE's continuing obligations.
- 70. The obligations of a significant creditor under its agreement to standstill payments will cease to apply if any of the following occurs and a significant creditor gives notice of termination to BE:
  - there is a default in payment of the non-deferred amounts due to that significant creditor which continues for more than 20 business days,
  - a winding-up or administration petition or order is made in respect of BE or any of its subsidiaries,
  - the UK Government makes a written demand for repayment of the credit facility agreement or under any replacement facility from commercial banks guaranteed by the UK Government and the related counter indemnity by BE and its subsidiaries in favour of the UK Government,
  - the requisite approvals have not been obtained from the Eggborough credit facility agent, RBS, the TPL bank syndicate or Enron,
  - documentation is issued by BE or any of its subsidiaries which provides for distributions to significant creditors different to those in the heads of terms agreed by the significant creditors.

Standstill impact

71. Table 4 sets out the level of cash that would be saved by BE through the standstill Agreements according to the UK authorities, should the restructuring effective date be on 31 March 2004.

Table 4Cash saved by BE through standstill Agreements

		(in GBP million)
Standstill amounts	Year ending March 2003	Year ending March 2004
BNFL	132	265
Bondholders	110	0
Eggborough banks	47	40
TPL	13	33
TFE	3	14
Enron	4	19
VAT impact	0	- 8
Interest impact	- 9	- 21
Standstill impact	300	342
Cumulative cash	300	642

# Measure D: significant creditors restructuring package

- 72. In addition to the standstill agreements, the restructuring plan provides for the claims of the significant creditors to be restructured and rescheduled. On 14 February 2003, BE reached a non-binding agreement with the significant creditors for the compromise and allocation of their claims.
- 73. The liabilities of the significant creditors to be compromised, as reflected in BE's unaudited financial statements for the six months to 30 September 2002, were as follows:
  - bondholders: GBP 408 million,
  - bank lenders: GBP 490 million,
  - PPA counterparties: GBP 365 million.
- 74. Under the heads of terms, the claim amounts in relation to the PPAs have since been set at GBP 316 million for the purposes of the restructuring package.
- 75. The liabilities will be restructured and rescheduled as follows:
  - GBP 275 million of new bonds will be issued to the bondholders, bank lenders, RBS, TPL, TFE, and Enron. The allocation of new bonds has been determined by an entity priority analysis as agreed by the significant creditors and BE. The priority analysis assesses the claim to which each party would be entitled on insolvency of BE. The terms of the new bonds have not been finalised yet but they will have a senior ranking and be unsecured,
  - a revised CTA will be entered into with the Eggborough banks with a financial return for the banks equivalent to GBP 150 million of new bonds,

- ordinary shares in BE will be issued to the bondholders, bank lenders, RBS, TPL, TFE, and Enron, on the basis of allocation between the parties set out below,
- BE's Board is considering proposals under which existing holders of shares in BE would have both shares and warrants in the restructured group. Any allocation of shares or warrants to existing shareholders in the restructured group will need to be agreed with the significant creditors. If the restructuring is implemented, the return, if any, to existing shareholders will represent a very significant dilution of their existing interests.

# Measure E: introduction of a new trading strategy

76. BE has revised its trading strategy, seeking to reduce its exposure to output and price risks. The revisions constitute one of the elements in the restructuring package which enhance BE's financial robustness.

#### Background

- 77. BE is one of the largest electricity generators within the UK, contributing over 20 % of UK power generation. This electricity generation portfolio consists of nuclear generation (83 % by capacity) and coal-fired generation (17 % by capacity), capable of producing approximately 75 TWh per annum.
- 78. The trading arm of BE, BEPET is responsible for selling the output of BE's generation portfolio, managing the exposure of BE to electricity market price fluctuations and maximising the sales prices achieved by BE relative to the market. Since 83 % of BE's generation capacity is nuclear, a key focus for BEPET is the sale of this mainly continuous production.
- 79. The coal-fired Eggborough plant is also an important element in the trading portfolio. It offers output flexibility to accomodate changing customers demand levels and valuable 'insurance' in the event of a nuclear outage.
- 80. In order to manage BE's exposure to market prices whilst maximising the sales price achieved relative to market, BEPET sells its output forward. By the time the electricity is produced, BEPET, in common with other generators, seeks to have sold 100 % of its generation to avoid exposure to the typically volatile prices in the balancing mechanism. By selling ahead, the company is able to ensure that future output volumes are sold at the prevailing price at that time and, in some cases, that prices for future output are fixed.
- 81. BEPET has a number of routes through which it can sell BE generation and sells 32 % of its total generation through the direct supply business ('DSB'). The DSB has grown organically and represents a key element of BE's business strategy.

- 82. BE's retail market position accounts for a small part of its generating output relative to other significant generators in Great Britain. BE's growth in this market is driven by the goal of diversifying delivery channels for generation output rather than any goal with respect to the retail market by itself. BE achieves a gross margin of approximately 2 % (<sup>9</sup>) on its direct sales reflecting the competitive nature of this market.
- 83. The reasons for the financial difficulties faced by BE in September 2002 included three substantially out-ofthe-money power purchase agreements and contracts for differences into which it had entered as part of earlier trading and corporate activity. Each was included in the compromise agreement with significant creditors reached as part of the restructuring package.
- 84. The first one is the contract with TFE. Compared to today's prevailing market prices, the exercise price within this contract is very high. The agreement was struck in 1997, at a time when prices were on average much higher than is currently the case. The agreement is substantially out-of-the-money for BE and the claim amount due to TFE is GBP 85 million.
- 85. The second relates to the swap contract with Enron, dated 1 April 1996, which is a financially settled instrument, based on the difference between peak and off-peak pool prices. The contract was entered into by BE prior to its acquisition of Eggborough. It was intended as a hedge against the varying shape of BE's growing I & C consumer business. The claim amount due to Enron recognised in respect of this out-of-the-money PPA in the restructuring package is GBP 72 million.
- 86. The third one concerns an agreement, inherited through BE's 1999 acquisition of SWALEC, with TPL. The contract was originally signed on 26 June 1991. The contract is substantially out of the money. The claim amount due to TPL recognised in respect of this PPA in the restructuring package is GBP 159 million.

#### BE's new trading strategy

- 87. As part of the restructuring package, BE has determined to secure more medium-term fixed price sales of its output. According to the UK Government, the implementation of this strategy will reduce the volatility of cashflows and reinforce the longer-term financial viability of the company.
- 88. Under the new strategy, fixed price forward sales of output will result in the Company pre-selling a higher portion of its output for the next three to five years at a fixed price, such that BEPET fixes the value of a greater proportion of its future generation.

- 89. The key objectives of the new trading strategy are: (i) to limit price risks by securing further fixed-price contracts; (ii) to maintain viable sales channels for significant generation volumes; and (iii) to provide additional cash to maintain adequate financial reserves.
- 90. Since the new strategy was articulated in early December 2002, BE has succeeded in selling or extending an additional 14,8 TWh of DSB sales for 2003 to 2006 through the renewal of annual contracts and some extensions to multi-year agreements. As at 6 March 2003, BE had also had negotiations with a number of wholesale counterparties on the subject of structured trades.
- 91. On 6 February 2003, a significant contract was signed with British Gas Trading Limited for the sale of approximately 10 TWh per annum until 1 April 2007, more than half of which is at a fixed price.
- 92. The new contracts with BNFL also provide some element of electricity price hedging to BE due to the variable price, linked to electricity prices, to be paid for AGR fuel supply and AGR spent fuel management services. At current market prices, the new agreements with BNFL provide a partial hedge on approximately 60 % of BE's AGR output of approximately 58 TWh p.a.
- 93. BE proposes focusing on the following objectives in its medium-term strategy:
  - ensuring the BE's nuclear plants are operating to world safety and performance levels. BE will seek to deliver its performance targets consistently and on a sustainable basis,
  - enhancing safety while improving productivity and competitiveness,
  - reducing exposure to wholesale electricity prices in the UK whilst continuing to maintain a reliable route to market. This will be achieved through a mixture of contract terms, access to flexible generation through Eggborough and DSB, focusing primarily on the I & C Consumer sector. BE already has significant market presence in this sector with a strong brand,
  - developing a profitable renewables business to support the competitiveness of the DSB. As a large supplier of electricity via DSB, BE must source an increasing proportion of its supply from renewable sources to comply with the UK's renewables obligation launched in 2002,
  - a continuing commitment to supporting EU-sponsored safety-related activities in the former Soviet Union and eastern Europe.

<sup>(9)</sup> Gross margin is based on total revenue before interest and tax less direct cost of supply (including electricity and delivery costs). (Source BE).

# Measure F: asset disposals to help finance the restructuring

#### Bruce Power

- 94. On 23 December 2002, BE announced that it had entered into binding heads of agreement to dispose of its 82,4 % interest in Bruce Power as follows: 79,8 % to a consortium made up of Cameco, BPC Generation Infrastructure Trust and TransCanada PipeLines Limited (together, the 'Consortium') and 2,6 % to the Power Workers' Union Trust No 1 and The Society. In addition, the Consortium agreed to acquire BE's 50 % interest in Huron Wind, a wind turbine project in Ontario. The sale of Bruce Power and Huron Wind to the Consortium was completed on 14 February 2003. At the closing, BE received CAD 678 million in cash (including repayment of a CAD 51 million capital call). In addition, BE expects to receive up to CAD 140 million from contingent on the restart of two Bruce A units and escrow accounts.
- 95. The initial proceeds of GBP 275 million, less certain amounts for transaction costs, have been paid into an account approved by and charged in favour of the DTI under the rescue credit facility agreement ('CFA').

# AmerGen

96. Exelon Generation Company, LLC ('Exelon') and British Energy Investment Ltd. have been soliciting proposals for their respective interests in AmerGen with respect to a sale of AmerGen. BE continues to explore options to realise its interest in AmerGen. According to the UK Government, BE will enter into an agreement to sell their interest in AmerGen, subject to regulatory approvals, by 30 June 2003.

# Measure G: local tax deferrals

- 97. A number of local authorities have agreed to defer without interest the payment of business rates owed to them by BE.
- 98. In view of the information forwarded by the UK authorities, these authorities are:
  - Lancaster City Council, in respect of the Heysham plant, for GBP 1 775 240,
  - Shepway District Council, in respect of the Dungeness plant, for GBP 578 524,
  - Hartlepool Borough Council, in respect of the Hartlepool plant, for GBP 447 508,
  - North Ayrshire Council, in respect of the Hunterston plant, for GBP 735 947,
  - East Lothian Council, in respect of the Torness plant, for GBP 765 986.
- 99. In total, as much as GBP 4 303 205 in rates payments were postponed from November 2002 to February 2003.

# 2.3. Market description

100. From a physical point of view, the United Kingdom electricity network is characterised by its segmentation and its small interconnection with other networks.

- 101. The network is broadly made of three distinct geographical subnetworks, managed by different entities, corresponding to E & W, Scotland and Northern Ireland.
- 102. As can be seen in table 5, interconnection between the three subnetworks and between the subnetworks and foreign networks are small. It can also be noted that the E & W subnetwork represents by far the majority of the United Kingdom capacity.

#### Table 5

### Subnetworks generation (1) and interconnection capacity

					(in MW)
Area	Generation capacity	Intercon- nection capacity with E & W	Intercon- nection capacity with Scotland	Intercon- nection capacity with Northern Ireland	Intercon- nection capacity with other EU/EEA networks
E & W	63 500	_	1 200	0	2 000 with France
Scotland	10 100	1 200	_	500	0
Northern Ireland	1 700	0	500	_	600 with the Republic of Ireland

 Source: market survey provided by the UK authorities. Capacities are registered capacities in 2002, and nominal capacity for the interconnectors. Mothballed plants are not included.

103. BE operates only in E & W and Scottish segments, each of which are further described below.

# The E & W segment

- 104. The E & W segment is the one on which competition is the most developed.
- 105. Its commercial organisation is based on a system that was introduced in March 2001 by the Great Britain electricity and gas sector regulator, the Ofgem. This system is known as the new electricity trading arrangements or NETA.
- 106. Under NETA, most of the exchanges are subject to direct bipartite contracts between generators and suppliers, based on estimated energy generation and consumption. The bipartite contracts are complemented by a last hour balancing system operated by NG and a complementary settlement mechanism by which NG charges most of its last minute balancing costs to generators and suppliers that do not fulfil their estimated generation and consumption.
- 107. NETA is such a competitive market organisation that, according to Ofgem its introduction has resulted, in only one year of existence, in a 20 % decrease in baseload electricity prices and a 27 % decrease in peak electricity prices (<sup>10</sup>).

<sup>(10)</sup> Source: Ofgem — The review of the first year of NETA. July 2002.

EN

108. The energy mix in E & W is described in table 6:

Table	6
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#### E & W energy mix (1)

Туре	Capacity (GW)	Share of total capacity in %
Coal	25,9	39,4
CCGT	21,6	32,9
Oil	1,8	2,7
OCGT	1,2	1,8
Pumped Storage	2,1	3,2
Nuclear	9,9	15,1
Interconnectors	3,2	4,9
Total	65,7	100

 Figures for 2002. Capacities are registered capacities, excluding mothballed plants.

- 109. Mothballed plants represent another 6 760 MW capacity. These plants are currently not operating, but are in such a position that they could be brought back to the network, although this operation might take at least some months.
- 110. Table 7 summarises the different operators' capacity market shares.

#### Table 7

E & W capacity market shares (1)

Company	Share in %
PowerGen	15,5
BE	14,1
Innogy	12,5
Edison	3,2
AES	7,5
AEP	6,1
BNFL	4,1
EdF (through interconnector with France)	7,3
Scottish interconnector ( <sup>2</sup> )	2,2
CCGT new entrants	23,9
Other new entrants	2,7

 Figures for 2002. Shares are relative to registered capacities, excluding mothballed plants.

(2) This interconnector is used mostly in the Scotland to E & W direction.

# The Scottish segment

111. At present, there is no such trade system as the NETA in Scotland. As a matter of fact, the Scotlish market is still

under the control of two companies: Scottish Power and Scottish and Southern Electricity, that own most of the electricity generation assets in Scotland except from BE's. These two companies also have a special arrangement with BE, know as 'the nuclear energy agreement', by which they purchase all the electricity generated by BE in Scotland.

- 112. Moreover, at present, prices in the Scottish market are linked to those in the E & W market through a mechanism know as the Scottish administered price mechanism.
- 113. This mechanism should be suppressed within a few years, with the introduction of a unified E & W and Scotland market mechanism, which will be an extension of NETA, and will be know as the British electricity trading and transmission arrangement (BETTA).
- 114. Capacities by company and energy source in Scotland are summarised in table 8:

#### Table 8

#### Capacity by company and energy source in Scotland

Company/plant-energy type	Capacity (MW)
British Energy	2 440
Hunterston — AGR	1 190
Torness — AGR	1 250
Scottish and Southern Energy	2 974
Peterhead — CCGT	1 524
Hydro	1 065
Pumped storage	300
Diesel	85
Scottish Power	4 055
Longannet — coal	2 304
Cockenzie — coal	1 152
Hydro	123
Pumped storage	400
Wind	76
BNFL	196
Chapel Cross – Magnox	196
Others	418
Fife energy	134
Grangemouth	130
Wind	96
Waste	43
Biomass	15
Total	10 141

# III. ASSESSMENT

115. At least part of the measures in question concern issues covered by the Euratom Treaty and therefore have to be assessed accordingly. However, to the extent that they are not necessary for or go beyond the objectives of the Euratom Treaty or distort or threaten to distort competition in the internal market, they have to be assessed under the EC Treaty.

# 3.1. Aid in the sense of Article 87(1) of the EC Treaty

- 116. According to Article 87(1) of the EC Treaty, there is State aid when aid granted by a Member State or through State resources in any form whatsoever distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods and affects trade between Member States.
- 117. Amongst the six restructuring measures, measure D ('significant creditors restructuring package'), measure E ('the new trading strategy') and measure F ('assets disposal') do not derive from public resources and are therefore not to be qualified as State aid under Article 87(1) of the EC Treaty.
- 118. The UK authorities have notified Measure A (funding of nuclear liabilities') as state aid. This measure derives from public resources since the State takes over part of the Nuclear Liabilities, which are costs which should normally be borne by the company. This measure conveys BE with advantages in respect of its competitors. As BE operates in a competitive market, these financial advantages place the companies in a favourable position as compared to its competitors and threaten to distort competition. Furthermore, electricity can flow between the UK and France and the Republic of Ireland. The advantages are therefore likely to affect trade between Member States. Therefore, at this stage, the Commission considers that measure A, which has also to be assessed in view of the objectives of the Euratom Treaty, may be regarded as State aid in the sense of Article 87 (1) of the EC Treaty. It will not enter into force before the restructuring effective date, hence not before the Commission takes a decision on the restructuring plan. It must therefore be regarded as notified within the meaning of Article 88(3) of the EC Treaty.
- 119. As regards measures B ('measures concerning fuel cycle agreed with British Nuclear Fuel Limited (BNFL)'), C ('standstill agreements') and G ('local tax deferrals'), the UK Government claims that these measures in favour of BE do not constitute aid.
- 120. The UK Government argues concerning measure B that the renegotiations of the spent fuel contracts with BNFL have been made at arm's length. According to the UK Government the long term nature and complexity of the spent fuel contracts has meant that they have been continuously subject to supplement or amendment as circumstances dictate and in the normal course of business. The UK Government adds that the contracts have within them 'non-discrimination' and 'hardship' clauses. In respect of the hardship clause, if either party experienced serious difficulty under the contract such

that it would continue to experience significant losses by compliance with the agreement, it could request the other party to consider changes to the agreement. In view of the financial difficulties of BE and considering the fact that BE is BNFL's largest customer, BNFL would have been particularly exposed as a substantial creditor in the event of BE's insolvency. Consequently BNFL expressed itself willing to consider the possible amendment of certain commercial terms in the existing agreements. Therefore, according to the UK authorities, the new contracts between BE and BNFL are not State aid within the meaning of to Article 87(1) of the EC Treaty.

- 121. At this stage of its assessment, the Commission thinks that the renegotiations of the contracts between BNFL and BE can be considered as being State aid. The Commission notes that BNFL is a publicly- owned company. This does not preclude that it might act as a private operator in particular if it can be proved that it acted the same way as another private operator in the sector. However the Commission notes that BE has been attempting to invoke the hardship clause for some period. During 2002, extensive discussions took place between BE and BNFL to see whether changes to the spent fuel contracts could be made, but without conclusion. It is only following the announcement by BE that it had initiated discussions with the UK Government with a view to seeking immediate financial support, that BNFL expressed itself willing to consider the possible amendment of certain commercial terms in the existing agreements.
- 122. Under these circumstances, the Commission holds the preliminary opinion that BNFL has not acted only as a private creditor and that the conclusion of more favourable contracts that what would otherwise have been agreed can be imputed to the State. The Commission therefore thinks that the renegotiation of BE's contracts with BNFL, which has also to be assessed in view of the objectives of the Euratom Treaty, can be considered as containing State aid elements within the meaning of Article 87(1) of the EC Treaty (11). In this regard, it must be noted that the renegotiated contracts have for most of them already entered into force. Should they contain State aid within the meaning of Article 87(1) of the EC Treaty, this State aid would have been put into place prior to Commission authorisation, and should therefore be regarded as unlawful within the meaning of Article 1(f) of Regulation (EC) No 659/1999 (<sup>12</sup>).
- 123. The same reasoning and the same preliminary conclusion as above may apply to the part of measure C that is undertaken by BNFL.
- 124. Measure C provides for a standstill of BE's major creditors debts, be they privately owned or publicly owned.
- 125. It must be noted though that the conditions of this standstill are different for privately owned creditors (known as 'the significant creditors') than for BNFL, the latter accounting for nearly half of the cash saved by BE through measure C.

<sup>(11)</sup> Effect on trade has already been shown (See point 118).

<sup>(12)</sup> Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty (OJ L 83, 27.3.1999, p. 1).

- 126. At this stage of its analysis, in view of the complexity of the contracts and the great differences between the conditions agreed respectively by the significant creditors and BNFL, the Commission would tend to consider that the standstill conditions agreed by BNFL result in a more favourable deal for BE than the standstill conditions agreed by other, privately owned, creditors.
- 127. Should this be the case, then the Commission would consider that the same reasoning and the same preliminary opinion as the one described above for measure B would apply, at least for the part of arrangement with BNFL that exceed in terms of benefit for BE the benefit that it gets from other creditors. As the part of the standstill regarding BNFL has already been put in place, the same reasoning as above concerning the unlawfulness of the aid applies.
- 128. As regards, measure G, the United Kingdom has not established that the local authorities have acted as a private creditor. In view of the absence of interest charged for the deferral, the Commission doubts whether the deferral can escape being qualified as State aid within the meaning of Article 87(1) of the EC Treaty.
- 129. As the deferrals have already occurred, the same reasoning as above concerning the unlawfulness of the aid applies.

# 3.2. Derogation under Article 87(3)(c) of the EC Treaty

- 130. In view of the above, some restructuring measures may or do fall to be assessed as ad hoc aid by the Commission.
- 131. Article 87(2) and (3) of the EC of the Treaty foresee exemptions to the general incompatibility as stated in paragraph 1 therein.
- 132. The exemptions in Article 87(2) of the EC Treaty do not seem to apply in the present case because the aid measures neither have a social character and are granted to individual consumers, nor do they make good the damage caused by natural disasters or exceptional occurrences, nor are the aids granted to the economy of certain areas of the Federal Republic of Germany affected by its division.
- 133. Further exemptions are laid out in Article 87(3)(a), (b) and (c) of the EC Treaty.
- 134. As the primary objective of the aid concerns the restoration of long-term viability of an undertaking in difficulty, only the exemption of Article 87(3)(c) of the EC Treaty could at first sight apply. Article 87(3)(c) provides for the authorisation of State aid that is granted to promote the development of certain economic sectors, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.
- 135. In its Community guidelines on State aid for rescuing and restructuring firms in difficulty (<sup>13</sup>) ('guidelines') the Commission spelled out the preconditions for a favourable exercise of its powers of appreciation.

- 3.2.1. Eligibility of the firm
- 136. In order to be eligible for restructuring aid, BE must qualify as a firm in difficulty as defined in section 2.1 of the guidelines. In particular, it must be demonstrated that the company cannot stem its losses through its own resources or with the funds it obtains from its owner/ shareholders or creditors.
- 137. According to point 5(a) of the guidelines, a firm is, in any event, regarded as being in difficulty, in the case of a limited company, where more than half of its registered capital has disappeared and more than one quarter of that capital has been lost over the preceding 12 months. At 31 March 2001 the total equity shareholders funds of BE stood at GBP 1 075 million. At 31 March 2002 this figure had fallen to GBP 490 million. Thus BE lost more than half its shareholders' capital in the preceding 12 months and falls within the terms of point 5(a) of the guidelines (<sup>14</sup>).
- 138. This situation has resulted from a deterioration of BE's financial situation over the last two years. In the course of 2002, BE made an attempt to refinance itself from the capital markets. In late June 2002 it sought to issue 10 year bonds to the value of GBP 262 million to repay existing debt and for general corporate purposes. This issue was unsuccessful and was withdrawn at the end of July. At the beginning of September, the board of BE determined that in the absence of Government support, the company would no longer be able to meet its liabilities to creditors as they arose and that it would otherwise be insolvent. The Electricity Regulator also warned the Secretary of State for Trade and Industry that there was a serious risk of default by BE under the Balancing and Settlement Code. The above shows that BE was not able to recover through its own resources or with external funds.
- 139. This conclusion is supported by the financial figures of BE.

#### Table 9

# financial figures of BE

	Financial year 2000/2001 (1)	Financial year 2001/2002 (1)	As of 31 August 2002 ( <sup>2</sup> )
Turnover	2 1 2 4	2 049	n/a
Profit after tax (before exceptionals)	- 23	- 39	- 70
Net cash flow	- 11	- 31	- 131
Debt	730	859	995
Net assets	1 168	627	557

(1) Source: British Energy Annual Report 2001/2002.

(2) Source: British Energy Management Accounts, as transmitted by the United Kingdom authorities.

<sup>(&</sup>lt;sup>13</sup>) OJ C 288, 9.10.1999, p. 2.

 $<sup>(^{14})</sup>$  The fact that BE has apparently paid a dividend to shareholders on 16 July 2002 is not relevant in checking whether point 5(a) of the Guidelines is fulfilled.

EN

- 140. BE's last approved annual accounts and management accounts show that, during last year, BE were confronted with the usual signs of a firm in difficulty as defined in point 6 of the Guidelines. It suffered increasing losses, its turnover diminished, its cash flow declined and its debt increased as shown in table 9. All these criteria worsened particularly during the last five months preceding the decision of the board of the company to ask for State aid. In addition, the net asset value also fell considerably. It has to be noted that other signs defined in point 6 of the Guidelines, like increasing stocks, are not applicable due to the specificity of the electricity sector.
- 141. BE therefore qualifies as a firm in difficulty in the sense of section 2.1 of the guidelines and is eligible for restructuring aid.
- 3.2.2. Restoration of viability
- 142. The award of restructuring aid requires a feasible, coherent and far reaching restructuring plan capable of restoring the long-term viability of the firm within a reasonable time span and on the basis of realistic assumptions. According to point 32 of the guidelines, the improvement in viability must derive mainly from internal measures contained in the restructuring plan.
- 143. Point 33 of the guidelines require the Member State to submit a restructuring plan describing the circumstances that led to the company's difficulties and considering scenarios reflecting best-case, worst-case and intermediate assumptions. Point 34 of the guidelines adds that the plan should provide for a turnaround that will enable the company after completing its restructuring to cover all its costs including depreciation and financial charges. The expected return on capital should be enough to enable the restructured firm to compete in the market place on its own merits.

# Position of the UK authorities

- 144. Before presenting the effect of the restructuring plan on the viability of BE, the UK authorities have described the economics of nuclear generation. In assessing the economics of BE's generation activities the notification distinguishes between the avoidable costs and non-avoidable costs of running BE's stations. Nuclear plants are characterised by very high non-avoidable costs and comparatively low avoidable costs, in particular short run marginal costs. According to the UK authorities, since the decision to generate is motivated by the level of avoidable costs and in view of the fact that nuclear plants have the lowest short-run marginal costs, running nuclear plants is economic rational.
- 145. The UK authorities then argue that if BE's restructuring succeeds, the firm will not structurally be loss-making. According to the UK authorities, the plan is able to address the issues at the origin of BE difficulties and lead to long-term viability. In particular, it will improve its trading strategy to try to offset BE unhedged position, relieve BE from part of its very high fixed costs in taking over historic nuclear liabilities and enable it to build sufficient cash reserves to secure its activities.

- 146. The objective of BE's restructuring plan is to restructure BE's costs and liabilities and to put in place a stable capital structure in order for BE to continue to operate in the long term as a financially viable entity. In order for BE to be considered financially viable, the UK Government has assumed that, over a period of time, the company must be profitable, with positive cashflow and able to finance its activities on an ongoing basis.
- 147. The following component parts of the restructuring plan were developed in order to achieve the objective of financial viability:
  - the sale of BE's interests in Bruce Power and AmerGen, in order to build up cash resources within the business, enhance robustness and reduce the scope of the business,
  - reduction in BE's ongoing cost base through the commercial negotiation with existing significant creditors to compromise their historic claims, and enter into standstill agreements until the restructuring is effected, in exchange for a combination of new debt and new equity in BE following completion of the restructuring,
  - the assumption of costs of certain nuclear liabilities by the UK Government; and the commercial renegotiation of front end and back end nuclear fuel contracts with BNFL. The new commercial arrangements with BNFL have also reduced BE's exposure to adverse electricity price movements,
  - implementation of a new trading strategy to reduce BE's exposure to electricity wholesale market volume and price risk.
- 148. The restructuring plan has been developed to take account of a key requirement of financial viability ie the ability of the company to finance its activities. Since the company would expect to face difficulty in obtaining financing from the bank or bond markets, particularly considering the relatively small number of lenders prepared to provide financing to a nuclear generating company, the restructuring plan has to be considered as an alternative to seeking external financing. It foresees the creation and build-up of cash reserves. These cash reserves would be designed to enable the company to enter into electricity trading contracts requiring collateral cover and to sustain cash shortfalls without the need to rely on external funding. Accordingly, the restructuring plan envisages the creation of two reserves: a cash collateral reserve; and an outage and liquidity reserve. Although two separate pools of reserves have been identified, it is intended that these reserves will be fungible giving the ability to call on the outage and liquidity reserve to meet additional collateral requirements and vice-versa. This is to provide additional robustness for BE.
- 149. In the period ending 31. March 2004, the cash reserves are built up through two sources of funds: the standstill agreements (measure C) and asset disposals (measure F), after repayment of the liabilities outstanding under the rescue aid credit facility agreement.

- 150. The UK authorities have developed three financial scenarios to take into account the variables to which BE's financial position is particularly sensitive: generation output and electricity prices. In order to determine the impact on BE's financial position of alternative assumptions for generation output and electricity prices, BE has considered one upside and one downside sensitivity:
  - the bank case assumes output from the nuclear plants of approximately 67 TWh per annum and electricity price forecasts from Accenture,
- the upside case assumes output from the nuclear plants of approximately 67 TWh per annum and electricity price forecasts between the Ilex average and the Ilex low price forecasts,
- the downside case assumes output from the nuclear plants of approximately 65 TWh per annum and electricity price forecasts from the market survey low case.
- 151. Table 10 sets out the projected profit-and-loss accounts in the bank case for the five years ended 31 March 2008 together with the estimated profit and loss for the current financial year.

Five-year forecast period						
	2003	2004	2005	2006	2007	2008
UK nuclear output (TWh)	63,0	67,1	66,3	67,2	68,1	67,2
Income	1 654	1 317	1 301	1 3 3 9	1 372	1 410
Operating costs						
Fuel costs	- 404	- 428	- 332	- 348	- 366	- 380
Materials and services	- 580	- 450	- 436	- 447	- 450	- 462
Staff costs	- 332	- 232	- 261	- 268	- 274	- 280
Capital expensed to P/L	0	- 114	- 100	- 91	- 85	- 84
Depreciation and amortisation	- 280	- 50	- 45	- 45	- 44	- 41
Total operating costs	- 1 596	-1 273	-1174	-1199	-1 219	-1 25
Operating profit (loss)	58	44	127	140	153	164
AmerGen operating profit	48	41	0	0	0	(
Profit before finance charges and tax	106	85	127	140	153	164
Finance charges						
Revalorisation (net)	- 190	-177	0	0	0	(
Net interest and other finance charges	- 65	- 80	- 32	- 22	- 18	- 1
Total finance charges	- 255	- 257	- 32	- 22	- 18	- 1
Profit before tax, minorities, HMG indemnity and exceptionals	- 148	- 172	94	118	135	15
Minority interests (share of PBT)	- 15	0	0	0	0	(
Profit before tax, HMG indemnity and exceptionals	- 164	- 172	94	118	135	15
Movement in HMG-indemnity	0	0	- 39	- 74	- 112	- 8
Profit before tax and exceptionals	- 164	- 172	55	44	22	6
Exceptionals	- 4 232	4 408	- 14	0	0	- 39
Profit before tax	- 4 396	4 236	42	44	22	2
Taxation	389	- 17	0	- 1	0	(
Profit attributable to ordinary shareholders	- 4 006	4 220	42	42	22	2
Dividends	0	0	0	0	0	
Retained earnings	- 4 006	4 220	42	42	22	2

#### Table 10

#### Profit and loss accounts in the bank case until 31 March 2008 (1)

(1) The GBP 4 408 million exceptionals for 2004 correspond to the value of the undertakings by the UK Government under measure A.

- 152. Profit before tax, minority interests, the UK Government's undertakings and exceptional items improves from an estimated loss of GBP 172 million in 2004 to profits of between GBP 94 million and GBP 150 million in subsequent years. The projected losses in 2004 are largely due to the continuing revalorisation charge of GBP 177 million on outstanding liabilities. This revalorisation charge will be reduced from 2004 once the restructuring is agreed and the undertaking can be recognised on the balance sheet.
- 153. Profit before tax is substantially reduced by contributions to the NLF from 2005. However, these contributions are 65 % of cash flows available after debt service and are not payable when either cashflows are negative or transfers to maintain target cash reserve levels are required.
- 154. Exceptional items in 2003 relate primarily to the write-down of fixed assets. The exceptional item in 2008 relates to the expected closure in March 2008 of Dungeness B.
- 155. An analysis of BE's financial projections demonstrates that under the bank case, the restructured business is expected to generate profits and cash flows to service the various stakeholders and that significant contributions are made towards the discharge of uncontracted liabilities and decommissioning liabilities before any return to shareholders. Applying the sensitivity variables lead to the following conclusions. Under the upside case, while the business is very sensitive to changes in output and price assumptions, the clawback arrangements act to constrain returns to shareholders and to provide additional contributions to fund nuclear liabilities. Finally, under the downside case, the level of cash reserves is at an appropriate level sufficient to maintain financial viability.
- 156. On basis of the above financial projections, the UK authorities are convinced that the restructuring plan will lead to the restoration of the beneficiary's long-term viability in a reasonable time-span.

# Commission's preliminary assessment

- 157. The Commission notes that the UK Government has submitted a detailed plan containing a market survey and scenarios reflecting best-case, worst-case and intermediate assumptions, as required by the guidelines.
- 158. The guidelines also foresee that the improvement in viability must derive mainly from internal resources contained in the restructuring plan and may be based on external factors such as variations in prices and demand over which the company has no influence if the market assumptions made are generally acknowledged.
- 159. In view of the restructuring measures proposed, the Commission doubts whether the restoration of long-term viability of BE can be considered as mainly deriving from internal resources and whether the duration of the restructuring plan can be deemed to be as short as possible. The restructuring plan does contain

internal measures such as the introduction of a new trading strategy and the disposal of assets. However other measures depend mostly on external commercial partners and/or of the State; besides they are not limited in time.

- 160. Measure A which relates to the funding of nuclear liabilities constitutes the central point of BE's restructuring plan. Its financing will mostly be at the costs of the State. Besides the costs related to some nuclear liabilities are not limited to a reasonable time-span but can arise until 2086. The UK Government argues that the nuclear liabilities are historically incurred costs which do not have any impact on the ongoing costs of the company. There would be, therefore, no ongoing subsidy to BE. The Commission does not subscribe to that view. If the origin of the nuclear liabilities occurred in the past (spending of fuel and construction of nuclear plants), the costs will have to be carried out in the future. One of the main reason of BE's difficulties was its inability to meet the high fixed costs attached to nuclear generation. Measure A will certainly help the return to viability of BE but this measure can not be considered as internal and limited in its duration. In addition, it seems to relieve BE from part of its obligations under the 'polluter pays' principle.
- 161. Besides, the Commission holds the preliminary view that measure B also involves State aid. This measure does not concern only historical costs but also costs linked to future operations. It is not limited in time either. The Commission therefore doubts that the company can be considered to face the market with its own forces while it benefits from this measure.
- 162. Finally measures B, C and G depend on the participation of external partners The economies realised by BE following these measures are only due to concessions by creditors and suppliers and not by any rationalisation of BE's activities.
- 163. Consequently, the Commission doubts whether the restructuring plan submitted by the UK authorities can be considered as complying with the criteria of the guidelines. In particular, it doubts, at this stage, whether the improvement of viability can be considered as mainly deriving from internal measures and whether the company can be considered to be able to compete on the market place on its own merits once the restructuring is completed. It also doubts whether without the intervention of the State the plan could be considered as providing a turnaround that will enable the company, after completing the restructuring, to cover all its costs. Finally, the intervention of the State in the funding of nuclear liabilities can still last until 2 086 which cannot in principle be deemed to be limited to a reasonable time-span.

# 3.2.3. No undue distortions of competition

164. Point 35 of the guidelines provides that, in order to avoid undue distortions of competition by the aid, 'measures should be taken to mitigate as far as possible any adverse effect of the aid on competitors'.

- 165. Apart from the case where the size of the relevant market at the Community or EEA level or the beneficiary of the aid's market share would be negligible, point 36 of the guidelines indicates that these measures should usually take the form of a limitation of the presence which the company can enjoy on its market after the end of the restructuring period.
- 166. Point 39 of the guidelines states that the form of this limitation depends on the capacity situation on the relevant market. In case there is a Community-wide or EEA-wide structural excess of production capacity, then the compensatory measures must take the form of an irreversible reduction of production capacity. In case there is no such excess, then the Commission may examine whether compensatory measures are required, and may take account of other types of measures than irreversible reductions of production capacity.
- 167. Point 38 of the guidelines also indicates that a relaxation of the need for compensatory measures may be contemplated if such measures were likely to cause a manifest deterioration in the structure of the market, for example by having the indirect effect of creating a monopoly or a tight oligopolistic sitution.

#### Opinion of the UK authorities

- 168. The UK authorities have not offered any form of compensatory measure as part of their restructuring plan.
- 169. They consider that no such measure is necessary, for the following reasons, each of which will be further detailed below:
  - (a) the restructuring aid does not distort competition, hence there is no adverse effect of the aid on competitors, and therefore no need to mitigate such effects;
  - (b) there is no structural overcapacity on the British electricity market;
  - (c) in any event, capacity reductions would be unefficient and more costly for the State.

# a. The restructuring aid does not distort competition

170. The UK authorities base this assertion on the fact that, according to them, BE's nuclear plants' short run marginal cost (<sup>15</sup>) ('SRMC') are the lowest of all of the UK's plants, save for hydro power plants, even without the aid. As a matter of example, the UK authorities present the following comparison of the average BE's nuclear plants' SRMC with some of its competitors'.

#### Table 11

#### Comparison of BE's plants' SRMC with other types of plants' SRMC

	SRMC with base case fuel price scenario for 2004 (GBP/MWh)	SRMC with low case fuel price scenario for 2004 (GBP/MWh)
Average of BE's nuclear plants (pre-restructuring)	4,3	4,3
Drax	13,3	11,0
Cottam Development Centre Limited	15,1	12,7

- 171. Now, according to the UK authorities, in a competitive market like NETA, the decision by operators whether to generate or not at a certain time is based on whether market price is expected to cover their SRMCs. Indeed, if market price exceeds one plant's SRMC, then it is always profitable for this plant to generate, even if the profit generated may not be sufficient to cover all the costs of its corporate structure.
- 172. As the market functions as a kind of auction process, operators are selected by the market according to their rank in the SRMC scale.
- 173. According to the UK authorities, BE's nuclear plants are the first or almost the first in the SRMC scale in E & W, and are only second to hydro capacity in Scotland. As BE's nuclear plants account for 9,251 GW in E & W for a minimum demand of about 19 GW, they would always be selected. As for Scotland, the UK authorities submit that BE's 2,539 GW capacity there, even when added to the 1,3 GW of hydro capacity, would be also well below the 2,2 GW minimum demand, taking into account the outward flow in the Scotland-England interconnector, the capacity of which will be upgraded to 2,7 GW in 2004.
- 174. As far as Eggborough's coal-fired plant is concerned, the UK authorities submit that its position in the SRMC scale prior to any restructuring ensures a 40 % load factor for it. The UK authorities claim that, with this load factor, depending on whether the plan is run for daytime throughout the whole year or for 24 hours a day during the winter only, it would be able to sell at prices between 17 % to 24 % or 2 % to 8 % above its avoidable costs (which are themselves greater that the SRMC).
- 175. All BE's plants would therefore always be covering their SRMC in any event, be the restructuring plan implemented or not. Besides, as the SRMC ranking scale would not be changed (hydro capacity having in any event a virtually null SRMC), the operators that would been selected at any period of the year would be the same whether the plan be implemented or not.

<sup>(15)</sup> That is, those costs that can be avoided by not running the plants and that vary directly with the output generated. They include mainly fuel costs, but also small amounts of other variable costs like hours-dependant maintenance costs.

- 176. The UK authorities conclude from this line of reasoning that the restructuring plan and the aid it contains would have no effect on BE's competitors. They also note that this reasoning would not be affected in the exceptional case where BE would be put under administration. Indeed, they submit that the administrator, as a rational economic actor, would notice that BE's plants' SRMC are covered by market prices, and would therefore operate them anyway.
- 177. The restructuring plan would therefore have no effect on BE's competitors in any event. Thus there would be no need to implement any measure to compensate the effect of the aid on competitors.

# b. There is no structural overcapacity on the British electricity market

- 178. The UK authorities argue that, while judging whether there is overcapacity on an electricity market, one should take account of the fact that, for a number of physical and technical reasons, network operators consider that the total installed generation capacity should always exceed the average cold spell peak demand by a certain amount, know as the 'capacity margin'.
- 179. They submit that the capacity margin in E & W would be at present 20,3 % (<sup>16</sup>), which is not high, both compared to its past values (it has always been above 20 % except in year 1995/1996, where it fell to 18 %) and to values in other European countries (see chart below). Futhermore, the capacity margin is expected to stay within the range 18 % to 22 % within the foreseeable future.
- 180. They also submit that adding mothballed plants in the capacity margin estimate would not significantly change the result, as one should take account of the fact that many mothballed plants could not easily be brought back to the network, and that therefore, if one takes only account of plants that could be brought back in reasonable time and within reasonable expenses, the capacity margin would increase only to 23,4 % (<sup>17</sup>).

## Table 12

Capacity margin in EU countries in 2002 (1)

Member State	Capacity (GW)	Peak demand (GW)	Capacity margin (%)
Austria	17,5	9	94
Belgium	15,5	13	19
Denmark	12,1	6,3	92
Finland	16,6	13,2	26
France	115	77	49
Germany	117	85	38

<sup>(16)</sup> This figure includes the import capacity interconnection with Scotland and France. It does not take into account mothballed plants.

Canada	10	0.0	26
Greece	12	8,8	36
Ireland	5	4,2	19
Italy	74	51	45
Luxembourg	1,5	0,9	67
The Netherlands	20	17	18
Portugal	9,9	7,5	32
Spain	45	37	22
Sweden	30,8	26	18
United Kingdom	73	61	20
EU-15	564,9	416,9	36

<sup>(1)</sup> Charts submitted by the UK authorities. These figures exclude interconnections and count hydrocapacity at full rate.

- 181. Finally, as regards Scotland, the UK authorities submit that the current capacity margin there is about 71 %, but that, if one excludes the interconnector capacity from this figure, as would be consistent with the fact that figures for E & W include this interconnector capacity, then the capacity margin falls to 33 %. They also submit that there is no mothballed capacity in Scotland.
- 182. The UK authorities conclude from the above that there is no significant overall structural overcapacity on the British electricity market, and that there will be none in the foreseeable future. They conclude therefore that there is no need for compensatory measures to the restructuring plan.

# c. Capacity reductions would be unefficient and more costly for the State

- 183. The UK authorities submit that closing nuclear plants would have a number of detrimental effects.
- 184. The first of these aspects would be an increase in electricity prices, that would range between GBP 1/MWh if 2 GW of BE nuclear power was to be removed from the network to GBP 3/MWh if all BE nuclear plants were to be closed. According to the UK authorities, this would result in a cost to customers ranging from about GBP 350 million p.a. if 2 GW of BE nuclear power were to be removed from the network to about GBP 1 000 million if all BE nuclear plants were to be closed.
- 185. The second aspect would be an increase of the nuclear liabilities cost to the tax payers. This increase would be due to the fact that BE would not be able to fund part of these liabilities out of its cashflow and to the fact that some of these liabilities would have their net amount increased, as they would have to be either processed earlier than foreseen, in already fully booked reprocessing facilities or to be stored in an expensive way for years before they are managed.

<sup>(17)</sup> This figure also includes the import capacity interconnection with Scotland and France. It includes the Deeside, Killingholme, Tilbury and Grain mothballed plants.

- 186. The third aspect would be a detrimental impact on environment, as a large amount of  $CO_2$  free generation capacity would be removed from the network. The UK authorities submit that from 5,2 to about 30,9 <sup>(18)</sup> about more mtpa of  $CO_2$  would be released in the atmosphere.
- 187. To end with, the closure of nuclear capacity would also have a detrimental impact on the diversity of fuel supply in Great Britain, thus increasing heavily the UK's dependence of gas (and to a lower extent coal).

Commission's preliminary analysis

- 188. First of all, the Commission shares the view that the UK electricity network is largely independent from the rest of the Union's network. At this stage, it seems that the relevant geographic market may be regional or national and may be restricted to the UK electricity market in application of footnote 20 of the guidelines (<sup>19</sup>). The Commission notes that this market is not negligible at Community and at EEA level, nor is BE's share of it negligible. Point 36, second sentence, of the guidelines therefore does not apply to the case.
- 189. The Commission also notes that the reduction or limitation of BE's presence on the market is not likely to create a monopoly or a tight oligopoly on the UK electricity market, in view of the great level of competition on the market induced by the existence of the NETA in E & W, which is by far the largest part of the UK electricity market.
- 190. At this point of its analysis, the Commission does not see any other reason to believe that such a reduction or limitation could create any other sort of 'manifest deterioration in the structure of the market'. The Commission therefore doubts that point 38 of the guidelines could be applied to the case.
- 191. In view of the above, the Commission must consider the effect of the aid on competitors and examine the necessity to require compensatory measures to mitigate this effect, and the form these measures should take, if any.

# a. Impact of the aid on competitors

- 192. The Commission takes good note of the UK authorities' reasoning as regards the impact of the restructuring plan on BE's competitors.
- 193. In particular, at this stage of its analysis, the Commission considers that it is indeed likely that BE's nuclear plants' rank in the SRMC scale will not be affected by the aid.
- 194. However, the Commission has doubts as to whether one can conclude from this that the aid has no impact on competitors.
- 195. Firstly, the Commission considers that, even if the ranking of BE's plants in the SRMC scale is likely not to be affected by the aid, the value of their SRMC itself will be diminished as the consequence of the more

favourable contracts for the supply of fuel concluded with BNFL.

- 196. As the price at which generators sell their electricity is linked to their costs, and in particular their SRMC, such an effect on BE's SRMC may result in a decrease in electricity market prices, especially if one takes account BE's rather large market share.
- 197. The Commission considers that such a decrease in electricity prices would have a direct effect on competitors. Indeed, even if their ranking in the SRMC scale and hence their ability to generate would not be affected by the aid as the UK authorities claim, the profit they can make out of the electricity they sell would be decreased, thus affecting at least their cash flow, if not their viability.
- 198. In addition, the restructuring package is likely to have an impact on the break-even point of BE and may place BE in a more favourable situation vis-à-vis its competitors. In order to be able to assess the extent of the impact of the aid on BE's competitors, the Commission would need data on the break-even point of BE before and after the restructuring in comparison with the break-even point of its main competitors.
- 199. On the basis of the above, the Commission doubts that it can be held that the restructuring aid has no effect on BE's competitors. It is therefore necessary to examine the need for compensatory measures.
- 200. In order to analyse whether compensatory measures are mandatory or preferable, and what form they should take, the Commission must first examine whether there is a structural overcapacity on the relevant market.

# b. Existence of structural overcapacity on the relevant market

- 201. At this stage of its analysis, the Commission considers that, in view of the physical specificity of electricity, like the fact that it cannot be stored, and of the enormous disturbance that electricity black-outs would create both for the economy and to citizens' everyday life, it is relevant to consider that the notion of overcapacity for the electricity market should include a sufficient capacity margin such as to allow the network operator to satisfy the demand under any reasonable scenario of peak demand that can be expected to arise in winter.
- 202. The Commission also takes good note that, in this respect, the value of the capacity margin in E & W, which represents by far the majority of the UK market, is not particularly high, both as compared to historical values and to values in other countries. However, the Commission also notes that there seems to be little room to decrease the capacity margin to the slightly lower value it had in 1995/1996 or to the values it has in a few other EU Member States.
- 203. The Commission therefore considers that, at this stage of its analysis, although it seems that the capacity margin on the UK electricity market is not particularly high as compared to values observed elsewhere, it cannot totally exclude that there is no structural overcapacity on this market. This preliminary conclusion would not be affected in view of table 12 if overcapacity had to be assessed at EU level.

<sup>(18)</sup> Depending on whether only 2GW of BE nuclear capacity or the whole BE nuclear capacity is withdrawn from the network.

<sup>(&</sup>lt;sup>19</sup>) The reasoning which follows could also apply if E & W and Scotland had to be considered as the relevant geographic markets in the present case.

# c. Relevance and form of potential compensatory measures

- 204. The guidelines state that, where there is a structural overcapacity on the market, compensatory measures are mandatory for a restructuring aid to be approved, and should take the form of an irreversible reduction of production capacity. In view of the above, the Commission notes that it cannot exclude the possibility that a slight structural overcapacity exists. In case it would, the Commission notes that the absence of compensatory measure in the restructuring plan as submitted by the UK authorities would certainly be incompatible with the guidelines provisions.
- 205. If, on the other hand, there is no structural overcapacity on the market, then the Guidelines provide that the Commission 'will nevertheless examine whether compensatory measures should be required'. In this case, however, compensatory measures do not have to take the form of irreversible reduction of production capacity, but may take other forms, like for instance the transfer of assets to other operators. In any event, the type of compensatory measures has to be determined depending on the effects of such measures on the competition situation.
- 206. In the present case, in view of the high degree of competition on the market, and of the very large amount of aid to be granted, the Commission doubts that the aid could be approved without any compensatory measure being offered (<sup>20</sup>).
- 207. The Commission acknowledges that such compensatory measures would however have to take account the need to preserve the necessary capacity margin in the UK.
- 208. To end with, the Commission takes note of the UK authorities' arguments as regard the inefficiency of compensatory measures in the form of closure of nuclear plants in particular as regards environmental purposes and security of supply.
- 209. The Commission however has doubts that these arguments can be considered as relevant in the present context. Besides, the Commission notes that they apply only to nuclear plants, and therefore not to Eggborough's coal-fired plant, and that they apply only to compensatory measures in the form of plant closures, and therefore not to other forms of compensatory measures. To end with, the Commission considers that the need to adopt State support measures to address those specific policy considerations has not sufficiently been argued, developed and proved by the UK authorities in their notification.

# 3.2.4. Proportionality to restructuring costs and benefits

210. The amount and intensity of the aid must be limited to the strict minimum needed to enable restructuring to be undertaken and must be related to the benefits anticipated from the Community's viewpoint. Therefore, the investors must make a contribution to the restructuring plan from their own resources. Moreover, the way in which the aid is granted must be such as to avoid providing the company with surplus cash which would be used for aggressive, market-distorting activities not linked to the restructuring process.

# Opinion of the UK authorities

- 211. In their notification, the UK authorities write that the estimates of the value of the aid are subject to considerable uncertainty. They refer in particular to the aid related to the discharge of nuclear liabilities. Both the costs of the nuclear liabilities relieved and BE's contribution to those costs are highly uncertain. The discharge of the liabilities will occur over extremely long time periods. For example, BE would not expect to begin dismantling an AGR until at least 85 years after a station has ceased generating, while spent fuel management must continue indefinitely. In addition, there are many tasks, including the decommissioning of AGRs, for which there is to date no direct experience.
- 212. The UK Government has therefore notified the classes of liabilities and expenditure required to discharge those liabilities rather than the current estimated values of the cost of discharging those liabilities. The form of the aid is fixed and cannot be altered going forward. In the short term, the cost to the UK Government is estimated to average between GBP 150 million to GBP 200 million per annum for the next 10 years and to fall thereafter. They come to a net present value of GBP 3 298 million and have estimated the future cash payments as being equal to GBP 10 402 million. The UK authorities have added that despite the uncertainty relative to the amount, the aid can be considered limited to the minimum necessary for the following reasons. When BE's financial difficulties became acute last autumn, the UK Government was faced with three possible scenarios:
  - a solvent restructuring of BE,
  - sale of stations to a third party, and
  - UK Government ownership following insolvency proceedings.
- 213. In assessing these scenarios, the UK Government had the following objectives:
  - the need to preserve safety of the nuclear power stations and the safe management of the nuclear liabilities,
  - maximising the value of the stations to the economy over the rest of their useful lives, as well as their value as generating capacity which avoids  $CO_2$  emissions, and

- minimising the amount of aid.

<sup>(&</sup>lt;sup>20</sup>) In this sense measure F cannot be considered as a compensatory measure in line with point 39 of the guidelines.

- 214. The aid value is difficult to precisely estimate. According to the UK Government, the latter has sought to balance the need to minimise the total amount of aid with the need to ensure financial robustness against plausible downside risks, such as price movements or unplanned station outages. The UK Government has further sought to avoid the creation of perverse incentives on the management of the business through the removal of liabilities and has put in place more robust arrangements for the long-term management of those liabilities. The UK Government has also acted to avoid the costs and disruption to the business of insolvency.
- 215. Finally, the UK Government argues that since the aid related to the discharging of nuclear liabilities only relieves historically incurred costs, BE carries all its ongoing costs. There is, therefore, no ongoing subsidy to BE. It adds that the opted out solution takes into account the existing tension between limiting the amount of aid and ensuring robustness to downside risks. The means by which that tension is resolved is the provision for BE to make payments under the clawback mechanism, in perpetuity, normally equating to 65 % of its free cash flow into the NLF. The objective of this provision is to ensure that BE's contributions to the NLF are increased if BE's financial performance improves.
- 216. Under the arrangements for the operation of the NLF, the UK Government proposes to put in place a series of controls and incentives to ensure that BE runs its nuclear stations as though it were exclusively responsible for the discharge of the nuclear liabilities notwithstanding the aid package. These controls and incentives should ensure, for example, that BE is not enabled to make changes to operating practices which increase operating revenues but result in higher nuclear liabilities and thus additional expenditure borne by the UK Government.

# Commission's preliminary analysis

- 217. The Commission is of the opinion that it is not possible to conclude at this stage that the aid is limited to the minimum within the meaning of points 40 and 41 of the guidelines. As previously said the Commission doubts that Measures B, C and G do not contain any aid element and cannot conclude that the aid package by the UK Government is limited to measure A (nuclear liabilities). Without knowing the extent of the aid package, it is therefore not possible to conclude that the aid is limited to the minimum.
- 218. Besides, as laid down by the UK Government, the value of measure A is difficult to estimate since both the costs of the nuclear liabilities relieved and BE's contribution to those costs are unknown. For the liabilities related to spent fuel, the totality of the costs will be taken over by the UK Government. The clawback mechanism which determines BE's participation in the funding of the new NLF relates to the decommissioning liabilities and contains a certain uncertainty as to the level of funding by BE and the level of shortfall eventually to be covered by the UK Government.

219. Consequently, in particular, in view of the uncertainty as regards their extent and value, the Commission can not determine whether the aid amounts granted are proportional to the costs and benefits of the restructuring.

# 3.2.5. Full implementation of the restructuring plan

220. The company must fully implement the restructuring plan submitted to the Commission. The UK Government has committed to fully implement the restructuring plan if approved.

# 3.2.6. Monitoring and annual report

221. If the aid package is approved, the UK Government is committed to providing to the Commission a report not later than six months after the approval of the aid package and thereafter annual reports so that the Commission can monitor BE's progress until the position has stabilised to a point at which the Commission no longer feels the need for further reports.

# 3.2.7. Other provisions of the Guidelines

222. Finally, given the large amount of the aid, the sector concerned, and other specificities of the case, the Commission doubts if it should not make use in particular of points 42 and 44 of the guidelines which have not been referred to by the UK authorities.

# 3.3. Euratom Treaty

- 223. According to the UK authorities, the aims of the measures are, amongst others, to preserve the safety of nuclear power stations, to ensure the safe management of the nuclear liabilities, to enhance security of supply by maintaining diversity of fuel sources in Great Britain as well as to avoid carbon dioxide emissions.
- 224. It appears that these objectives are pursued by the Euratom Treaty. This Treaty was agreed notably to guarantee a certain security of supply (<sup>21</sup>) while at the same time creating the conditions of safety and security. As it was confirmed by the Court of Justice, nuclear safety is a Community competence which must be linked to the protection against the dangers arising from ironising radiations, laid down in Article 30, Chapter 3, Euratom Treaty, relating to health and supply (<sup>22</sup>).
- 225. The Commission needs to check whether the measures may be necessary to fulfil these objectives and whether they distort or threaten to distort competition in the internal market. Article 305(2) of the EC Treaty lays down that, 'the provisions of this Treaty shall not derogate from those of the Treaty establishing the European Atomic Energy Community'. However, at this stage, the UK authorities have not sufficiently explained whether and how the measures take account of them.

<sup>(21)</sup> See in particular, its recital 3 where it claims, 'Resolved to create the conditions necessary for the development of a powerful nuclear industry which will provide extensive energy resources, ...'.

<sup>(&</sup>lt;sup>22</sup>) Ruling of the Court of Justice dated 10 December 2002, Case C-29/99.

# IV. CONCLUSIONS

- 226. In the light of the foregoing considerations, the Commission, acting under the procedure laid down in Article 88(2) of the EC Treaty, requests the United Kingdom to submit its comments and to provide all such information as may help to assess the aids/measures, within one month of the date of receipt of this letter. It requests your authorities to forward a copy of this letter to the potential recipient of the aid immediately.
- 227. The Commission wishes to remind the United Kingdom that Article 88(3) of the EC Treaty has suspensory effect, and would draw your attention to Article 14 of Council Regulation (EC) No 659/1999, which provides that all unlawful aid may be recovered from the recipient.
- 228. The Commission warns the United Kingdom that it will inform interested parties by publishing this letter and a meaningful summary of it in the *Official Journal of the European Union*. It will also inform interested parties in

the EFTA countries which are signatories to the EEA Agreement, by publication of a notice in the EEA Supplement to the *Official Journal of the European Union* and will inform the EFTA Surveillance Authority by sending a copy of this letter. All such interested parties will be invited to submit their comments within one month of the date of such publication.

229. This decision is without prejudice to the application of the Euratom Treaty. As already stated, the measures in question, notably measures A and B, have to be assessed in view of the objectives of the Euratom Treaty and in view of its possible impact on competition in the internal market. Therefore, the Commission requests the United Kingdom to provide all such information as may help to assess the measures, notably measures A and B, in the light of the objectives of the Euratom Treaty and in view of its possible impact on competition in the internal market.'