



The restructuring of British Energy

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 943 Session 2005-2006 | 17 March 2006

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The restructuring of British Energy

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This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

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14 March 2006

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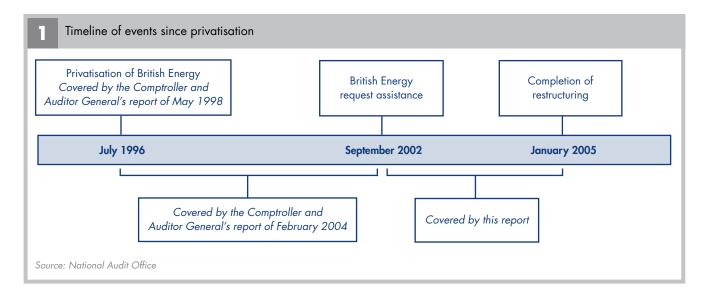
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EXECUTIVE SUMMARY



1 British Energy was privatised in 1996. In 2002, the price of electricity fell and on 5 September 2002, the Company applied to the Department of Trade and Industry (the Department) for financial assistance. In November 2002, the Department agreed to provide financial assistance with the proviso that the Company's financial arrangements would be restructured.

2 In September 2004, the Committee of Public Accounts¹ analysed how effectively the Department had managed the risks that privatisation had left with it up until the Company ran into financial difficulties. This report deals with the financial aid that the Department gave to British Energy and the terms of the restructuring of British Energy².



¹ Details of the Committee of Public Accounts report and the Government's response are at Appendix 7.

² The intention to produce this report was set out in paragraph 4 of the National Audit Office's report *Risk Management: The Nuclear Liabilities of British Energy plc*, HC 264 Session 2003-04, 6 February 2004.

Overall conclusion

3 Normally, when private companies get into difficulty the Department's policy is not to intervene on the argument that United Kingdom productivity goes up if relatively inefficient firms are allowed to close and this process should not be inhibited by government action. In this instance, the Department decided to intervene because, in its assessment, unplanned closures of British Energy's nuclear power stations would have had safety implications and put electricity supplies at risk.

4 After British Energy approached the Department for financial assistance in September 2002, the Department had to respond quickly. The Department decided to support the restructuring of the company, in preference to allowing it to fall into administration but kept the latter as an option should the restructuring fail. The Department's decision was underpinned by an extensive review of both options.

5 As part of its review the Department recognised that to ensure a viable company, it would need to take responsibility for a large proportion of the Company's liabilities, thereby taking back the responsibility it had transferred at the time of privatisation. This also reflected the fact that the liabilities would have fallen to it anyway in the event of the Company's liquidation. The Department, however, did not have an up-to-date estimate of what those liabilities to be funded through a Nuclear Liabilities Fund might be. Estimates of key elements of British Energy's liabilities had not been updated (other than through indexation) since privatisation. The focus for the Department was to agree a restructuring deal whereby British Energy's contributions to meet those liabilities were maximised without jeopardising the Company's long-term viability. As the Department had already decided to take on a large proportion of the liabilities, and the fact that seeking new estimates would have been time consuming to produce, it decided that it would not require the Company to provide updated estimates of the liabilities during the restructuring as this would not have changed its overall analysis. As part of the restructuring agreement the Department has now put in place arrangements for the estimates of the liabilities to be updated at least every five years. New estimates, yet to be validated by the Nuclear Decommissioning Authority, were published by British Energy in February 2006 and resulted in a £1,165 million increase in the liabilities to £5,287 million.

The Department's efforts during restructuring focused 6 on securing the maximum ongoing contribution from the Company towards meeting the liabilities whilst reducing the risk that these contributions could put the Company in jeopardy in future. The mechanism put in place was a cash sweep³ plus a fixed annual contribution. The cash sweep requires the Company to make a bigger contribution to the Nuclear Liabilities Fund when it is doing well. In the 12 months following completion of restructuring in January 2005, the wholesale electricity price rose sharply and the Company's share price more than doubled. The Company's creditors who under restructuring acquired most of the shares in British Energy will have benefited significantly from the high share price. The Nuclear Liabilities Fund should also benefit from contributions from the cash sweep at a level higher than the most optimistic scenarios considered by the Department and its advisers during the restructuring process. The electricity market has, however, proved to be particularly volatile over recent years. The Nuclear Liabilities Fund is therefore left particularly exposed to British Energy's financial and operational performance.

7 British Energy remains a company wholly-owned by private shareholders but its actions will continue to have significant implications for the public purse. This therefore places an onus on the Department to monitor closely the Company's financial and operational performance and to be prepared to act quickly and effectively to manage its interest. Day-to-day responsibility for monitoring various aspects of the Company's performance currently lies with a number of teams within the Department⁴, reflecting the need to bring to bear financial and nuclear expertise. There is, however, in our view, a real risk that information learned by the different teams is not shared quickly and evaluated and that insufficient staff resources are committed to safeguarding the taxpayer's significant interest. To assist its management of the taxpayer's interest, the Department will need to prepare sufficiently comprehensive contingency plans to enable it to act quickly under the range of scenarios that might arise.

³ The cash sweep is equivalent to 65 per cent of the Company's available cash flow each year. The Department can convert the cash sweep into British Energy shares.

⁴ Responsibility within the Department for the monitoring of British Energy's financial and operational performance and for making decisions about possible conversion of the cash sweep rests with Shareholder Executive, created in 2003 to improve the Government's performance as a shareholder in the businesses in which it has a stake.

Detailed conclusions and findings

On the Department's role in the restructuring of British Energy

8 When British Energy approached the Government for help on 5 September 2002, the Department decided to act to protect electricity supplies and maintain nuclear safety:

- Maintaining electricity supplies. National Grid Transco, the electricity transmission network operator, advised the Department in September 2002 that losing output from all of the Company's stations in England and Wales would lead to power cuts and forecast demand exceeding supply by 20 per cent, by January 2003.
- Maintaining nuclear safety. Because of capacity constraints for the receipt, storage and reprocessing of spent fuel, British Energy's nuclear stations would have needed to have remained fuelled for many years to allow control of safety critical functions (such as reactor power levels, cooling and containment) to be maintained. In addition, before September 2002, the Nuclear Installations Inspectorate had raised a number of concerns with the Department about the Inspectorate's ability to regulate British Energy effectively should the Company fall into administration. In administration, until the Company was formally dissolved it would continue to be the site licensee and would remain responsible for ensuring compliance with the licence.

9 The Department commissioned analyses to inform its strategy for supporting British Energy. Often when companies are failing, potential purchasers have to decide whether to make an offer prior to administration or wait until the company fails in the hope of paying less for it or its constituent assets. In this case, the Department's objective was to ensure that the Company continued to

function as a private company to maintain the generation of electricity. Analyses undertaken by the Department's advisers (Figure 2) indicated that the cost to the Department of the Company going into administration was likely to be broadly comparable to the cost of supporting the restructuring of the Company.

10 But the Department and its advisers considered that administration also carried greater risks which they did not think possible to quantify. In particular the Department's advisers thought it likely that the Company's investment of £410 million in Bruce Power, a business that leased Canadian nuclear stations, would be lost in administration because of conditions attached to the lease, thereby reducing the funds available for restructuring the Company. In addition, the Nuclear Installations Inspectorate had raised a number of concerns including the risk of low morale and loss of staff at nuclear stations as a result of the uncertainty arising in the event of insolvency. The Department therefore opted to support a restructuring, but continued to maintain administration as an option until restructuring was completed.

2 Comparison of the costs to the taxpayer of the restructuring of British Energy with letting the Company go into administration, November 2002

	Restructuring £m	Administration £m	Difference £m
November 2002			
Most optimistic assumption of costs	1,423	1,172	(251)
Most pessimistic assumption of costs	2,463	2,533	70

Sources: Department of Trade and Industry, Credit Suisse First Boston, Deloitte, National Audit Office

The Department tested the robustness of the new 11 financial structure proposed by the Company against a range of assumptions. The Department concluded that to ensure the Company's viability it would need to assume responsibility for the Company's contracted spent fuel liabilities⁵. This decision removed a significant element of the Company's fixed costs thereby reducing its exposure to movements in the wholesale price of electricity. The Department also decided that the Nuclear Liabilities Fund would assume responsibility for the Company's uncontracted liabilities, as well as its decommissioning liabilities. With assistance from Grant Thornton, the National Audit Office reviewed the financial projections produced by the Department's advisers which supported these decisions. These projections, based on assumptions about a variety of future electricity prices and output, and conducted between September and November 2002, indicated that the Company would not have been viable without the removal of these nuclear liabilities.

12 The cost of restructuring was shared between shareholders, creditors and the taxpayer. Shareholders lost 87 per cent of the value of their shareholding between the Company's financial collapse and relisting although they would have received nothing if the Company had gone into administration. The Company's main creditors agreed to extinguish their debt claims against British Energy in return for new bonds and 97.5 per cent of the share capital in the restructured Company. When these creditors signed up to the restructuring plan in October 2003, those who took equity in the new company effectively lost some £289 million⁶ compared to their position before the Company's approach to the Department in September 2002. But by the date of the relisting of the Company on 17 January 2005 their holding had risen in value to £1,871 million compared to the £834 million of loans to British Energy they had made before the Company's collapse. As shown in Figure 3, as at 28 February 2006, all the three main parties to the restructuring have seen a further increase in the value of their holdings in British Energy following the rapid rise in the Company's share price after January 2005. For the taxpayer, the rise in the share price illustrates the potential value of the cash sweep, but also the significant sensitivity of any potential surplus or deficit to the Company's performance and the market conditions within which it operates.

The Department made effective use of the advice 13 provided by a range of advisers but there were weaknesses in the procedures used by the Department to procure this expertise. Between September 2002 and January 2005, the Department paid £29.1 million in fees to its advisers, in addition to its own administrative costs of £2.5 million. The Department subsequently negotiated an agreement with British Energy for a contribution to its advisory costs of £16.5 million, resulting in a net cost to the Department of £15.1 million. The use of advisers with sufficient and relevant expertise was important, given the complex nature of restructuring and the level of expertise available to British Energy and to the Company's banks and bondholders. Of the four main firms of advisers only one was appointed through a competitive process for the work on British Energy. In the other three cases the Department extended existing contracts on the basis that the need for urgent advice and commercial sensitivity precluded them from putting this work out to competition. In each of the three cases the fee rates were reviewed once during the two and a half years the work was being undertaken. In the case of the Department's contract with Credit Suisse First Boston, the actual fees paid significantly exceeded the capped amount put in place on the original contract.

14 The Department, and the Shareholder Executive in particular, are regular users of financial and legal advisers. Where possible, the Department should employ the approach which it has now adopted for the appointment of legal advisers and which is widely used by some other departments, of entering into standing agreements with a number of firms appointed on a competitive basis and with fee policies agreed in advance which could be called upon to provide advice. It is also important particularly on long contracts that fee rates are regularly reviewed.

⁵ Under the restructuring agreements the Department took responsibility for liabilities under existing or "historic" contracts for spent fuel management. Liabilities and other monetary amounts shown in this report, which may arise over many years, are discounted to present values using a real discount rate of 3.5 per cent unless stated.

⁶ The difference between the market value of creditors' holdings at 3 September 2002 and 1 October 2003, the day that creditors formally agreed to restructuring.

	Before approach (3 September 2002) £m	At relisting (17 January 2005) £m	Current valuation (28 February 2006) £m
Shareholders ¹	307	66	107
Creditors ²	834	1,871	3,867
Taxpayer:			
Estimated contributions from British Energy ^{3, 4}	-	3,821	7,753
Estimated nuclear liabilities assumed/underwritten ⁵	-	(4,054)	(5,287)
Estimated net value/(liability) to the taxpayer arising from nuclear liabilities ⁶	-	(233)	2,466

Sources: National Audit Office, Grant Thornton analysis of Departmental Accounts and data

NOTES

1 The current valuation is based on some 569 million shares in issue. The valuation at relisting includes shares valued at £37 million and warrants valued at £29 million.

2 The value to creditors at 28 February 2006 consists of 97.5 per cent of the company's equity (currently valued at £3,428 million) and British Energy bonds (currently valued at £439 million).

3 Estimated contributions from British Energy at 28 February 2006 consist of: the value of the cash sweep (currently estimated at £6,495 million), British Energy bonds (valued at £283 million), the value of investments held in the Nuclear Liabilities Fund (valued at £672 million) and future fixed payments relating to the cost of decommissioning and for each tonne of fuel loaded into the Sizewell B reactor (estimated at £303 million). The estimated value of the cash sweep element at 28 February 2006 derives from applying the Company's share price of £6.17 on that day to 65 per cent of the number of shares that would be in issue if all of the cash sweep was converted to shares. This estimate assumes any conversion and sale does not result in a dilution of shareholder value, whereby a reduction in the Company's cash sweep liability would lead to a commensurate increase in equity value. Over time the value of the cash sweep increases and decreases with movements in the share price.

4 If the Department decides to convert and sell all or part of the cash sweep, British Energy will issue a number of shares to the Nuclear Liabilities Fund, calculated with reference to a formula in the Liabilities Agreements and credited as fully paid. Voting rights attached to these shares are limited so long as they are held by the Nuclear Liabilities Fund (paragraph 3.5).

5 Estimated nuclear liabilities consist of the contracted spent fuel liabilities assumed by the Department (currently estimated at £2,573 million) and the uncontracted (an estimated £350 million) and decommissioning (an estimated £2,364 million) liabilities assumed by the Nuclear Liabilities Fund. Estimates for uncontracted and decommissioning liabilities had not been updated (other than through indexation) since privatisation. The estimates above are based on the estimates published by British Energy in February 2006, which have yet to be vaildated by the Nuclear Decommissioning Authority, and are adjusted for example for the use of a consistent discount rate.

6 Before British Energy's approach to the Department in September 2002 the Company was responsible for meeting all of its nuclear liabilities, however the taxpayer retained residual liability should the Company fail.

7 The table does not include the benefit to the taxpayer of the renegotiation of British Energy's contracts with British Nuclear Fuels plc, estimated by British Energy at £714 million, the cost of the standstill agreement to British Nuclear Fuels plc, amounting to £452 million, and the net administrative cost to the Department, amounting to £15.1 million.

8 The current valuation includes market valuations at 28 February 2006, or at 31 January where these are not available; other amounts are stated at December 2005 prices. Valuation at relisting includes market valuations at January 2005 where these are available; other amounts are stated at January 2005 prices. Valuation at September 2002 includes market valuations at September 2002.

On the Department's role since restructuring

15 Under the restructuring agreement reached with the Company, the Department will play no direct role in approving the Company's commercial strategy. However, the Department has placed limits on British Energy's actions through conditions attached to the Liabilities Agreements⁷ reached with the Company and in covenants attached to the British Energy bonds (some of which are held by the Nuclear Liabilities Fund). The Department has

also strengthened its ability to monitor and evaluate British Energy's performance with a right of access to financial and operational information – prior to September 2002 the Department had no right of access. In the months following restructuring the Company supplied financial information to the Department on a regular basis, including a rolling 18-month cash flow forecast, and officials had met representatives from the Company regularly to review performance.

7 On the completion of restructuring British Energy, the Department and other parties entered into a number of legally binding agreements collectively referred to as the Liabilities Agreements, governing amongst other things the nuclear liabilities assumed by the Department and the Nuclear Liabilities Fund and the Company's contributions to the Fund. More details are provided in Appendix 5.

Although the Government sometimes appoints a 16 director, as in the case of Network Rail, the Department considered and rejected the idea of appointing a director to British Energy's Board on the grounds that once appointed a director's duty is to the company and not to the appointing body. The Department also thought that the presence of a Government-nominated director could lead to questions about the integrity of the Department's policy-making and regulatory functions. The Department's intention is that the restrictions imposed by the various agreements and covenants, together with the Company's agreement to follow a "prudent" trading strategy, will protect the taxpayer's exposure to the Company's performance whilst not interfering with the Board's ability to run the business.

17 The Department's investment policy leaves the Nuclear Liabilities Fund highly exposed to British Energy's financial performance. Normally, it is good practice that funds built up to meet long term liabilities, for example pension funds, rely on a diversified portfolio of investments. In the case of the Nuclear Liabilities Fund, the Fund's main source of income will come via the cash sweep. Of its existing capital, worth £787 million at 31 March 2005, £275 million was accounted for by British Energy Bonds issued at restructuring, other than this the Fund is only permitted to invest in government gilts (because of HM Treasury rules governing investments by public sector bodies), which prevents further diversification of the Fund through other investments. The existing equity investments of the Nuclear Liabilities Fund will be converted to gilts over the next three years. The Department does have power to convert part or all of the cash sweep into ordinary shares in the Company which could then be sold. This would reduce the Fund's dependence on the Company's performance but the Department would need to take account of the effect this would have on its ability to influence the Company if it needed to. Given the risks involved, the Department needs to develop appropriate contingency plans to help it oversee the Fund's interests and act quickly should it need to.

The liabilities to be taken on by the taxpayer remain 18 subject to uncertainty. The size of the liabilities to be met from the assets of the Nuclear Liabilities Fund will be affected by such factors as the day-to-day operation of the power stations, the expected operating life of each station and the developing knowledge of how to undertake the task of decommissioning and the timescale involved. At the time of restructuring the estimate of liabilities at privatisation in 1996 had not been updated, other than through indexation. As the Department had already decided to take on a large proportion of the liabilities and had judged that seeking new estimates would be time consuming it decided that it would not require the Company to provide updated estimates of the liabilities during restructuring. The Liabilities Agreements with the Company now provide for the liabilities to be re-valued at least once every five years. The Company has recently released new estimates, although these are still subject to review by the Nuclear Decommissioning Authority.

19 The Nuclear Decommissioning Authority has responsibility for ensuring certain of the terms of the Liabilities Agreements⁸ are adhered to. Removal of British Energy's nuclear liabilities gives the Company weak incentives to reduce or to minimise the effect of its activities on them. The Liabilities Agreements therefore specify arrangements which are intended to minimise the extent to which the Company's operational decisions increase the liabilities to be met by the taxpayer. The Agreements also allow for the Authority to review and approve British Energy's decommissioning plans and for the Department to acquire the stations to decommission. The Authority currently has one full-time official responsible for its work on British Energy, supported by other Authority officials during peak working times. When British Energy's power stations move towards being decommissioned the Authority will need to make provision within its business plan to ensure sufficient staff are recruited to monitor the Agreements in the medium term. The Department has made provision within the Liabilities Agreements for the Company to receive incentive payments to reduce the liabilities of the Nuclear Liabilities Fund. However, by January 2006, this facility had yet to be used. The Department will need to ensure that it has sufficient procedures in place to spot potential opportunities for reducing liabilities and make use of incentives where this is appropriate. The Department reported that the incentives and the associated payment to British Energy will be negotiated on a case-by-case basis.

20 Overall responsibility for managing the taxpayer's interest in British Energy lies with a senior official within the Department. However, day-to-day responsibility for evaluating the Company's performance, and assessing market and other factors that might have an impact on the taxpayer's interest, lies with a number of different teams:

- responsibility for managing the risks to the taxpayer arising from British Energy's financial performance lies with a senior official within the Shareholder Executive;
- responsibility for monitoring the liabilities arising from British Energy's activities lies with the Departmental team within the Department's Energy Group with responsibility for liaising and monitoring the work of the Nuclear Decommissioning Authority;
- responsibility for wider energy policy sits in various units in the Department's Energy Directorate changes in the Department's energy policy can have a direct impact on the net liabilities likely to be borne by the taxpayer.

Each of these teams currently has appropriate expertise to monitor the issues to which they have been assigned but there is a risk that information learned by the different teams is not shared quickly and evaluated as a whole. Similar risks arise where the Department seeks to achieve its objectives at arms length through other organisations such as the Nuclear Decommissioning Authority. The Department's Internal Audit team reported that it is starting work to provide assurance that risk management arrangements between the Department and related bodies, including the Nuclear Decommissioning Authority, are sufficiently complementary. In addition, there is a risk that a high turnover of staff in key areas in either the Department or the Nuclear Decommissioning Authority could lead to a loss of expertise which might have a detrimental effect on monitoring issues, for example, liabilities.

RECOMMENDATIONS

a The Shareholder Executive is responsible for managing the Government's exposure to British Energy's performance. The Shareholder Executive needs to maintain and keep under frequent review its plans for managing this exposure.

b The Department should ensure that the Company fulfils its new requirement to update its estimates at least every five years of the liabilities likely to fall to the Nuclear Liabilities Fund and publishes the results of any formal reviews of the Fund's assets and liabilities.

c The Department, working with the Nuclear Decommissioning Authority, should consider whether alternative arrangements, such as a pre-determined framework, would provide British Energy with a stronger incentive to reduce the liabilities of the Nuclear Liabilities Fund than the current provisions within the Liabilities Agreements. **d** The Department should continue to identify the range of risks associated with its interest in British Energy and keep this register up to date. Crucially, against the key risks on its register, it should prepare and maintain adequate contingency plans to enable it to act quickly and effectively when required, including arrangements to draw upon appropriate expert advice outside the Department.

e In line with good practice the Department should appoint professional advisers following competition. Where advisers are frequently needed at short notice, the Department should where possible employ the approach which it has now adopted for the appointment of legal advisers and which is used by other departments, of entering into standing arrangements with a number of firms appointed on a competitive basis and with fee policies agreed in advance. On long contracts, fee rates should be reviewed regularly.



f The Health and Safety Executive is concerned that if a company like British Energy went into administration its ability to regulate the company could be compromised. The Department needs to consider what means are required, including legislation, to establish provisions which could assist the Inspectorate to ensure the safety of nuclear assets is maintained.

g The Department should ensure that there is effective co-ordination of the risk management arrangements it has in place, to ensure that the Shareholder Executive has all the information it needs to fulfil its role effectively and that the Department is fully aware of the potential effects on British Energy when making policy decisions.

h The Department, and the Nuclear Decommissioning Authority, should manage continuity amongst staff, including keeping adequate records of their various monitoring activities, to ensure that the accumulated knowledge and understanding of British Energy's activities is maintained.

i To carry out its responsibilities in relation to British Energy effectively, the Nuclear Decommissioning Authority should re-examine whether it has, and is likely to be able to maintain, sufficient staff with the right skills in place to enable it to monitor compliance with the Liabilities Agreements and spot opportunities for reducing liabilities as its workload increases.

PART ONE Background



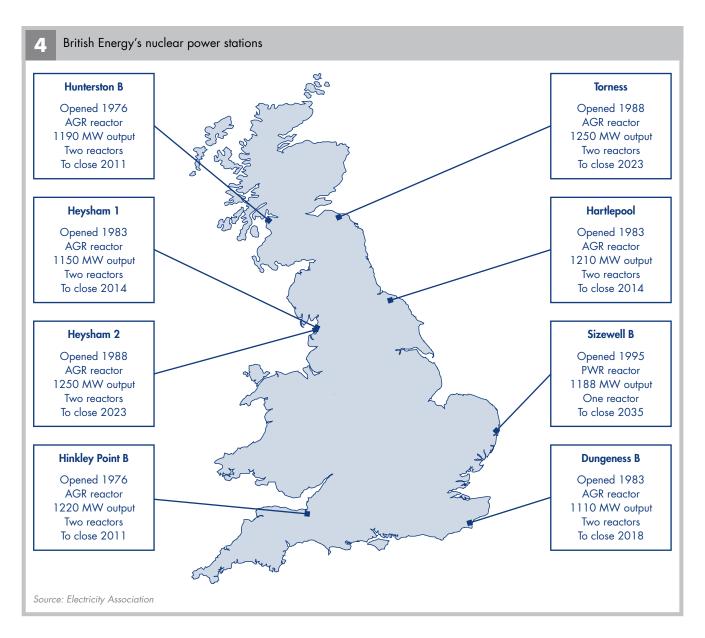
1.1 British Energy is the largest electricity generator in the United Kingdom with an annual turnover in excess of £1.5 billion. Its eight nuclear stations located in England and Scotland (**Figure 4 overleaf**) generate approximately 20 per cent of the electricity used in England and Wales and half that used in Scotland. The Company operates seven Advanced Gas-Cooled Reactor (AGR) stations, the design of which is unique to the UK, and one Pressurised Water Reactor (PWR) station. Although the nuclear fission process is the same for each type of station, different methods (gas and pressurised water respectively) are used for taking heat away from the reactor core. The Company also owns a coal-fired power station at Eggborough in North Yorkshire.

1.2 British Energy was privatised in 1996 raising $\pounds 2.1$ billion from a public flotation. The privatisation required the Company to meet the cost of discharging all of its nuclear liabilities from its own resources. Some $\pounds 5.6$ billion of nuclear liabilities that had accrued before privatisation were transferred to the Company. These liabilities fall broadly into two categories: the management and disposal of spent nuclear fuels and the decommissioning of its nuclear power stations.

1.3 By mid-2002, a combination of falling wholesale electricity prices and an unexpected temporary closure at its Torness nuclear station caused the Company's revenues and levels of cash to decline sharply. An attempt by the Company in June 2002 to raise additional external finance through a \$400 million bond placement in the United

States failed to raise the expected level of funds for the Company, and did not proceed. By the end of August 2002 the Company's level of available cash had reduced to £78 million which was likely to be insufficient to meet the Company's liabilities during September. British Energy had £610 million of undrawn committed bank facilities. The Company's Directors, however, considered that there was no guarantee that the company could repay any amounts borrowed given the scale of its forthcoming financial commitments and so concluded that to draw on these facilities could be in breach of their legal duties. The Directors concluded that without financial support from a third party they would have to begin insolvency proceedings.

1.4 On 5 September 2002, British Energy announced that it had initiated discussions with the Department of Trade and Industry to secure immediate financial support with a view to enabling a longer term financial restructuring to take place. On 9 September the Department responded by granting the company a credit facility to 27 September 2002 of up to £410 million. The Department's aim was to stabilise the Company's financial position and enable it to continue trading so that it could work towards establishing a more permanent solution to its financial difficulties. On 27 November 2002 the European Commission, the body responsible for enforcement of European Union competition rules, gave its approval for the Department's temporary support on the condition that the Department submitted a plan for a permanent solution by 9 March 2003⁹.



1.5 On 28 November 2002, British Energy presented its proposals for a plan to restructure the finances of the Company and the Department announced its support for the plan. The plan entailed: the Department agreeing to assume responsibility for much of the Company's nuclear liabilities (discussed in detail in Part 2), while continuing to make the credit facility available until restructuring was completed; the renegotiation with British Nuclear Fuels plc of the Company's contracts in relation to fuel supply and spent fuel management; creditors exchanging their existing debt claims for equity and bonds in the restructured company; and the Company's sale of its financial interests in Bruce Power (in Canada) and

Amergen (in the United States), using the proceeds to repay amounts borrowed under the credit facility. The Company reached agreement in principle on restructuring with its main creditors on 14 February 2003.

1.6 The Department had to obtain the approval of the European Commission for its financial support before restructuring could be completed. The Department submitted British Energy's restructuring plan to the European Commission on 7 March 2003. British Energy, its main creditors and the Department entered into formal restructuring agreements (subject to certain conditions being met) on 1 October 2003. The European

Commission concluded its state aid investigation into the restructuring plan on 22 September 2004 by approving the Department's financial support subject to conditions. On 22 December 2004, creditors and shareholders approved the restructuring. On 14 January 2005, the restructuring was complete when the High Court in Scotland gave its approval¹⁰. The Company relisted on the Stock Exchange on 17 January 2005. Appendix 4 summarises the main events occurring during the restructuring phase.

1.7 As part of the restructuring the Department undertook to meet the cost of the Company's liabilities under existing spent fuel management contracts and to underwrite any shortfall in the Nuclear Liabilities Fund. In return for its support the Department secured a commitment from the Company that it would contribute to the fund from future cash streams. This contribution includes fixed amounts and a variable payment into the Nuclear Liabilities Fund based on British Energy's future performance, known as the cash sweep. Although not a shareholder the Department has the option to convert the cash sweep into British Energy shares, equivalent to a maximum of 65 per cent of the Company's equity after conversion, at any time¹¹.

The Government's nuclear safety obligations

1.8 Under the 1957 Euratom Treaty the United Kingdom Government, like other governments, is obliged to make provision for the disposal of radioactive waste. In 1995, the United Kingdom also ratified the Convention on Nuclear Safety which came into force in autumn 1996. Under the Convention each member nation is obliged to provide regular written reports on how they are fulfilling the Articles of the Convention on the legislative and regulatory framework for nuclear safety, the financial and human resources they allocate to nuclear safety and the details of their procedures for siting, designing, constructing and operating civil nuclear power plants. A further international agreement places obligations on each state on the management (or disposal) of radioactive waste and spent fuel. To comply with its international obligations for nuclear safety the State must bear the responsibility and by implication meet the costs in those cases where no other party is able to discharge those obligations.

1.9 The Department has lead responsibility for energy policy, including the nuclear industry, and the Secretary of State for Trade and Industry is accountable to Parliament for matters of nuclear safety, and for regulation of nuclear security by the Office for Civil Nuclear Security. The Department for Work and Pensions is accountable for the Health and Safety Executive, which includes the Nuclear Installations Inspectorate (the Inspectorate) (Figure 5 overleaf). The Inspectorate is responsible for the licensing and inspection of all nuclear sites in the UK, including those owned and operated by British Energy. The Department is also responsible for the continuity and security of electricity supplies, together with the Office of Gas and Electricity Markets (Ofgem), a non-ministerial Government department that regulates the electricity industry. The Environment Agency (in England and Wales) and the Scottish Environment Protection Agency (in Scotland) regulate discharges from British Energy's nuclear power stations.

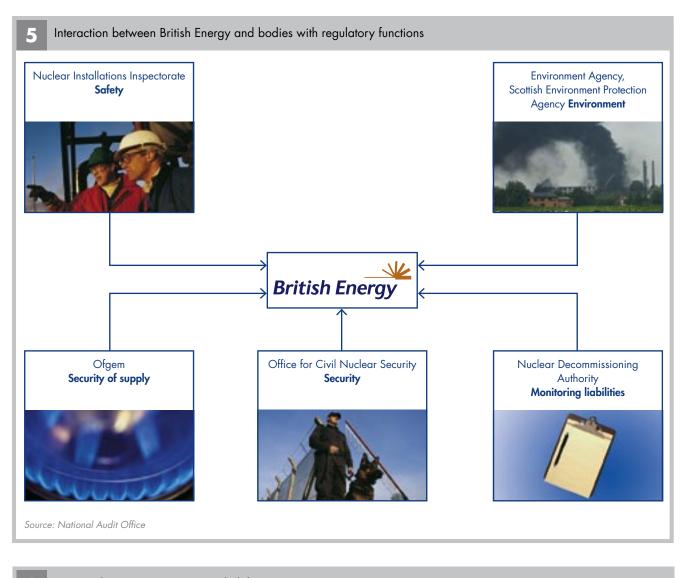
1.10 The Nuclear Decommissioning Authority is a non-departmental public body established in April 2005 to handle the decommissioning of 20 nuclear sites in the United Kingdom (not including British Energy's sites), and will oversee operations at the commercial facilities still operating on these sites. These facilities include four Magnox nuclear power stations, fuel fabrication and spent fuel reprocessing plants. The Nuclear Decommissioning Authority has also been charged by the Department with overseeing the liabilities of the Nuclear Liabilities Fund (discussed further in Part 3).

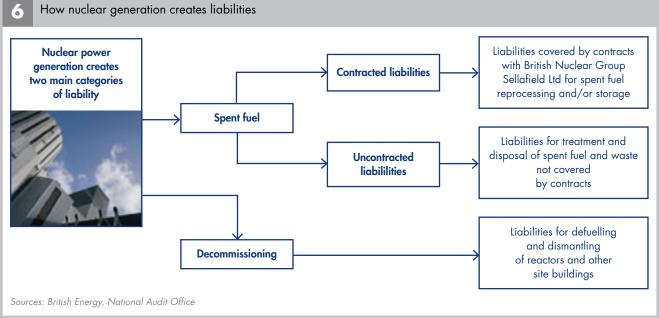
Nuclear liabilities

1.11 The generation of electricity from nuclear fuel sources creates two categories of nuclear liabilities: the treatment and disposal of spent nuclear fuel and other operational wastes and the decommissioning of nuclear power stations (decommissioning liabilities) (Figure 6 overleaf).

10 British Energy required the consent of the High Court in Scotland because the Company is registered in Scotland.

11 The Department may require the Nuclear Liabilities Fund to convert all or part of the cash sweep into shares. Various actions may reduce the 65 per cent figure. Following conversion, shares held by the Nuclear Liabilities Fund would be subject to a maximum voting level of 29.9 per cent.





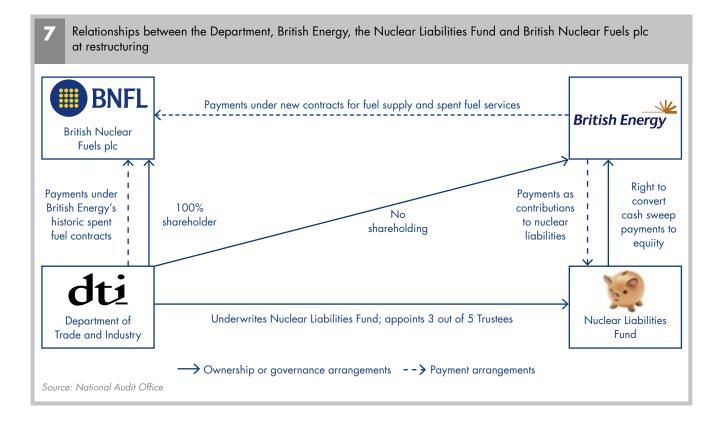
Spent nuclear fuel and other operational wastes

1.12 Spent fuel is fuel which is removed from nuclear reactors and requires safe management after use. Spent fuel can be either held in storage (for example at British Energy's Pressurised Water Reactor station at Sizewell B), or reprocessed resulting in uranium, plutonium and nuclear waste. At privatisation British Energy was expected to meet the costs of discharging its spent fuel liabilities, then estimated at £4.9 billion (discounted), out of current revenue. These liabilities consist of:

- Contracted spent fuel liabilities. Spent fuel from British Energy's Advanced Gas-Cooled Reactor stations is re-processed or stored under contracts with British Nuclear Group Sellafield Ltd, a subsidiary of British Nuclear Fuels plc, a company wholly owned by the Department (Figure 7)¹².
- Uncontracted liabilities. The future management or disposal of derivatives from reprocessing plutonium, uranium oxide and waste - and the long term storage and disposal of spent fuel are not fully covered under contracts, as the ultimate disposal site is not yet available and the process and its costs could therefore not be defined¹³. For similar reasons the disposal of Intermediate Level Waste arising from nuclear power station operations is not covered by any contracts¹⁴.

Nuclear decommissioning

1.13 Decommissioning occurs over many decades. It involves the defuelling of reactors followed by dismantling of ancillary buildings and finally the reactor, eventually allowing the site to be reused. Decommissioning also produces nuclear waste. The first of British Energy's stations to be decommissioned, Hinkley Point B and Hunterston B, are due to close in 2011.



- 12 Reprocessing facilities are owned by the Nuclear Decommissioning Authority but reprocessing is undertaken by British Nuclear Group Sellafield Ltd under contract with the Authority.
- 13 Under the renegotiated terms of the contracts discussed in paragraph 2.21, the full liability for spent fuel management and disposal relating to AGR fuel loaded into British Energy's reactors after restructuring rests with British Nuclear Group Sellafield Ltd.
- 14 Ongoing management of spent fuel from Sizewell B is also not covered by contracts as the reactor was designed so that spent fuel can be stored on site and then directly disposed to a long term depository. British Energy's policy is to store such spent fuel on the Sizewell B site pending decisions on future management options.

1.14 At privatisation, the Government established the Nuclear Generation Decommissioning Fund through which British Energy was expected to meet the costs of discharging its decommissioning liabilities, estimated at £700 million (discounted) at privatisation. The Fund had accumulated assets of £411 million at 31 March 2002. As part of British Energy's restructuring, the Nuclear Generation Decommissioning Fund was renamed as the Nuclear Liabilities Fund and its role expanded to take responsibility for meeting all of the Company's decommissioning liabilities as well as uncontracted spent fuel and operational waste liabilities (Figure 8). The Department has the power to appoint three, and British Energy two, of the five Trustees who administer the Nuclear Liabilities Fund, which has been classified as a public sector body by the Office for National Statistics.

1.15 Having assumed the Company's nuclear liabilities as described in Figure 8, the Department sought to reduce the eventual cost of its support for restructuring by securing contributions from British Energy towards these liabilities. Under the restructuring plan, British Energy agreed to make an initial contribution to the Nuclear Liabilities Fund through the issue of £275 million of company Bonds. From 2005, the Company will make fixed annual payments of £20 million¹⁵ to the Nuclear Liabilities Fund toward the cost of decommissioning, together with payments (likely to amount to some £4 million per annum) that vary with the quantity of fuel loaded into the Company's Sizewell B nuclear reactor¹⁶. The Department also introduced a mechanism called the cash sweep payment, whereby the Company will pay a specified percentage (initially set at 65 per cent¹⁷) of its annual free cash flow to the Nuclear Liabilities Fund. The payments to be made under the restructuring plan were agreed as part of negotiations between the Department and the Company based on an assessment of what the Department thought British Energy could afford whilst giving it the best chance of remaining a viable company. The agreed contributions were not calculated to match the potential liabilities but were intended to secure the maximum contribution whilst maintaining the viability of the Company.

Previous NAO coverage

1.16 The Comptroller and Auditor General published a report on the privatisation of British Energy in May 1998. The report concluded that because of the residual risk that future Governments might have to meet the cost of some of the nuclear liabilities, the Department needed to manage that risk effectively.

1.17 In February 2004, the Comptroller and Auditor General reported on events from privatisation up to British Energy's request for assistance in September 2002. The report concluded that the Department had conducted only a limited evaluation of the changing nature of the residual risks faced by the taxpayer prior to September 2002 and that the Department had treated the Company no differently from other electricity companies.

1.18 The Committee of Public Accounts published a report on these events in September 2004 (Appendix 7)¹⁸. The Committee concluded that:

- the Government's formal residual liability implied that British Energy was in a different situation from any other company;
- the Department had failed to put in place any proper arrangements to manage the risk to the taxpayer arising from British Energy's nuclear liabilities; and
- the Department had failed to establish a credible overview of British Energy's deteriorating financial position and did little more than gather information.

The Department, however, believed that its actions in respect of the Company were appropriate given that the structure of privatisation was a traditional one which left the Department with few tools with which it could mitigate any risk. The Department retained no rights of information or control over the Company's decision-making. In the light of that, the Department considered its monitoring appropriate given the Company's financial position, in that initially while the Company was successful monitoring was light touch and, as its financial position worsened, monitoring was stepped up. Appendix 7 examines the Department's actions in response to the Committee's recommendations.

65 per cent (see Part 3)

¹⁵ Payments are tapered in relation to station closures and indexed to the Retail Prices Index.

British Energy will pay £150,000, indexed to the Retail Prices Index, to the Nuclear Liabilities Fund for each tonne of fuel loaded into the Sizewell B reactor.
Under the terms of restructuring, the cash sweep payment percentage could increase or decrease as a result of the level of cash sweep payments, the issue of further shares by British Energy, capital distributions to shareholders, and partial conversions of the cash sweep payment to equity, but can never exceed

¹⁸ Risk Management: The Nuclear Liabilities of British Energy plc, Thirty-seventh Report of Session 2003-04 (HC354), 9 September 2004.

The Department accepted responsibility for certain of British Energy's nuclear liabilities, either directly, or via the Nuclear Liabilities Fund

The Department assumed direct responsibility for:

Contracted spent fuel liabilities: estimated at 28 February 2006 at £2,573 million, mostly falling within the next ten years. The Department assumed responsibility for meeting payments for spent fuel liabilities under British Energy's "historic" contracts with British Nuclear Fuels plc (now British Nuclear Group Sellafield Ltd), covering the reprocessing and storage of spent fuel loaded into reactors at the Company's Advanced Gascooled Reactors before 14 January 2005, and other services including flask maintenance and rail transport. The Department made the first payment in March 2005.

The Department agreed to underwrite the Nuclear Liabilities Fund for any shortfall in meeting:

- Spent fuel and operational waste liabilities: estimated at 28 February 2006 at £350 million and falling due over the next 100 years. British Energy had liabilities for spent fuel and nuclear waste that were not covered by contracts with British Nuclear Fuels plc, referred to as "uncontracted" liabilities (and described in paragraph 1.12).
- Decommissioning liabilities: estimated at 28 February 2006 at £2,364 million, mostly falling due within the next 50 years, and between 80 and 100 years from now. Decommissioning costs will comprise the costs of defuelling reactors, dismantling redundant ancillary buildings and making the reactor complex secure, and after a long period of care and maintenance dismantling the reactor to allow the site to be used. Estimates for uncontracted and decommissioning liabilities had not been updated (other than through indexation) since privatisation, until British Energy published new estimates in February 2006.

Source: National Audit Office review of departmental papers

1.19 This report considers the Department's response to British Energy's request for assistance in September 2002, including its provision of temporary support to the Company to allow it to continue trading and its role in the restructuring of the Company. This report also considers the Department's management of the residual risks to the taxpayer arising from the Company's activities since the completion of restructuring. The Comptroller and Auditor General does not have statutory rights of access to audit British Energy, however the Company co-operated fully and helpfully in the preparation of this report.

PART TWO Restructuring of British Energy



- **2.1** This Part examines:
- i) the Department's response to British Energy's request for support; and
- ii) the Department's efforts to minimise the cost of restructuring to the taxpayer.

i) The Department's response to British Energy's request for support

2.2 When British Energy asked the Department for financial assistance in September 2002, the Department faced the choice of either providing support to the Company or letting it fall into an immediate and unplanned administration. The Department's normal policy when private companies get into difficulty is not to intervene because United Kingdom productivity goes up if inefficient firms are allowed to close. In the case of British Energy the Department justified intervention on the grounds of its international obligations for nuclear safety and its other energy objectives including reducing carbon dioxide emissions. Assessments undertaken by the Department at the time indicated:

Maintaining continuity of electricity supplies. Unplanned closures of British Energy's nuclear stations would have placed electricity supplies at risk, with serious consequences for the United Kingdom and its economy. National Grid Transco, the electricity transmission network operator, advised the Department in September 2002 that closure of all British Energy's stations in England and Wales would lead to immediate shortfalls in supply. National Grid Transco estimated that forecast demand would exceed supply by 20 per cent by January 2003. The Department therefore expected that it would have to instruct network operators to disconnect demand (except for vital customers) on a rolling basis for three-hour periods. The Department considered further disconnections likely between January and April 2003, and again from September 2003 onwards. The Department expected disruption to the wider economy caused by disconnections to businesses and potentially to the provision of public services.

- Maintaining nuclear safety. When a nuclear power station is shut down, control of safety critical functions (such as reactor power levels, cooling and containment) must be maintained for as long as there is nuclear fuel in the reactor core. Because of capacity constraints for the receipt, storage and reprocessing of spent fuel, some of British Energy's nuclear stations would have needed to remain fuelled for many years.
- The Taxpayer risked bearing substantial costs in the absence of intervention. Without a prospective purchaser, a liquidator would be entitled to disclaim the nuclear stations, which (together with the Company's nuclear liabilities) would revert automatically to the Crown¹⁹.

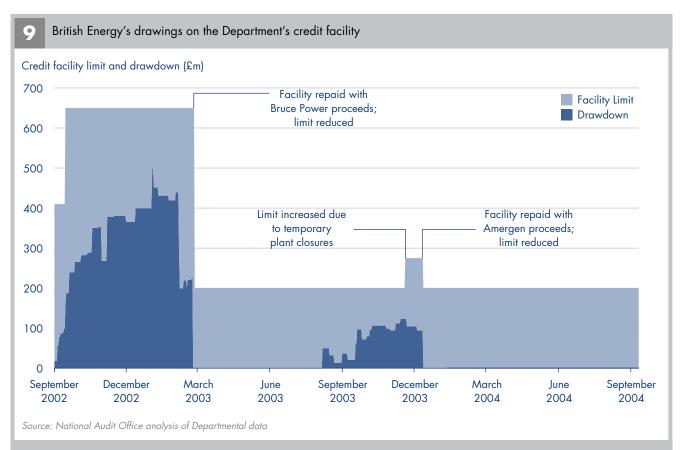
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Insolvency law permits a liquidator to "disclaim" onerous property. This is any unprofitable contract and any other property of the company which is unsaleable or which is not readily saleable or is such that it may give rise to a liability to pay money or perform any other onerous act (section 178, Insolvency Act 1986).

Before September 2002, the Nuclear Installations 2.3 Inspectorate had raised concerns with the Department about its ability to regulate British Energy if the Company went into administration. Until formally dissolved the Company would continue to be the site licensee and would remain responsible for ensuring compliance with the licence. But under insolvency law the administrator's duty is owed to the creditors with no overriding duty of health and safety. Even if the Inspectorate was able to enforce licence conditions, it was concerned that the Company would have insufficient funds available to make any changes necessary to meet the Inspectorate's requirements. The Inspectorate's other main concern was the potential impact of any uncertainty following administration on staff morale and the possible loss of skills and experience that might result from staff leaving. The Inspectorate reported that the statutory provisions governing administration

could have had implications for other Health and Safety Executive work and is now discussing with the Department how to address these concerns.

2.4 In September 2002, the Department concluded that the consequences of allowing the Company to fall into an immediate and unplanned administration could result in disrupted energy supplies and compromise safety. It therefore decided to provide British Energy with temporary support whilst it worked with the Company to determine a longer term solution. The Department granted a credit facility to British Energy on 9 September and the Company began drawing on the facility immediately (**Figure 9**). In December 2003, British Energy used proceeds from the sale of overseas assets to repay in full the amounts outstanding, plus interest and made no subsequent drawings.



NOTE

No further drawings were made after December 2003, although the facility continued to be available until the European Commission's state aid approval on 22 September 2004, following which no further drawings were permitted. The sales of British Energy's assets are described in Box 1.

ii) The Department's efforts to minimise the cost of restructuring to the taxpayer

2.5 The Department's decision to grant temporary support to the Company in September 2002 allowed both parties time to consider the prospects for drawing up a longer term solution. Before lending its support to the Company in November 2002, the Department considered whether the Company might be able to find its own solution without recourse to support from the taxpayer or the Department. Our examination indicated that a wide range of options were considered, including:

- The sale of one or more of British Energy's stations to a third party. The Department and its advisers considered the likelihood of a sale of all or part of the Company. The Department concluded that given the prevailing low wholesale electricity prices and the scale of British Energy's nuclear liabilities no credible and qualified purchaser existed, except possibly for British Energy's Sizewell B station, which the Department considered necessary to the viability of the Company as a whole. The Department reported that no organisations had shown an interest in making an offer for the Company.
- An early planned closure of some or all of British Energy's stations. In November 2002, based on information supplied by British Energy, the Department and its advisers undertook an economic assessment of the option to close each of the Company's eight nuclear stations, and concluded that it would be uneconomic to close any of them (Figure 10). Closure would have ended the opportunity of British Energy's stations to contribute to its long term liabilities, while not substantially reducing costs. Further, an early planned closure of all of the Company's stations would have reduced total generation capacity and would have been likely to result in an increase in wholesale prices paid by retail electricity suppliers, which in all likelihood would have been passed on to consumers. In time the scale of the wholesale price increase might have been mitigated if higher prices encouraged other generators to return mothballed plant or to invest in new capacity.

A nuclear levy or Climate Change Levy exemption.

A levy on electricity bills to support British Energy would have increased the Company's revenue but would have raised prices for consumers and businesses, and would have created a market distortion in favour of nuclear generation. The Department considered reducing British Energy's costs through an exemption from the Climate Change Levy²⁰. Either option would have required primary legislation and changes in Government policy and would in the Department's view have been potentially difficult to implement in the time available and could have had serious implications for the existing Climate Change Levy.

10 The cost of closing each of British Energy's nuclear power plants in March 2003

Power Station	The net cost of early closure £m
Dungeness B	60
Hartlepool	328
Hunterston B	351
Heysham 1	392
Hinkley B	427
Torness	556
Heysham 2	641
Sizewell B	839

Source: Department of Trade and Industry, Credit Suisse First Boston, Deloitte

NOTE

The costs estimated in November 2002, based on the Net Present Value of foregone future income and decommissioning costs brought forward, less future costs avoided (discounted at a nominal rate of 8 per cent).

20 The Climate Change Levy which has been payable from 2001 adds £4.30 per megawatt hour to the price which customers have to pay for British Energy's electricity. Purchasers of eligible renewable energy, for example, do not have to pay the levy.

2.6 The Department took the view that none of the options open to the Company offered a realistic prospect of success and therefore concluded that some form of support from the taxpayer might be needed.

Planned administration or solvent restructuring

Primary responsibility for determining the future of 2.7 British Energy lay with its Board. The Department, which had ultimate responsibility for the Company's nuclear liabilities should the Company fail, had to decide whether to support a solvent restructuring of the Company and, if so, on what terms, or let the Company enter into a planned administration. If a solvent restructuring was pursued, it would be solely a matter for the Company's Board to secure agreement for any restructuring with its shareholders and creditors. While the Department sought to avoid the Company falling into an immediate and unplanned administration, the possibility of a "planned" administration remained if the cost of restructuring proved unacceptable to any one of the Department, shareholders and creditors. Under this option it would be possible for the Department to fund an administrator and thereby keep the Company running and satisfy safety standards.

2.8 Initial estimates prepared by the Department and its advisers in November 2002, suggested that the cost to the taxpayer of pursuing a solvent restructuring was likely to be comparable to the cost of allowing the Company to fall into administration although the uncertainty involved with either option meant that the estimates ranged considerably (Figure 11).

2.9 On the basis of this financial analysis the Department could not therefore determine a clear preferred option from its financial analysis alone. The Department and its advisers also analysed the associated risks from the two options (**Figure 12**) to enable it to make the appropriate decision.

2.10 As a result of this additional analysis the Department concluded that the overall risks, both financial and non-financial, were greater under administration and that restructuring offered the best prospect of meeting its objectives for a permanent solution. The Department was concerned that if the Company fell into administration there was no certainty that a bidder would come forward for all or part of the business and that a prolonged period in funded administration posed a significant risk to the taxpayer. It therefore announced its support for the restructuring plan on 28 November 2002. Subsequent analysis

commissioned by the Department in May 2004 (Figure 11) indicated that the costs of these two options remained comparable throughout the restructuring process and depended on the degree of optimism which British Energy attached to its future prospects. From September 2002 onwards, the Department nevertheless made detailed plans for an administration should the results of the negotiations with the various parties over restructuring have proved unacceptable to one or more parties.

2.11 Analysis undertaken by Grant Thornton for the National Audit Office confirmed that the Department's decision to opt for restructuring was based on a rigorous and extensive review of both options. The Department and its advisers undertook considerable work to identify all of the potential outcomes and risks arising from each option. In comparing the expected financial impact of each option the Department's advisers incorporated illustrative estimates based on the financial information available at the time, employing standard methodologies and incorporating reasonable assumptions in their analysis.

Creating a viable company

2.12 The Department's primary objective in helping the Company draw up a restructuring plan was to ensure that the restructuring resulted in a viable Company capable of maintaining continuity of supply and the safety of its nuclear facilities whilst minimising the cost to the taxpayer. Between September and November 2002, the Department and its advisers worked with British Energy using a financial model developed for the Company by its advisers, Citigroup. The analysis undertaken by the Department, the Company and their respective advisers influenced the level of debt to be carried by the restructured company and the contributions to be made by the Company towards its nuclear liabilities. The projections made at the time tested viability against electricity prices in the range £15 to £21 per megawatt hour, compared to the price of £12 per megawatt hour in September 2002. At the time the projections were made, £15 to £21 per megawatt hour was considered by both the Department's advisers and our advisers to have been a reasonable price range for electricity, given previous trends and expected market performance. Electricity prices have risen significantly since restructuring, reaching over £50 per megawatt hour in early 2006 (see Figure 16 on page 32). British Energy should therefore remain viable at price levels significantly below those that existed at the end of 2005.

П

Comparison of the costs to the taxpayer of restructuring and administration

	Restructuring £m	Administration £m	Difference £m
November 2002			
Best case	1,423	1,172	(251)
Worst case	2,463	2,533	70
May 2004			
Best case	1,749	1,436	(313)
Central case	2,005	1,805	(200)
Worst case	2,899	3,101	202

Source: Department of Trade and Industry, Credit Suisse First Boston, Deloitte, National Audit Office

2 Summary of main risks at November 2002 of restructuring and administration

Risks

Restructuring

- Bondholders and other financial creditors would not sign up
- Failure to achieve new trading contracts necessary for robustness
- Reduced sale proceeds from North American assets
- Failure to achieve state aid approval
- Vulnerability to price and output risks on the basis of worsened Company projections
- Risk shared between Government (through contributions) and creditors/shareholders

Administration

- Uncertainty concerning the ultimate outcome and effect on regulators (mitigated by planning for administration)
- Loss of value of investment in Bruce Power lease
- Government influence over process reduced since administrator has duties to creditors
- Nuclear Installations Inspectorate concerns about the effects on staff morale and loss of expertise
- If insolvency led to public ownership, Government holds 100 per cent of value but also 100 per cent of risk
- No guarantee of better management under public ownership

Source: Credit Suisse First Boston, Deloitte, National Audit Office

2.13 Overall the restructuring plan sought to reduce the Company's vulnerability to market fluctuations by reducing its fixed cost base, creating a closer link between costs and revenue and reducing the Company's debt (Box 1 overleaf) – weaknesses identified in the Comptroller and Auditor General's previous report. In November 2002, the Department concluded, with advice from its financial advisers Credit Suisse First Boston, that to ensure a viable British Energy the Department would have to assume responsibility for certain of British Energy's nuclear liabilities, either directly or via the Nuclear Liabilities Fund, as detailed at Figure 8. Credit Suisse First Boston were involved in the viability analysis throughout, together with Deloitte who also advised the Department on electricity price projections. The Department also used Stone and Webster, a firm of consulting engineers, as technical consultants to review British Energy's output projections. The Department and its advisers continued to test the financial viability of the Company's restructuring plan throughout the restructuring process until its completion on 14 January 2005.

2.14 Analysis by Grant Thornton and Lumis on our behalf concluded that the Department had conducted a thorough analysis of the likely viability of British Energy under a wide range of assumptions. Grant Thornton considered that the Department had conducted a robust analysis to satisfy itself of the sufficiency and appropriateness of the target cash reserves. After reviewing whether the price assumptions were sufficiently pessimistic, Lumis considered that the Department's advisers had used suitably conservative estimates, and that strategic changes within the electricity market would make it extremely unlikely that prices would fall below the most pessimistic assumptions employed. With regard to output forecasts, Lumis concluded that WS Atkins and Stone and Webster, the advisers appointed by the Company and the Department respectively, were suitably gualified for the task and followed a proper process in reviewing output forecasts. Lumis noted the advisers' finding that there was a low probability of output being less than the "Reasonable Worst Case" output assumptions.

BOX 1

Examples of some of the action taken to reduce the Company's vulnerability to market fluctuations and assist restructuring

- Reductions in fixed costs. Following privatisation, British Energy's payments to British Nuclear Fuels plc under contracts for fuel supplies and spent fuel reprocessing services of approximately £400 million per annum represented the largest element of its costs, most of which were fixed. British Energy had sought to renegotiate these contracts for some time and the failure to do so on 4 September 2002 was immediately followed by the Company's approach for Government assistance. The Department's assumption of the existing contracted spent fuel liabilities reduced the Company's costs in total and also reduced its fixed costs, amounting to £187 million²¹ in each year to 2015.
- Linking costs and revenues. In 2003 British Energy renegotiated its contracts with British Nuclear Fuels plc for new fuel and future spent fuel. There was formerly no link between British Energy's costs under these contracts and its revenues, because pricing of these contracts was linked to the Retail Prices Index, not to wholesale electricity prices. As a result the Company was highly exposed to wholesale electricity price movements. The new contracts with British Nuclear Fuels plc established a closer link between British Energy's unit costs and the revenue it received for its output. The new contracts result in higher payments when wholesale prices increase, however the contract reduces the risk to the Company when wholesale prices fall.
- Reduction in debt. The reorganisation of the Company's financial structure reduced the level of its long term borrowings from £1,068 million at 31 March 2002 to £676 million at 31 March 2005. In turn this reduced interest payments by the Company: these amounted to £12 million in the eight months to 31 March 2005²² compared to £62 million in the year ended 31 March 2002.
- Cutting costs and realising assets. British Energy was required to help offset the cost of restructuring to be borne by the various parties by generating extra funds through internal savings and the sale of assets. The Company sold its head office at Peel Park

in Livingston raising £6.6 million and reduced administrative costs resulting in expected annual savings of £9 million. The Company also had to sell its financial interests in North America. The Company announced its intention to dispose of its interest in Amergen in September 2002 and subsequently raised £148 million proceeds from the sale in December 2003. In November 2002, at the Department's insistence, the Company also agreed to dispose of its interest in Bruce Power by 14 February 2003. Its interest was sold on the due date, yielding initial proceeds of £275 million after transaction costs.

The Department's requirement that Bruce Power should be sold within a specified timetable resulted in significantly reduced receipts to British Energy and reduced the money available to support the restructuring. But the decision took account of the potential loss of all the value of the holding should the Company have fallen into administration, the additional cash collateral requirements that the Department would have had to fund to allow Bruce Power to continue trading, and a requirement for state aid purposes that recipients of Government aid divest themselves of assets in order to minimise the level of aid. In September 2002, the Department's advisers, Credit Suisse First Boston, had valued the Company's interest in Bruce Power at between £853 million and £962 million, subsequently revising this estimate to between \pounds 390 million to \pounds 487 million²³. In November 2002, a consortium of three Canadian concerns made an initial offer of £410 million for British Energy's share of Bruce Power. The consortium subsequently reduced their offer, firstly as a result of the Ontario government's announcement of a cap on the price of electricity and because Ontario Power Generation, a government owned company responsible for electricity generation in Ontario which had to agree the price, disputed the size of the offer made. On 14 February 2003, British Energy accepted the revised offer of £275 million. The Department considers that this was a fair price as there was still a significant danger at that time that British Energy might have gone into administration.

2.15 In the continuing absence of a credit rating following restructuring, the Company is likely to continue to require large cash holdings to meet collateral requirements. The ability of the Company to finance its activities through borrowing from banks or bond markets during the cash crisis of September 2002 was greatly hampered by losing its investment-grade credit rating. The agreements entered into by the Department, British Energy and other parties

on restructuring now require the Company to achieve and maintain a "target" cash reserve initially set at £490 million. British Energy must maintain this cash reserve before it makes any dividend payments or any payments under the cash sweep, and it must also maintain the cash reserve until it achieves an investment-grade credit rating or can raise equivalent funding.

21 At March 2005 prices.

²² British Energy's Annual Accounts for the year ended 31 March 2002 and the period ended 31 March 2005.

²³ The initial values were preliminary and based on the Company's business plan projections. The subsequent valuation resulted from a more detailed exercise based on the Company's reduced projections and a revised discount rate.

Sharing the cost of restructuring with creditors and shareholders

2.16 In March 2004, the Department estimated that the net cost of rescuing British Energy would be $\pounds 2,844$ million. A detailed breakdown of this cost is shown at Appendix 2. While the taxpayer assumed responsibility for much of British Energy's nuclear liabilities, the Department sought to share the overall cost of restructuring with the Company's shareholders and creditors.

- Shareholders. The Company's shareholders (who would have received nothing in administration) agreed to exchange 100 per cent of the existing equity for 2.5 per cent of the equity in the restructured Company terms similar to some other recent corporate restructurings. As a result, the value of the equity held by the original shareholders stood at £37 million when the restructured Company relisted its shares on 17 January 2005, compared with a valuation of £307 million at 3 September 2002, prior to the Company's approach to the Department (a reduction in value of 87 per cent).
- Creditors. The Company's main creditors agreed to extinguish their debt claims against British Energy in return for new bonds and 97.5 per cent of the share capital in the restructured company. At the time of signing up to the restructuring plan in October 2003, creditors who took equity in the new company might have expected to have lost some £289 million compared to their position before the Company's approach to the Department in September 2002, but by the time the restructured Company had relisted its shares in January 2005 the value of their holding had risen to £1,871 million.

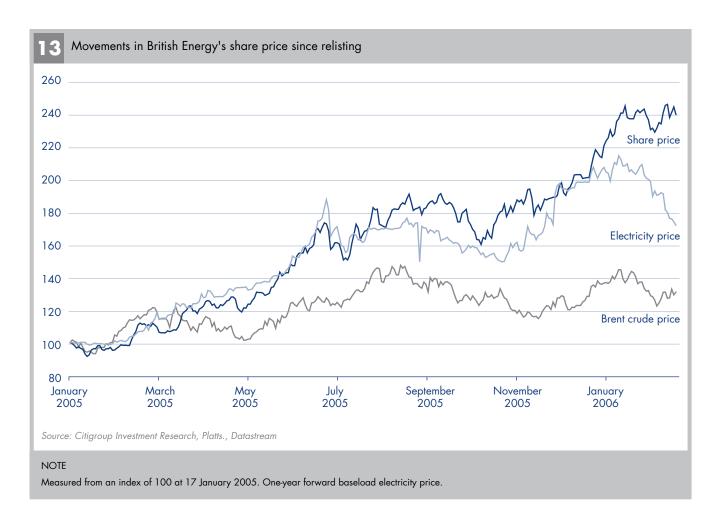
2.17 Because of the way the Company was restructured, share price movements also have an impact on the imputed value of the cash sweep because of the Department's ability to convert the cash sweep into shares in the Company. For example, for each increase of 10 pence in the Company's share price, the potential value²⁴ of the taxpayer's interest in British Energy increases by £104 million, compared to an increase of £55 million for the Company's creditors and £1.4 million for shareholders.

2.18 Following the completion of restructuring on 14 January 2005, British Energy shares were relisted on the Stock Exchange on 17 January 2005, trading at an initial price of £2.63. In the months following relisting, the Company's share price rose significantly, trading at £6.17 per share on 28 February 2006, a 140 per cent increase in little over thirteen months. Figure 13 (overleaf) shows the movement in the Company share price (indexed) against movements in wholesale electricity and Brent crude prices over the same period. Over the first six months, the Company's share price moved largely in step with rapid increases in electricity prices but thereafter began to pull ahead. At the end of February 2006 the rise in British Energy's share price since relisting was above the increase in wholesale electricity prices (70 per cent) and Brent crude (29 per cent).

2.19 Based on the current estimates of the Company's liabilities, the net benefit to the taxpayer from restructuring would exceed the value to creditors when the share price is higher than ± 8.98 . Figure 14 (on page 27) also shows, that an increase or reduction in the share price affects the potential value of the taxpayer's interest more than that of creditors or shareholders.

2.20 The allocation of risk has changed considerably as a result of restructuring. Creditors bear greater risk than before restructuring because the value of their holdings was not previously dependent on the Company's earnings. However the risk to the taxpayer is even greater for two reasons: first, the taxpayer holds a larger potential stake in the company through its option to convert the 65 per cent cash sweep and secondly, the taxpayer also bears the risk that the nuclear liabilities may increase. As a result, the taxpayer is only likely to benefit from a surplus on the Nuclear Liabilities Fund if British Energy performs strongly with a consequent impact on the value of the cash sweep. As for shareholders, the value of their holding continues to depend on the Company's earnings although they hold a much smaller stake than before, and the risk attached to the nuclear liabilities has been removed.

24 The term "potential value" is used here to reflect the value arising either from cash sweep payments or through the Nuclear Liabilities Fund exercising its option to convert.



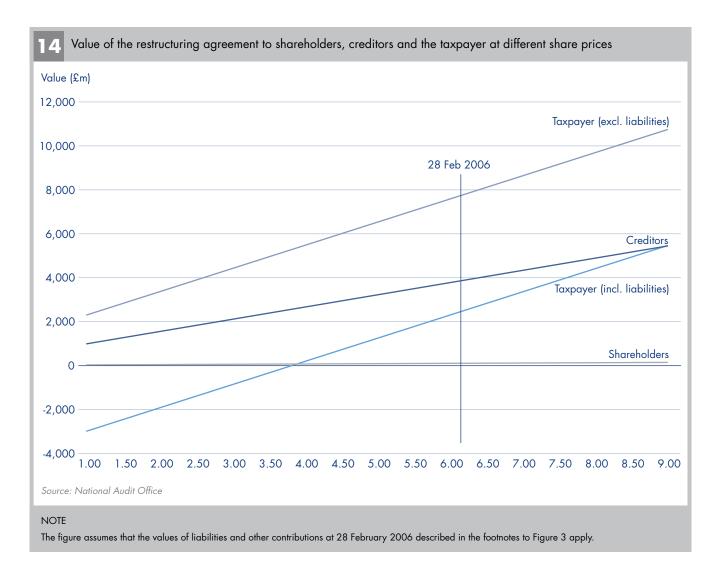
Dealings with British Nuclear Fuels plc as a creditor

2.21 More than 63 per cent²⁵ of the original amount owed to the main creditors was owed to British Nuclear Fuels plc, which is wholly publicly owned. British Nuclear Fuels plc decided not to take bonds or equity in the newly restructured company but instead in 2003 agreed to renegotiate its contracts for fuel and spent fuel reprocessing. In September 2002, British Energy notified British Nuclear Fuels plc that it would be unable to meet its obligations under existing contracts and that restructuring could not take place without amendment of the terms of these contracts. British Nuclear Fuels plc concluded that it was willing to enter into negotiations covering any possible amendment on the grounds that restructuring of British Energy was more commercially attractive than insolvency, although not at any cost.

The Department played no part in the negotiations between British Nuclear Fuels plc and British Energy. The renegotiated contracts created a stronger link between the price charged to British Energy for spent fuel management and the price received by British Energy for the electricity it sells on wholesale markets (Box 1). At the time of the restructuring agreement, the Department estimated that the discounted cost to British Nuclear Fuels plc of the new contracts and hence to the taxpaver would be £462 million at prevailing electricity prices²⁶. Because of the link between wholesale electricity prices and British Energy's payments under the renegotiated contracts, the increase in wholesale prices that has occurred since restructuring (if it continues) would result in a net benefit to the taxpayer as a result of renegotiation, now estimated to be £714 million²⁷.

Based on the net present value of the amount owed to British Nuclear Fuels plc under historic spent fuel contracts, estimated at £2,185 million in March 2003. This total represents estimates of £140 million for new fuel supply contracts and £322 million relating to spent fuel (£174 million for the new AGR spent fuel contracts with fuel loaded on or after restructuring, and £148 million for the transfer of title to spent fuel from British Energy to British Nuclear Fuels plc). British Energy also negotiated standstill agreements with a number of creditors including one with British Nuclear Fuels plc. British Energy calculated its saving under this agreement, and hence the cost to British Nuclear Fuels plc and thus to the taxpayer, at £452 million.

²⁷ Since the restructuring of the United Kingdom nuclear industry on 1 April 2005, British Energy makes payments under renegotiated spent fuel contracts to British Nuclear Group Sellafield Ltd, which in turn passes these payments to the Nuclear Decommissioning Authority. As a result, movements in wholesale prices now affect the taxpayer's position through the Authority, not through British Nuclear Group Sellafield Ltd.



The European Commission's decision

2.22 In September 2004, the European Commission concluded that the Department's financial support was consistent with European Union state aid rules. The Commission accepted that the assumption of British Energy's nuclear liabilities by the taxpayer and its guarantee to underwrite the Nuclear Liabilities Fund would allow the Company to be financially viable in the long term. The Commission concluded that the Department's support was the minimum necessary to restore the long term viability of the Company. The Commission commented that the Department's support for restructuring could have an adverse effect on competition in the UK wholesale electricity market, and required the Department to agree to a number of remedial measures before approving the plan, a necessary condition for restructuring to proceed. These measures included, for example, the ring-fencing of British Energy's nuclear generation businesses to prevent cross-subsidy to its non-nuclear and energy trading activities.

Remuneration of British Energy Directors

2.23 In its report published in September 2004 the Committee of Public Accounts was concerned that British Energy executives might receive bonuses as a result of improvements in the Company's finances accruing from restructuring funded by the taxpayer. The Committee recommended that the Department should require that financial improvements brought about through its support for restructuring were excluded when considering directors' remuneration and bonuses.

2.24 All the Executive Directors on British Energy's Board as at September 2002 had left the Company by September 2004. Three of these directors, including the former Chairman/Chief Executive Officer and the Director of Finance, received contractual compensation on leaving the Company amounting to some £379,000. Two of these payments were made while the Company was utilising the credit facility - the total amount received under the credit facility was repaid by the Company with interest. The third payment was made after credit facility drawings had ceased but before restructuring was completed in January 2005. In the Department's view, its financial support for restructuring had been used to meet the Company's nuclear liabilities and not used for operational expenditure, which would have included the payments to the former directors. We consider that without the Department's support for restructuring the payments to the former Directors could not have been made, although we accept that as long as the Company remained in existence the Company needed to be mindful of its existing contractual arrangements or face possible legal action. Since the completion of restructuring the Department has no right of consultation on executive remuneration, which it regards as a matter for the Company and its private shareholders.

The cost of advice on restructuring

2.25 The Department quickly established a dedicated team with responsibility for handling the Department's response to the situation. The team included two senior civil servants throughout the process and reported directly to the Secretary of State. The team established a Project Oversight Group which allocated responsibilities and set milestones as the restructuring process unfolded, and established a register of risks which it updated monthly. The Department maintained staff continuity throughout the process and managed changes in staff effectively. HM Treasury, in addition to fulfilling its usual role of scrutinising proposed Departmental expenditure, provided secondees and additional support to the Department throughout restructuring. Both the Health and Safety Executive and the Trustees of the Nuclear Liabilities Fund considered that the Department involved them fully and closely throughout the restructuring process.

2.26 The use of advisers by the Department with sufficient and relevant expertise was also important, given the complex nature of restructuring, and the level of expertise available to British Energy and to the Company's banks and bondholders.

2.27 The Department made only limited use of competition in appointing its main advisers (Figure 15). Of the four main firms of advisers used, Credit Suisse First Boston, Deloitte, and Slaughter and May were already working for the Department on other matters, the first two on nuclear energy issues, when British Energy approached the Department in September 2002. In each of these three cases the Department decided that to have run a competition to appoint new advisers would have taken too long as they needed detailed advice quickly. The Department did not therefore advertise this work, worth in total over £28 million, in the Official Journal of the European Union as required under European Union law. There are exemptions in the relevant European Directives that allow member states not to have to advertise contracts that involve work of a secretive or urgent nature or work involving legal services.

2.28 Figure 15 summarises the value of the contracts that the Department let on the British Energy restructuring work and the method of appointment. The fee rates agreed with Credit Suisse First Boston had been reviewed during the previous work which the company had undertaken with the Department and were reviewed again in September 2003. The fee rates agreed with Deloitte and with Slaughter and May were also reviewed once in the period from September 2002 to January 2005. The original contract with Credit Suisse First Boston was capped at £5 million. The value of the work undertaken on British Energy was £11.1 million.

Adviser	Fees September 2002 – January 2005 £000	Method of appointment
Credit Suisse First Boston – financial adviser	11,054	As at September 2002, Credit Suisse First Boston were already advising the Department on nuclear matters. The Department did not compete the new British Energy work but extended an existing contract which had been competitively tendered. The fees for the British Energy work were set as a capped monthly fee plus a series of lump sums to be paid on completion of stages of the restructuring. These fees were reviewed in September 2003.
Deloitte – financial adviser	10,108	As at September 2002, Deloitte were also already working for the Department on nuclear matters. The Department did not compete this new work on British Energy but extended an existing contract which had been competitively tendered. The level of fees were reviewed and capped for 6 months in January 2004.
Slaughter and May – legal adviser	7,079	Slaughter and May were not appointed through a competitive process. The Department extended an existing contract which had been competitively tendered. The hourly fee rates were reviewed and increased in January 2004.
Other legal advisers	397	Legal advisers were also appointed in Scotland, Canada and the United States of America without competition as a matter of urgency in September 2002. The Department states that this is a common method for appointing legal advisers in other countries.
Stone and Webster – technical consultants	146	Appointed by competition
Other advisers	278	Not appointed by competition
Total	29,062	

NOTES

1 These fees are stated net of Value Added Tax.

2 The fees quoted are for payments made between the start of September 2002 and the end of January 2005 when restructuring was completed.

2.29 Departments may often find themselves in a situation where it is not practicable to initiate a new competition to appoint external advisers. It is, however, possible for departments who make regular use of legal, financial and other advice to select firms on a competitive basis and to appoint to a list of preferred suppliers with fee rates agreed in advance which they can call upon as required. The Department now has in place such arrangements for the provision of legal services but it considers that it would not always be practical, for example, in procuring legal advice for large scale projects.

2.30 Figure 15 shows that between September 2002 and January 2005, the Department paid £29.1 million in fees to its advisers. It also incurred administrative costs of £2.5 million. As a condition of renewing the credit facility on 26 September 2002, the Department was able to recover all of the administrative costs incurred in providing the facility. The Department also negotiated an agreement with the Company whereby the Company made a contribution toward the Department's adviser and administrative costs. The Department recovered £16.5 million from British Energy, resulting in a net cost of £15.1 million.

PART THREE Post-restructuring arrangements



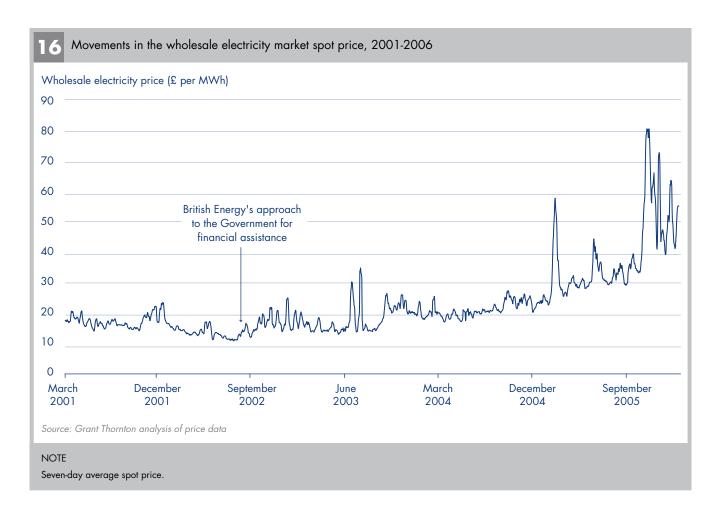
3.1 This Part examines the adequacy of the Department's arrangements for:

- i) overseeing British Energy's performance;
- ii) controlling the cost of the liabilities; and
- iii) allocating monitoring responsibilities within the Department.

i) Overseeing British Energy's financial performance

3.2 As a listed company, British Energy is responsible for managing its own performance in the interests of its own shareholders. Ultimately, the Company's financial performance will reflect the success of the commercial strategy pursued by its Board. Although the Department owns no shares in British Energy, it retains a significant interest in the Company's success. Important contributory factors to that success are likely to be the Company's ability to cope with price volatility in the energy market and the operational reliability of its power stations.

Volatility in the energy markets. One of the principal factors contributing to British Energy's cash crisis in September 2002 was the Company's failure to provide a long-term hedge against wholesale price movements. In recent years, British Energy, and other generators, have had to work with significant variations in the price obtained for their output. Figure 16 overleaf, for example, shows that the market spot price rose by over 250 per cent between the period immediately before the Company's cash crisis and October 2005. The Company agreed under its restructuring agreement to adopt "prudent trading principles". During the restructuring period British Energy began selling forward a greater proportion of its output for a longer period at fixed prices than in the past. Some output was sold at low prices compared to subsequent market movements. The Company reported that it had sought to refine its approach to managing the risks, including the use of options to limit the Company's exposure to price falls, while permitting it to benefit to some extent from price rises.

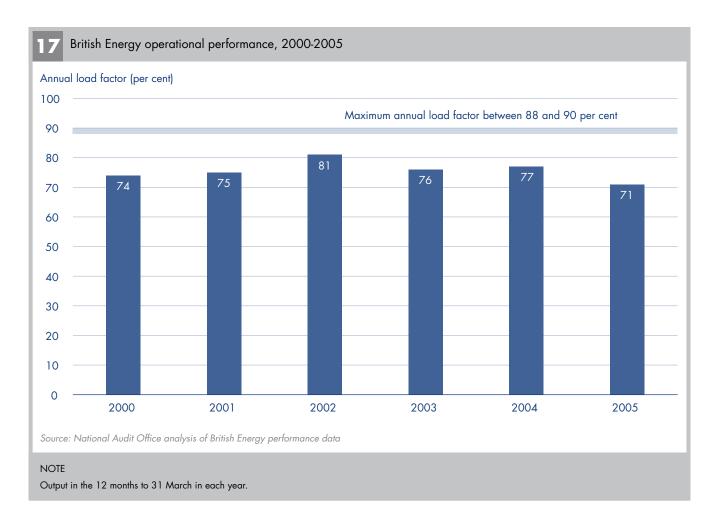


Improving operational reliability. Nuclear reactors may sometimes have to shut down temporarily because of unplanned outages, for example caused by technical problems. In some cases, routine inspections can reveal problems requiring longer than expected outages. The output achieved by British Energy's power stations has fallen short of plan over recent years. Since 2000, the annual load factor²⁸, a measure of the operating efficiency of the Company's nuclear stations, has exceeded the level of 71 per cent achieved in the year ended 31 March 1996²⁹, but has fallen some way short of the maximum annual load factor which could theoretically be achieved, of between 88 and 90 per cent (Figure 17). International data on nuclear power station performance to March 2005 indicates that 61 per cent of reactors (albeit of a different design to British Energy's Advanced Gas-Cooled Reactors) achieved an annual load factor of greater than 80 per cent³⁰. In

August 2003, British Energy started a Performance Improvement Programme to review and help improve the reliability of its power stations. The Performance Improvement Programme is focused on investing in plant and equipment and in changing the culture within the Company and its stations through investment in training, skills and project management. In its relisting prospectus issued in November 2004, British Energy reported that it would spend an additional £70 million to £120 million on the Programme in each of the two years to 31 March 2007. Because of the time and costs of implementation, the Company does not expect to see immediate improvements in performance. The Company, however, reports that in its view the initial results from the Programme have been positive, with improved reporting by staff of potential problems - in its view, an important precursor to improved performance.

28 The annual load factor is obtained by dividing the actual output by the output that would have been achieved had each station operated at its stated capacity in that year for the entire period.

- 29 The last full year before privatisation.
- 30 Nuclear Engineering International, August 2005.



Monitoring and influencing the Company's commercial strategy

3.3 Compared to the position prior to September 2002, the Department has strengthened its ability to monitor and evaluate British Energy's performance. Following privatisation, the Department had no rights of access to information within the Company and obtained such information only from early 2002 when British Energy invited the Department to inspect its books. The Liabilities Agreements give the Department the right to access information kept by British Energy, and to receive financial information necessary to monitor the financial health of the Company. Although not a shareholder, the Department has a major financial interest in the Company, and the Department has delegated responsibility for managing this financial interest to the Shareholder Executive, created in 2003 to improve the Government's performance as a shareholder in businesses it owns. The Shareholder

Executive aims to act as an intelligent and professional shareholder, drawing on best practice in both public and private sectors, and applying a consistent approach to shareholding across the Government's portfolio.

3.4 Since the completion of restructuring, the Company has supplied a range of financial information to the Department on a regular basis, including a rolling 18-month cash flow forecast. In addition, officials have met representatives from the Company monthly since January 2005 to review performance, and will meet annually to discuss the Company's strategy (initiated July 2005). Officials plan to meet with the Board's non-executive directors periodically, with the first meeting held in December 2005. A Minister from the Department is likely to meet British Energy's Chairman every six months (initiated November 2005).

3.5 The Department plays no formal role in approving the Company's commercial strategy. It has, however, placed some limits on British Energy's actions through conditions attached to the Liabilities Agreements and in covenants attached to the British Energy bonds owned by the Nuclear Liabilities Fund. These terms prevent the Board from taking certain decisions that could increase the Department's exposure to the Company's financial position, for example there are limits on the indebtedness that can be incurred by the Company. Some of the conditions set out in the bond covenants will fall away if British Energy attains an investment-grade credit rating, although this in itself would be a positive indicator of the Company's financial health. These covenants include limitations on the ability of the company to incur indebtedness in excess of £75 million, on the scope of business activity undertaken by British Energy and on consolidations or mergers. The Department considered and rejected a second option of appointing a non-executive director because a director's duty is to the company and not to the appointing body. The presence of a Government-nominated director could also lead to questions about the integrity of the Department's policy-making and regulatory functions. A third option would be to acquire an equity holding in the Company and exercise influence as a shareholder. The Department chose not to acquire a shareholding as part of restructuring but has under the Liabilities Agreements the option to convert, in whole or in part, the Company's cash sweep payment to the Nuclear Liabilities Fund into equity in British Energy, which would allow the Nuclear Liabilities Fund to obtain up to 29.9 per cent of voting rights in the Company after conversion³¹.

Effect of Company performance on the Nuclear Liabilities Fund

3.6 The financial structure of the Nuclear Liabilities Fund leaves it particularly exposed to British Energy's financial performance. Apart from the £275 million of British Energy Bonds issued at restructuring, the Fund is only permitted to invest in government gilts (because of HM Treasury rules governing investments by public sector bodies), which prevents further diversification of the Fund through other types of investments. The existing equity investments held in the Nuclear Liabilities Fund will be converted to gilts over the next three years to comply with rules governing the Fund. The Fund's main source of income will therefore be contributions from British Energy. The future financial performance of the Company will therefore influence both the value of its Bonds and the size of its future contributions to the Fund through the cash sweep payment. The Department recognises this exposure and, through the Shareholder Executive, will direct the Fund in managing these holdings.

3.7 The Nuclear Liabilities Fund holds potential value through cash sweep payments and through the option to convert the cash sweep payments to a maximum of 65 per cent of the equity in British Energy which can then be sold thereby realising value for the taxpayer, as discussed in paragraph 2.17. However, the Department would need to consider the impact this action would have on its continuing ability to influence the Company's actions should it need to do so.

ii) Controlling the cost of liabilities

3.8 The size of the liabilities to be incurred by the taxpayer will be affected by decisions taken by British Energy on how it operates its nuclear facilities. The Liabilities Agreements signed between the Department, the Nuclear Liabilities Fund and British Energy specify the circumstances under which the Fund will bear the cost of liabilities and those where the Company will become liable. Examples include:

- Strategic or operational decisions made by British Energy leading to an increase in liabilities. Under the Agreements, the Company can make decisions for commercial reasons (for example, to repair or replace major plant and equipment) that result in an increase in the liabilities to be borne by the Nuclear Liabilities Fund, provided it agrees to meet the cost of any increase in liabilities.
- Changes in regulation or Government policy. The Nuclear Liabilities Fund will meet the cost of discharging the increase in liabilities (but not the cost to British Energy of making the change). The expected decision by the Government on the treatment and storage of nuclear waste is an example of the sort of decision that will affect the level of liabilities assumed by the taxpayer arising from the Company's operations.

31 Following any conversion the maximum voting level is restricted to 29.9 per cent of votes, a limit designed by the Department to avoid the requirement for the Nuclear Liabilities Fund to make a mandatory offer for the whole Company under the City Takeover code.

Failure by British Energy to meet performance standards. British Energy will be required to meet increases in the costs of discharging the liabilities, over certain thresholds, of the Nuclear Liabilities Fund which result from a failure to comply with minimum performance standards. Examples of minimum performance standards include a breach of the Company's site licence conditions set by the Nuclear Installations Inspectorate, a failure to stay within its environmental discharge authorisation limit or a failure to comply with its own operating procedures.

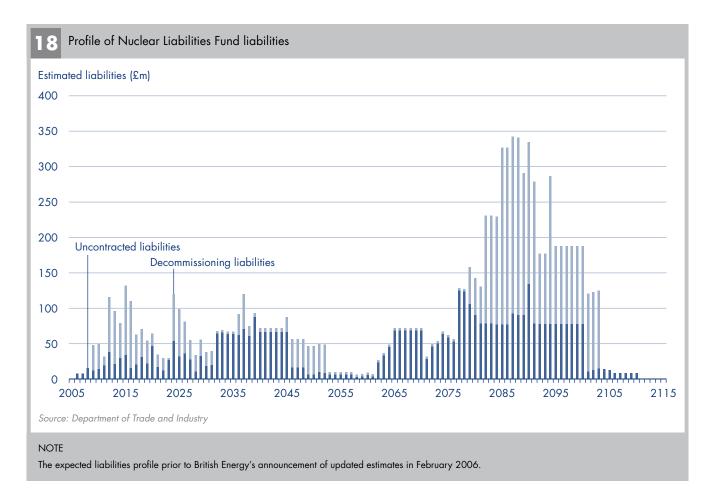
3.9 One of the factors likely to affect the liabilities to be met by the Nuclear Liabilities Fund will be decisions taken on the operational life of the existing stations. The expected closure dates of the Company's stations are detailed in Figure 4. The Company will take decisions on the future of each station on the basis of the technical practicality and economic viability of keeping them running. This decision would include an assessment of the investment costs needed to satisfy itself that the Nuclear Installations Inspectorate would agree future Periodic Safety Reviews. The restructuring agreements provide for the Nuclear Decommissioning Authority to assess the impact of any British Energy application to extend a station life. Should any incremental liabilities be offset by the economic benefit to the Nuclear Liabilities Fund and the Department, then the Department (having been advised by the Authority) must approve the lifetime extension. This occurred in September 2005 when the Company announced that the operational life of its station at Dungeness B would be extended from 2008 to 2018. The Department estimated that this lifetime extension would result in a net contribution to the Fund of £3.4 million at current prices. Should the incremental liabilities outweigh the economic benefit then the Authority must make a recommendation to the Secretary of State on whether to approve the extension or not. At this point the Secretary of State can base his decision on a wider range of factors. The Liabilities Agreements permit the Department to acquire for £1 and continue to operate any station that British Energy plans to close in its own economic interest.

3.10 To provide an incentive to British Energy to reduce the liabilities borne by the Nuclear Liabilities Fund, the Department has included provisions within the Liabilities Agreements for the Company to receive an incentive if it finds ways of reducing these liabilities. The Liabilities Agreements provide for an incentive fee to be agreed through negotiation between the Department, the Nuclear Decommissioning Authority and British Energy before the Company begins work. However, to date an incentives structure has not yet been drawn up. The Department reported its intention that the incentive fee to be paid to British Energy would be negotiated on a case-by-case basis rather than have a structure agreed in advance. The Company and the Nuclear Decommissioning Authority reported that they will seek ways of reducing the costs of discharging liabilities through the sharing of good practice, particularly through learning from experience at sites owned by the Authority where decommissioning has already commenced³². This is where the Department considers reductions in liabilities are most likely to occur. The Liabilities Agreements allow the Authority to require the Company to make changes that would reduce the liabilities of the Nuclear Liabilities Fund, provided that British Energy is compensated for the operating costs of doing so.

Arrangements for estimating the scale of Nuclear Liabilities Fund liabilities

3.11 The likely cost of decommissioning nuclear facilities remains highly uncertain. This uncertainty reflects the fact that the decommissioning process is at an early stage and that technical knowledge of the process is still developing. Because of its long timescale, as long as 100 years for some nuclear stations, financial estimates of the final cost are highly sensitive to assumptions about the likely expenditure profile. **Figure 18 overleaf** shows the estimated profile of British Energy's uncontracted and decommissioning liabilities at March 2005.

32 The Nuclear Decommissioning Authority will play an important role in delivering the Department's Public Service Agreement target to reduce the civil nuclear liability by 10 per cent by 2010.



3.12 Estimates of the liabilities arising from the Company's activities used at the time of restructuring dated from the Company's privatisation in 1996 and had not been updated other than through indexation. And the methodologies used to compile the original estimates had dated from the early 1990s. As the Department had already decided to take on a large proportion of the liabilities and had judged that seeking new estimates would be time consuming it decided that it would not require the Company to provide updated estimates of the liabilities during restructuring. The Department focused its efforts during restructuring and its negotiations with the Company on securing future contributions to meet the cost of the liabilities.

3.13 The Department has strengthened the obligations placed on British Energy to update and report on the liabilities to be borne by the Nuclear Liabilities Fund. The Liabilities Agreements require the Company to produce plans updating its estimates of the liabilities at intervals of at most five years, and at this point the updated estimates

would be reflected in both the Department's and the Company's annual Accounts. The Department expects that all of the reports in **Figure 19** will be published by the Nuclear Decommissioning Authority.

3.14 Since the completion of restructuring British Energy has updated its estimates of the uncontracted and decommissioning liabilities. The Nuclear Decommissioning Authority is in the process of reviewing the accuracy and reasonableness of all the Company's Plans in a phased manner, commencing with uncontracted liabilities and Dungeness B's Decommissioning Plan.

3.15 Following privatisation, the trustees of the former Nuclear Generation Decommissioning Fund were required to assess periodically whether British Energy's contributions would be sufficient to match the Fund's liabilities, and for the Company's contributions to be increased or decreased as a result of this assessment³³. Aside from fixed contributions described in paragraph 1.15, the Company's contribution under the new

33 The Trustees undertook a first Quinquennial Review in 2001, concluding that the assessed value of the Fund at that date was not less than its total discounted liabilities. Following restructuring, the Trustees are no longer required to review adequacy.

Plan	Frequency	Purpose
Decommissioning Plan	At least every five years, and three years before a station is expected to close	Plan of decommissioning work at each nuclear station and estimated cost of discharging the associated liabilities
Uncontracted Liabilities Plan	As for Decommissioning Plans	High level plan of work for the treatment and disposal of spent fuel and waste constituting the uncontracted liabilities of the Nuclear Liabilities Fund, and estimated cost of discharging these liabilities
Annual Liabilities Report Part 1	Annual	Report detailing British Energy's estimates of changes to liabilities in the preceding year
Annual Liabilities Report Part 2	Annual	More detailed plan covering the work over the next three years to discharge the uncontracted and decommissioning liabilities of the Nuclear Liabilities Fund

NOTE

Decommissioning and Uncontracted Liabilities Plans are to be produced as and when required under applicable law, a broad definition which captures both the requirement to update plans every five years in line with the quinquennial review process undertaken by the Nuclear Installations Inspectorate, but also at any point at the behest of the Nuclear Decommissioning Authority. This means that plans will be updated at least every five years but may be more frequently.

arrangements is set at a maximum of 65 per cent of free cash flow and there is no opportunity for the Department to alter the Company's contribution if a Fund shortfall appears likely. The Department, however, considers that it has adopted a prudent position, since the cash sweep percentage was intended to ensure that the Company contributes the maximum it can afford toward the liabilities without jeopardising the Company's financial position.

3.16 The Liabilities Agreements provide for a formal review of the Nuclear Liabilities Fund, comparing its assets and liabilities every 10 years beginning in 2015, and at any point after 2015, if it is likely that the assets held in the Fund exceed the total liabilities by 25 per cent. If the review concludes that this is the case, the Department can elect for the surplus funds to be transferred from the Fund to the Secretary of State. The Department will report annually through its Accounts on the potential liability or surplus arising from its underwriting of the Nuclear Liabilities Fund.

3.17 Lumis, working under contract to our consultants Grant Thornton, compared the basis for making payments toward liabilities and for ensuring sufficient funding of liabilities resulting from restructuring with arrangements in 12 other countries (Appendix 6). They found that it is usual for the ultimate liability to transfer to the State. In some instances electricity customers' bills include a contribution toward the cost of discharging nuclear liabilities, an option rejected by the Department. The nature of the mechanism by which British Energy will contribute toward the nuclear liabilities, consisting of both a fixed charge and an element relating to the volume of waste, is common internationally. However, Lumis found that the arrangement whereby a potentially substantial proportion of contributions are related to the financial performance of the Company rather than the cost of discharging the liabilities is unique. Similarly, Lumis concluded that the Department's decision to underwrite the liabilities, rather than making provision for contributions to be revised upwards or downwards, means that risk has been transferred from shareholder to taxpayer to a greater extent than elsewhere. As discussed in paragraph 2.13, the Department concluded that this transfer was necessary to make British Energy a viable company.

iii) Responsibility for monitoring the taxpayer's interests

3.18 The Comptroller and Auditor General's report of February 2004 found that between privatisation and early 2002, no single individual, post holder or branch within the Department was given defined responsibility for monitoring the risks to the taxpayer arising from British Energy's nuclear liabilities. As a result, there was a risk that information received by one part of the Department was not necessarily being linked up with information obtained by others.

3.19 The Department has strengthened its arrangements to identify and assess the risks to the taxpayer arising out of British Energy's activities. Overall responsibility for managing the taxpayer's interest in British Energy lies with a senior official within the Department. However, day-to-day responsibility for evaluating the Company's performance, and assessing market and other factors that might have an impact on the taxpayer's interest, lies with a number of teams:

- responsibility for managing the risks to the taxpayer arising from British Energy's financial performance lies with a senior official within the Shareholder Executive. The Shareholder Executive is responsible for decisions regarding the Nuclear Liabilities Fund, for example concerning the appointment of Trustees by the Department and any conversion of cash sweep payments to equity;
- responsibility for monitoring the liabilities arising from British Energy's activities lies with the Departmental team with responsibility for liaising with and monitoring the work of the Nuclear Decommissioning Authority. The Authority will carry out the day-to-day work involved in monitoring British Energy's activities;
- responsibility for wider energy policy sits in various units in the Department's Energy Directorate changes in the Department's energy policy can have a direct impact on the net liabilities likely to be borne by the taxpayer.

Each of the teams has appropriate expertise to monitor the issues to which they have been assigned but there is a real possibility that information learned by the different teams is not shared quickly and evaluated as a whole. The Department's Internal Audit team is starting work to provide assurance that risk management arrangements between the Department and its related bodies, including the Nuclear Decommissioning Authority, are complementary.

3.20 Monitoring British Energy's activities is a small but important part of the Nuclear Decommissioning Authority's overall programme. Its core objective is to ensure that the 20 nuclear sites including Sellafield which are now under its ownership are decommissioned and cleaned up safely and effectively. Its workload in relation to British Energy is likely to increase sharply in the early part of the next decade, when four of the Company's eight stations may close on current estimates (Figure 4). As its workload in fulfilling this role increases, the Authority will need to have sufficient resources and expertise in place to ensure that the requirements included in the Liabilities Agreements are properly adhered to and the taxpayer's interests protected. British Energy has agreed to meet the costs incurred by the Department, the Nuclear Liabilities Fund and the Authority in undertaking their responsibilities under the Liabilities Agreements in relation to the Company, up to a maximum of £1 million per annum³⁴. The full costs of monitoring British Energy's activities are not yet known and are likely to vary significantly over time. The Authority currently only has one full-time official responsible for its work on British Energy, supported by other Authority officials during peak working times. The Authority anticipates that the staffing complement will increase as decommissioning becomes imminent.

3.21 More generally, although British Energy is a company wholly-owned by private shareholders its actions and performance will continue to have significant implications for the public purse. To protect the taxpayer's interest, the Department, through the Shareholder Executive, will need to monitor closely for some considerable time the Company's financial and operational performance, and the various factors that might affect the net deficit or surplus on the Nuclear Liabilities Fund, and exert its influence where necessary. The Department needs to establish a contingency plan which will provide a range of options for taking action in the event of specific events including significant falls in the price of electricity or serious outages at one or more of the Company's plants, any of which might once more place the Company's future at risk.

34 If the combined cost of these three bodies exceeds £1 million, the Nuclear Liabilities Fund's excess costs will be met out of the Nuclear Liabilities Fund. British Energy will meet all of the costs incurred in investigating any breach of its obligations under the Liabilities Agreements.

APPENDIX 1 Study methods

This Appendix summarises the methods employed by the National Audit Office in producing this report.

Use of external expertise

The National Audit Office employed Grant Thornton, financial experts with experience of private sector corporate restructuring, to provide the National Audit Office with the following analyses:

- an explanation of the financial assistance provided by the Department to British Energy;
- whether there were any viable alternatives to the restructuring of British Energy which the Department could have adopted;
- an assessment of the new financial structure of British Energy and its suitability;
- a commentary on the arrangements put in place for British Energy to make payments into the Nuclear Liabilities Fund;
- an assessment of the suitability of the analysis that the Department and its advisers undertook in assessing the viability of British Energy after restructuring;
- an evaluation of the Department's revised processes for managing the risks which the newly restructured British Energy poses for the taxpayer; and
- an examination of the governance arrangements between the Department and British Energy and whether they provide a sound basis for monitoring the risks arising from British Energy's nuclear liabilities.

Grant Thornton commissioned work from Lumis LLP, a specialist energy consultancy, to provide analysis in several specific areas. These included an operational perspective on the Department's work to establish whether the Company would be viable following the completion of restructuring, in particular the degree of pessimism attached to price projections; advice on how the Nuclear Liabilities Fund will operate and the Department's post-restructuring risk management arrangements; and a commentary on the Company's proposed management incentive structure. Lumis also undertook a comparison of the arrangements established as a result of restructuring with arrangements for nuclear generators to contribute toward the costs of discharging the resulting nuclear liabilities and the role of the state in other countries (Appendix 6).

Analysis and conclusions

The National Audit Office brought together estimates of the various costs and benefits to the taxpayer - the assumption and underwriting of nuclear liabilities by the Department, the Company's contributions to the Nuclear Liabilities Fund, the estimated costs to British Nuclear Fuels plc, the administrative costs to the Department - to produce an estimate of the total net cost to the taxpayer arising from British Energy's restructuring. Based on analysis by Grant Thornton, the National Audit Office compared the estimated financial cost of restructuring to the taxpayer with the position of the Company's creditors and shareholders.

In assessing the Department's decision to support restructuring, the National Audit Office (with Grant Thornton) reviewed the main documents underlying the decision, primarily submissions to the Secretary of State and presentations by Credit Suisse First Boston and Deloitte to the Department on financial and risk issues. Grant Thornton's assessment was based on the completeness of the range of options considered; the appropriateness of the financial analysis underpinning the recommendations; the impact of sensitivities on the results of the financial analysis; and the weight given to market structure and wider value for money issues. In considering the Department's assessment of the Company's post-restructuring viability, Grant Thornton reviewed the financial model iterations produced by Citigroup (for British Energy), Credit Suisse First Boston and Deloitte (for the Department), British Energy management papers and the information on pricing and collateral requirements generated by Deloitte. Lumis reviewed the output assessments performed by British Energy, its advisers WS Atkins, and the Department's advisers, Stone and Webster. Grant Thornton's conclusions were based on the structure and content of the financial model used; the thoroughness of the scenario modelling; the degree of prudence inherent in the underlying assumptions; and the degree to which operational experience was reflected in the modelling.

Together with Grant Thornton, the National Audit Office reviewed and analysed the documents underpinning the restructuring agreement and process. Of particular importance were the Department's state aid submission to the European Commission of 7 March 2003 and the European Commission's decision document of 22 September 2004; the Credit Facility Agreement and the main Liabilities Agreements between the Department and the Company; and the Company's listing Prospectus of November 2004.

The National Audit Office compared British Energy's operational performance (as measured by its annual load factor) with earlier years and with the performance of nuclear reactors in other countries, assessed changes and volatility in the wholesale electricity market and compared the Company's share price in the context of price changes in the wider electricity sector and the market as a whole.

Audit interviews

Throughout the study the National Audit Office held detailed discussions with the Shareholder Executive within the Department as the body responsible for the monitoring of British Energy. We conducted semi-structured interviews with each of the following:

- the Nuclear Decommissioning Authority official charged with monitoring and minimising the impact of British Energy's activities on the liabilities of the Nuclear Liabilities Fund;
- senior managers of British Energy;
- staff from the Nuclear Decommissioning Authority Corporate Governance branch within the Department responsible for monitoring the work of the Authority;

- representatives of each of the main advisers to the Department on the restructuring of British Energy;
- staff from HM Treasury who worked with the Department on the restructuring of British Energy; and
- representatives of Ofgem and the Health and Safety Executive.

Grant Thornton attended several of these interviews, in particular those with the Department's advisers, and held further semi-structured interviews with representatives of each of:

- Citigroup, advisers to British Energy during restructuring;
- Deutsche Bank, one of British Energy's main creditors;
- Standard and Poors, a credit ratings agency; and
- Lexicon Partners, a firm of financial advisers specialising in electricity mergers and acquisitions.

The National Audit Office visited British Energy's Hinkley Point B station, interviewing station staff regarding operational performance and the operational and cultural changes that have taken place as a result of the Performance Improvement Programme.

Review of policy files, management information and key restructuring documents

The National Audit Office examined the policy files held by the Department to make judgements on a range of issues, particularly the options for a permanent solution; the Department's decision to pursue a solvent restructuring of British Energy; and the analyses the Department and its advisers undertook to assess whether a restructured British Energy could be a financially viable company. The National Audit Office reviewed the Department's arrangements for monitoring the financial position of British Energy both during and after restructuring, including the Department's risk registers and its analysis of information supplied by British Energy to the Department since the completion of restructuring in January 2005.

APPENDIX 2

Estimates of costs or benefits to the taxpayer

The following Figure compares estimates of the costs and benefits to the taxpayer of restructuring made during restructuring (at March 2004, based on the Department's submissions to the European Commission) and as at 28 February 2006, just over one year after the completion of restructuring. They comprise estimates of the net costs or benefits of the nuclear liabilities assumed and underwritten by the Department, the costs or benefits to British Nuclear Fuels plc arising from the standstill agreement and renegotiation of contracts, and the administrative costs incurred by the Department during restructuring. As discussed in paragraph 2.8, the Department's analysis in November 2002 suggested that the cost to the taxpayer of pursuing a solvent restructuring was likely to be comparable to the cost of allowing the Company to fall into administration.

	At March 2004 £m	At 28 February 2006 £m
Estimated contracted spent fuel liabilities assumed by the Department ¹	(2,369)	(2,573)
Estimated uncontracted spent fuel liabilities assumed by the Nuclear Liabilities Fund ¹	(610)	(350)
Estimated decommissioning liabilities assumed by the Nuclear Liabilities Fund ¹	(905)	(2,364)
Total estimated cost of Nuclear Liabilities	(3,884)	(5,287)
Less estimated contributions from British Energy ²	1,914	7,753
Estimated net benefit/(cost) of Nuclear Liabilities	(1,970)	2,466
Estimated cost of contract renegotiations to British Nuclear Fuels plc ³	(462)	714
Cost of payments which British Energy did not make to British Nuclear Fuels plc during restructuring	(397)	(452)
Total additional costs to British Nuclear Fuels plc	(859)	262
Department's administrative costs ⁴	(32)	(32)
Less contributions from British Energy to those costs ⁴	17	17
Net administrative costs	(15)	(15)
Total estimated net benefit/(cost)	(2,844)	2,713
Sources National Audit Office analysis of Departmental Accounts and data Pritich Energy		

Source: National Audit Office analysis of Departmental Accounts and data, British Energy

NOTES

1 The nuclear liabilities assumed or underwritten by the Department are described in more detail in Figure 8. The estimates of contracted liabilities at 28 February 2006 are higher than those made during restructuring due to indexation. The estimates of uncontracted and decommissioning liabilities above are based on the estimates published by British Energy in February 2006, which have yet to be validated by the Nuclear Decommissioning Authority and are adjusted for example for the use of a consistent discount rate.

2 The elements of British Energy's estimated contributions at 28 February 2006 are detailed in the Notes to Figure 3 and in paragraph 1.15. The value of the cash sweep at 28 February 2006 is imputed from the Company's share price of \pounds 6.17 on that day, and over time the value of the cash sweep increases and decreases with movements in the share price. The difference between estimates of contributions at March 2004 and at 28 February 2006 is almost entirely due to increases in the value of the cash sweep resulting from the increase in the Company's share price following relisting (Figure 13 and paragraph 2.18).

3 The renegotiation of contracts between British Energy and British Nuclear Fuels plc is described in Box 1 and paragraph 2.21. The Figure includes British Energy's latest estimates of the cost or benefit to the taxpayer of the renegotiated contracts. The main difference between estimates of the cost to the taxpayer of the renegotiated contracts is due to the increase in wholesale electricity prices, an important factor in determining the level of the Company's payments to British Nuclear Fuels plc. A further difference results from the inclusion in the current estimate of the effects of the Dungeness B lifetime extension, originally assumed to be 5 years.

4 The administrative costs to the Department, including the costs of advisers, are described further in paragraphs 13 and 2.30. The costs of advisers are detailed in Figure 15.

5 Estimates of nuclear liabilities, contributions from British Energy and the costs of contract renegotiations used in the original submissions to the European Commission required amendment to arrive at a discount rate consistent with that used in the Department's Accounts. The current valuation includes market valuations at 28 February 2006, or at 31 December 2005 where these are not available; other amounts are stated at December 2005 prices. The valuation at March 2004 includes market valuations at March 2004 where these are available; other amounts are stated at March 2004 prices.



Advanced Gas-Cooled A nuclear reactor design unique to the UK that uses enriched uranium dioxide fuel clad in Reactor (AGR) stainless steel. British Energy has 14 AGR reactors (two at each AGR station). A British Energy joint venture to purchase and operate US nuclear generating stations. Amergen British Energy disposed of its Amergen interest on 23 December 2003. **Baseload** The minimum level of electricity demand throughout the day. British Energy is a baseload generator because nuclear generation is relatively inflexible. **Bondholders** The holders of British Energy Bonds. The identity of some bondholders changed during restructuring as earlier bondholders sold their holdings. **Bruce Power** In May 2001 British Energy acquired an 82.4% interest in the lease of Bruce Power LP, a nuclear operator in Ontario, Canada. This interest was disposed on 14 February 2003. Contracted liabilities The amounts that British Energy is contractually liable to pay to British Nuclear Fuels plc for the reprocessing and/or storage of AGR spent fuel and other services connected with management of spent fuel. The process whereby a nuclear facility, at the end of its economic life, is taken permanently Decommissioning out of service and its site made available for other purposes. Liabilities relating to the costs of defuelling, decontamination and dismantling of nuclear Decommissioning liabilities power stations after the stations have ceased to generate electricity. Defuelling The removal of all nuclear fuel from a site. This includes fuel within a nuclear reactor and cooling ponds, any unused fuel as well as gases, oils and chemicals. Euratom The EU body set up to encourage progress in the field of nuclear energy. Within the EU, nuclear matters are the subject of a separate Treaty dating from 1957. A statutory body whose role is the enforcement of work related health and safety law Health and Safety Executive (HSE) under the general direction of the Health and Safety Commission established by the Health and Safety at Work Act 1974. HSE is the licensing authority for nuclear installations. The Nuclear Safety Directorate of HSE exercises this delegated authority through the Nuclear Installations Inspectorate. Nuclear Generation A segregated fund established at the time of privatisation of British Energy to pay for the **Decommissioning Fund** decommissioning of British Energy's power stations. Nuclear Installations The body responsible for regulating the nuclear, radiological and industrial safety of nuclear installations UK wide. Inspectorate

Nuclear Liabilities Fund	The Nuclear Generation Decommissioning Fund was renamed the Nuclear Liabilities Fund at restructuring and assumed the uncontracted and decommissioning liabilities of British Energy. The Fund is a company limited by shares owned by an independent Trust. The Fund has five Trustees, three appointed by the Department, two by British Energy.
Outage	A period during which a reactor is shut down. Outages are either planned (including for maintenance, inspection and testing or for refuelling) or unplanned.
Pressurised Water Reactor (PWR)	A nuclear reactor whose primary coolant is maintained under such a pressure that no bulk boiling occurs. The reactor uses water as a moderator and coolant. British Energy has one PWR reactor at its Sizewell B station.
Reactor	A device for sustaining a fission chain reaction in a controlled environment.
Reprocessing	Chemical treatment of spent nuclear fuel to separate uranium and plutonium from nuclear waste products.
Significant creditors	Counterparties to power purchase agreements entered into by British Energy before September 2002 - Enron Capital & Trade Europe Finance LLC, Teesside Power Limited and Total Gas & Power Limited. These creditors sold on their interests to Deutsche Bank before the completion of restructuring.
Site licence	A nuclear site licence required under the Nuclear Installations Act 1965 for the construction, operation and decommissioning of a nuclear installation, and issued by the Nuclear Installations Inspectorate.
State aid	The European Commission has powers to monitor, control and restrict the forms and levels of aid given by all Member States to their industries. 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 whatever distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods and affects trade between Member States.
Uncontracted liabilities	Liabilities for which British Energy had no contract for services. These principally relate to final disposal of spent fuel, plutonium, uranium and wastes arising from the reprocessing of AGR fuel, storage and final disposal of spent PWR fuel (including construction of a dry store at Sizewell B), and storage and disposal of operational wastes.
WANO	World Association of Nuclear Operators, an organisation established in 1989 to maximise the safety and reliability of the operation of nuclear power plants. Its members include representatives of the world's major nuclear power station operators.

APPENDIX 4 Timeline of restructuring

5 September 2002	British Energy's Board announced that it had approached the Government for financial assistance.
9 September 2002	The Department provided British Energy with a £410 million credit facility until 27 September.
26 September 2002	The Department extended the credit facility to 29 November and increased the limit to £650 million.
27 November 2002	The European Commission approved the Department's temporary support to British Energy, subject to the Department submitting a plan for restructuring by 9 March 2003.
28 November 2002	British Energy announced its restructuring plan. The Department announced its support for the restructuring plan. The Department extended the credit facility to 9 March 2003.
14 February 2003	British Energy announced a standstill agreement with its main creditors on debt repayments, and agreement in principle on the terms of the restructuring plan. British Energy announced it had completed the disposal of Bruce Power, and used initial proceeds equivalent to £275 million to repay amounts advanced under the credit facility.
7 March 2003	The Department submitted a plan for restructuring British Energy to the European Commission. The Department extended the credit facility to the earlier of 30 September 2004 or the date on which the restructuring became effective, and reduced the limit to £200 million.
23 July 2003	The European Commission announced that it would undertake a formal state aid investigation.
18 August 2003	Following outages at Sizewell B and Heysham 1, British Energy began drawing on the credit facility again.
1 October 2003	British Energy announced formal agreement with its main creditors on the terms of restructuring.
27 November 2003	The Department announced an increase in the credit facility limit to ± 275 million, following unplanned reactor outages.
23 December 2003	British Energy used the proceeds of the sale of its investment in Amergen to repay all outstanding drawings on the credit facility; the facility limit was reduced to £200 million.
22 September 2004	The European Commission announced that restructuring was (subject to conditions) compatible with European Union state aid rules.
29 November 2004	British Energy issued its relisting prospectus and scheme circulars.
22 December 2004	British Energy gained the requisite approval of a majority of shareholders and creditors for restructuring to proceed.
14 January 2005	Restructuring became effective with the approval of the Court of Session in Scotland.
17 January 2005	British Energy's shares were relisted on the Stock Exchange.

APPENDIX 5

The restructuring agreements

As part of the restructuring, British Energy, the Department and other parties entered into a number of legally binding agreements. The principal agreements are as follows:

- The Historic Liabilities Funding Agreement details the mechanisms by which Government undertakes to discharge British Energy's payment obligations under certain of its existing contracts with British Nuclear Fuels plc (now British Nuclear Group Sellafield Ltd) with respect to the management, reprocessing and storage of "historic" spent fuel, i.e. fuel loaded into British Energy's reactors prior to the completion of restructuring.
- The Nuclear Liabilities Funding Agreement provides for the mechanisms by which Government will meet its commitment to underwrite the Nuclear Liabilities Fund to the extent that British Energy's contributions are not sufficient to meet the costs, as and when they fall due, of decommissioning British Energy's power stations and discharging other uncontracted nuclear liabilities.

- The Contribution Agreement details the mechanisms by which the British Energy group will make contributions to the Nuclear Liabilities Fund for the purpose of discharging its liabilities.
- The Option Agreement details the mechanisms by which Government may exercise an option to acquire the British Energy stations at the time when British Energy plans to shut them, either to prolong their operation or decommission them.

APPENDIX 6

International comparison of funding of nuclear liabilities

Lumis undertook a comparison of the basis for British Energy's payments toward its former nuclear liabilities and the mechanism for funding these liabilities with the mechanisms employed in other countries. The information underlying the comparison was drawn from nuclear energy agency sources, from annual reports of various utilities and supplemented in the case of the US, Canada and Spain by their own experience. The table at the end of this appendix summarises the comparison.

1) Basis for payments

Internationally, a range of mechanisms are used to secure contributions towards paying for nuclear liabilities, the most common being (a), (b) and (d) listed below. The United Kingdom employs a combination of (a) and (d) – that is fixed contributions for decommissioning payments and variable payments for spent fuel and waste, plus the cash sweep payment, which is a free cash flow based mechanism that is unique to British Energy.

a) A fee based on the amount of waste produced

Lumis consider that this method is an equitable approach in that those waste producers who derive benefit from the electricity generated in nuclear power stations incur costs in proportion to the waste that they create. This approach should also encourage those that produce waste to reduce the amount of waste they create. In most of the countries Lumis considered, the fees collected (either based on the amount of waste produced or some other mechanism) are reviewed at regular intervals (between one and three years) and adjustments are made if the projected fund assets are unlikely to meet the liabilities, whereas British Energy's payments are determined by the restructuring agreement and will not be reviewed or amended.

b) A fee based on the amount of electricity produced

This approach is similar to option (a) as there is a strong link between the amount of electricity produced and the amount of waste produced, but it unduly penalises those waste producers who are more efficient in terms of electricity generated per tonne waste produced.

c) A levy on electricity production

In some countries, utilities collect waste management/ decommissioning fees by means of a percentage applied to the electricity rate. This is slightly different from (b) in that the final consumer of the electricity is charged directly (sometimes through a separate line item on their bills) for waste management/decommissioning. In (b) the charge is applied to the producer of the waste who can then choose whether or not to pass this cost onto the final consumer.

d) Fees distinguishing between fixed and variable costs

In this method an attempt is made to distinguish between costs that are a function of the waste generated and those that are not. The 'fixed' category may include Research & Development costs, the cost of constructing encapsulation plants, the cost of sinking deep repository shafts and part of tunnels, and some decommissioning costs. Fixed costs may be allocated between the producers of waste on the basis of their generating capacity or may be charged according to committed volumes of waste whereby the waste producer reserves capacity in the waste repository.

The 'variable' category may include the cost of waste containers and the remaining parts of the repository tunnels. Variable costs may be assigned on the basis of the amount of fuel loaded or amount of waste delivered. One difficulty with this approach is the degree of sophistication or accuracy that can be applied to distinguishing between fixed and variable costs particularly in circumstances where the final waste disposal strategy has not been determined. In countries where there is only one producer of waste the fixed/ variable debate is irrelevant, however, most countries have more than one producer of waste, even if it is just a distinction between the public sector and one private sector producer of waste.

2) Fund management

- a) **Determining payments to be made into the fund.** In most cases, in the countries investigated (including the United Kingdom), government departments/agencies determine the level of payments into the fund. Generally fund payments are calculated with reference to the cost and timing of decommissioning/waste management costs and the fund's growth rate assumption.
- b) **Fund oversight.** Common practice is for oversight to be provided by government departments/agencies.

- c) **Fund management**. Most commonly government departments or agencies provide this role but in some cases waste management organisations, waste producers and independent third parties also perform this role. In some cases a segregated fund exists, in others provisions for future costs are made.
- d) Authorising use of the fund. In most cases, government departments or agencies have control over the use of the fund. In the United Kingdom, the recently formed Nuclear Decommissioning Authority is responsible for civil nuclear public sector liabilities not related to British Energy, and has responsibility for the strategy and management of the discharging of these liabilities including power station decommissioning. The Nuclear Decommissioning Authority does not manage the Nuclear Liabilities Fund - this is undertaken by the Nuclear Liabilities Fund Trustees in accordance with the Fund's investment policy as determined by the Secretary of State. This is similar to the arrangements used in Spain (via ENRESA) but is different to the United States of America where the utility has decommissioning responsibility whilst the Department of Energy is responsible for providing the waste repository. In Canada it is the utilities that have both responsibilities, albeit with some ability to pass through costs to consumers.

Country	Basis for payments	Fund sufficiency
Belgium (8GW ¹)	Reserved capacity for fixed costs	Provision is made in the balance sheets of waste producers
	Unit of waste delivered for variable costs	under the control of a State Supervisory Committee Waste producers have contractual agreements for additional costs not covered by fund payments
Canada (15.4GW) (under review)	Fixed annual payments Bruce Power – fixed and variable lease payments to Ontario Power Generation	Utilities are owned by the Federal or Provincial government which ultimately provides the guarantee
		Bruce Power Station (privately owned) – liabilities transfer to Ontario Power Generation (owned by Ontario province)
Finland	Generating capacity for fixed costs	A state Nuclear Waste Management Fund exists
(2.8GW)	Unit of waste generated for variable costs	Liabilities are estimated annually. The Fund's capital is adjusted annually
		The portion of each waste producer's assessed liability that is not covered by money in the fund must be covered with securities provided by the waste producer
France (68GW) (under review)	Revenues from electricity production	EdF (State owned – proposals to part privatise EdF may require changes in providing for nuclear liabilities)
		Regular cost updates required by French State
Germany	Costs are shared between waste producers based on actual expected usage of the waste repository	Provision made in balance sheet of waste producer
(21.7GW) (under review)		Regular review of funding contributions with reference to projected costs and fund performance
	Public sector budget for publicly owned utilities	
	Electricity production revenues for privately owned utilities	
	Unit of waste generated for Morsleben repository	
	Unit of waste delivered for small generators	
Japan	Unit of waste generated	Nuclear Waste Management Organisation set up by the private sector has liability for waste/spent fuel
	Some transfer of costs to consumers as explicit % of electricity rates	
Netherlands (47.1GW)	Percentage of volume reserved by waste producer	5 year review for low and intermediate level waste costs
South Korea (19GW)	Levy on electricity generated from nuclear plant (per kWh)	Not known
Spain (8GW)	Levy on electricity rate (%)	Annual review by ENRESA
		In return for making payments liability transfers from private utilities to a state owned company (ENRESA)

Country	Basis for payments	Fund sufficiency
Sweden (10GW)	Levy on electricity generated from nuclear plant (per kWh)	Waste producer's contributions to the fund reviewed annually by government departments
	Flat rate fee for administration and radiation monitoring costs	Each waste producer must give a guarantee (in place until all waste is placed in the repository) to cover early shutdown of reactors and shortfall in the required funding – guaranteed amount reviewed annually
		Responsibility and liability for waste/spent fuel transfers to the Swedish Nuclear Fuel Waste Management Co (SKB) when it leaves the nuclear power stations. SKB owned by the 4 nuclear power utilities
Switzerland (3.3GW)	Fixed payments based on estimated costs	Costs/contributions reviewed every five years. Contributions to the decommissioning fund and the waste disposal fund are revised if fund level/cost projection balance moves outside of -15%/+20% bandwidth
United Kingdom (13.8GW)	Public sector budget for publicly owned facilities	Government underwrites any shortfall in the fund
	Unit of waste generated (BE)	
	Fixed decommissioning payment (BE)	
	Cash sweep (BE)	
United States (105GW)	Spent fuel – levy on electricity generated from nuclear plant (per kWh)	Spent fuel - in return for making payments liability transfers from private utilities to Dept of Energy. Periodic review of
	Utility specific contributions to decommissioning fund	payments required into the fund
		Decommissioning ² – utility (either private or state owned) responsible for sufficiency of funds. Nuclear Regulatory Commission sets minimum funding requirements

NOTES

- 1 Operational nuclear capacity a proxy for relative size of nuclear liabilities in each country.
- 2 Accounting for decommissioning in the US.

Lumis' conclusions from the international comparison

1 The international comparison shows that there is no single model that applies in all cases.

2 Many different models exist, however there are some general characteristics:

- in most cases there is a "pay-as-you-generate" mechanism for meeting spent fuel and waste liabilities;
- in most cases ultimate liability transfers to the State or Province which has a vehicle for discharging them;
- the taxpayer is heavily involved in costs and risks associated with nuclear liabilities;
- it is not uncommon for the consumer also to be picking up some of the funding cost during the life of the asset via electricity tariffs;
- in many countries, decommissioning responsibility remains with the utility company – in the United Kingdom responsibility may ultimately be passed to the Nuclear Decommissioning Authority; and
- there are very few, if any, instances where so much of the contribution is based on market and operational performance of the waste producer as is the case with British Energy. (Elsewhere contributions are based on the estimated costs of discharging liabilities and on actual or anticipated fund performance).

- 3 The mechanism for British Energy contributing to nuclear liabilities resulting from restructuring is a hybrid, with:
- a "pay-as-you-generate" element for spent fuel and associated waste (£150,000 per tonne – through the contributions agreement);
- a fixed element the decommissioning contribution
 amounting to £20m per annum, plus the bond interest and repayment;
- a financial performance related element the cash sweep payment; but
- there is no link to the consumer i.e. no collection on tariffs and no costs are passed through to consumers if costs creep up.

4 Risk transfer. British Energy's value is no longer subject to the uncertainty caused by the cost of liabilities. There is no link back into the shareholder for any additional funding and all responsibility transfers to the Nuclear Liabilities Fund (and ultimately to the Department) for spent fuel and decommissioning. There seems to have been a much greater transfer of risk from shareholder to taxpayer than in other countries, for example:

- in the United States of America the utility is responsible for ensuring sufficient funds for decommissioning and carrying out decommissioning;
- in Canada the utilities are ultimately responsible for waste and decommissioning (albeit they are provincially owned);
- In Spain the liabilities transfer to the state owned ENRESA but over the operational life of a nuclear plant, the sum collected by ENRESA can vary year on year based on assessment of the cost of discharging the liability and is collected through a tariff on electricity sales.

APPENDIX 7

Public Accounts Committee report and Treasury Minute – Risk Management: The Nuclear Liabilities of British Energy plc

PAC recommendation

Treasury Minute response

i) Despite retaining, under international treaty obligations, the large residual liabilities associated with nuclear power, the Department treated British Energy after privatisation as just another company. But the Government's formal residual liability implied that British Energy was in a different situation from any other company and the Department needed to behave as a prudent business would in managing the residual risk. The Department failed, however, to put in place any proper risk management arrangements to protect the taxpayer from these risks as set out in our predecessors' report.

ii) The Department assumed that privatisation obliged it to distance itself from British Energy's potential problems, but that constraint was to a large extent self imposed. At privatisation the Department had prepared a risk analysis, which could have formed the basis of continuing risk management, but it failed to update this analysis, and omitted British Energy from its work underpinning the 1998 White Paper on energy for power generation.

1 The Department does not accept the Committee's conclusions. On the residual liabilities, as the National Audit Office noted in its report on the sale of British Energy (BE), the establishment of the Nuclear Generation Decommissioning Fund (to be subsumed into the Nuclear Liabilities Fund (NLF)) provided protection to the taxpayer, and was based on extensive modelling to ensure BE was set up as a robust company well placed to meet its liabilities. The Department believes its actions in respect of BE were at all times appropriate given that the structure of privatisation was a traditional one which left the Department with few tools with which it could mitigate any risk. The Department retained no rights of information or control over the Company's decisionmaking. In the light of that, the Department's monitoring was appropriate given BE's financial position during the period in question: when BE was successful, monitoring was light touch and, as its financial position changed, monitoring was stepped up.

2 Since privatisation, BE has been a public limited company operating in a competitive market. The Government was (and remains) committed to fair and competitive electricity markets and believed that it would not have been appropriate to bias policy to favour a single electricity company. The basket of changes that would lead to the significant fall in wholesale electricity prices was outlined in the 1998 White Paper. Therefore, it was clear from an early stage that Government would be driving towards greater competition and that BE would be a relative loser under new arrangements. However, BE also recognised this (indeed, it had recognised in its 1996 privatisation prospectus that wholesale electricity prices were more likely to fall than to rise). BE was completing its own modelling and analysis of changes. Given this was a privatised company, it was not for the Department to second-guess this work or BE's conclusions that it would be able to meet challenges. The modelling which was carried out by the Department focused on the three major price setting generators not price takers such as BE.

Action since the Public Accounts Committee report

The Department has done more since September 2002 to improve its monitoring. For example, it now receives a range of financial information from the Company including a rolling 18 month cash flow forecast. Officials meet representatives from the Company monthly to review the Company's performance and will meet annually to discuss the Company's strategy. The Department has also strengthened the level of expertise within the various parts of the Department which monitor British Energy (paragraphs 15, 3.3 to 3.5 and 3.19).

The Department has through the Liabilities Agreements made arrangements to manage the risks that British Energy's activities add to the nuclear liabilities assumed by the taxpayer. For example, there are limitations on the amount of indebtedness that the Company can incur, on the scope of business activities that the Company can get involved with and limitations on any consolidations or mergers that the Company may consider. More specifically if the Company decides for commercial reasons to repair or upgrade a power plant and that decision increases the liabilities then the Company has to meet the cost of those increases (paragraphs 3.8 to 3.17).

The Department intends to mitigate the risks arising from the Company's financial position through its working relationship with the Company. The Department considered and rejected the case for equipping itself with more direct influence over the Company's affairs, for example the appointment of a non-executive director (paragraphs 15, 16 and 3.5).

The Committee's conclusions regarding the 1998 White Paper are not directly relevant to this report.

PAC recommendation (continued)

iii) The Department placed too much emphasis on British Energy's dividend payments, particularly the £432 million special dividend, as an indicator of its financial position. Dividend payments are not necessarily a good indicator of a company's financial health and departments should not rely on them. In the private sector financial institutions will make arrangements to prevent companies leaking value through paying dividends and other fees to investors where underlying performance is poor. The Department should make arrangements in the restructured British Energy to avoid the risk that the Company might be weakened by excessive distributions to its shareholders.

Treasury Minute response (continued)

3 The Department accepts the Committee's recommendation regarding the arrangements in the restructured BE, and notes that the Liabilities Agreements agreed between the Government and BE as part of the restructuring anticipate the Committee's recommendation. The agreements prevent BE from making cash distributions (i.e. dividend payments, share re-purchases or other capital reductions in cash), capital distributions (i.e. non-cash dividends or distributions) or acquisitions of another undertaking or participating interest in another undertaking unless:

- available cash and collateral exceeds a 'target amount' of not less than £490 million (plus the amount of the distribution or consideration for the acquisition);
- committed bank facilities are available for such an amount; or
- the BE Group has an investment grade credit rating.

In addition if BE had attained an investment grade credit rating, it could not make a cash or capital distribution if it had reason to believe that the distribution would be likely to result in the loss of that rating.

4 Cash distributions and capital distributions also impact upon the NLF's 65 per cent cash sweep (a right to 65 per cent of BE's annual free cash flow) and therefore there are also restrictions on BE making such distributions if agreed parameters relating to the cash sweep would be exceeded.

Action since the Public Accounts Committee report (continued)

The Department has placed some limits on British Energy's actions through conditions attached to the Liabilities Agreements and in covenants attached to the British Energy bonds owned by the Nuclear Liabilities Fund. These terms prevent the Board from taking certain decisions that could increase the Department's exposure to British Energy's financial position, for example there are limits on the indebtedness that can be incurred by British Energy. Some of the conditions set out in the bond covenants will fall away if British Energy attains an investment grade rating, although this in itself would be a positive indicator of the Company's financial health (paragraph 3.5).

The Liabilities Agreements contain provisions limiting cash and capital distributions as described in the Treasury Minute (paragraph 1.15, footnote).

iv) The Department did not have access to definitive information and in the critical two years to early 2002, it was left to British Energy to bring matters to its attention. In future where departments are exposed to potential liabilities, they should equip themselves with rights of access to company information similar to those obtained by financial institutions in a comparable position.

v) The Department failed to establish a credible overview of British Energy's deteriorating financial position, and did little more than gather information. Its inaction was compounded by split responsibilities for monitoring British Energy and the design of the New Electricity Trading Arrangements. In designing and coordinating energy 5 The Department accepts the Committee's recommendations for future oversight of BE's financial position, and also notes that the Liabilities Agreements anticipate the Committee's recommendations. Amongst other things, the agreements set out the financial and other information that the Department and the NLF will receive from BE to allow us to monitor our exposure to the company's liabilities, including an entitlement to any financial information we might reasonably require to monitor the financial health of the business. Arising from these requirements BE has agreed to provide the Department with, amongst other things, periodic reports on its business performance and strategic and business plans and for there to be regular meetings and communication with senior executives and the Board on a range of topics.

6 The Department does not accept that it failed to consider the taxpayer's potential exposure. This was a key consideration: the structure of the privatisation of BE represented a significant transfer of risk from the public to the private sector, the Department recognise that there was some risk that BE's liabilities might return to the taxpayer, but that risk was contingent and residual.

The Department secured rights of access to information from British Energy under the Liabilities Agreements, and has received financial information from the Company and met with Company representatives since the completion of restructuring in January 2005 (paragraph 3.3 and 3.4).

Although the Department did not accept the Committee's conclusion that it failed to consider the taxpayer's potential exposure in designing policy (including the New Electricity Trading Arrangements), it has considered this exposure in designing its support for restructuring (paragraph 1.15) and post-restructuring arrangements (paragraphs 3.8 to 3.21).

Responsibility for managing these risks remains distributed across a number of teams within the Department. The National Audit Office found some evidence that the various teams were meeting to discuss relevant issues arising from British Energy's activities. However, there is a real possibility that information learned by the

PAC recommendation (continued)

policy it failed to consider the taxpayer's potential exposure. The Department should establish effective oversight of British Energy's financial position, drawing on information from outside and within British Energy and resolving any inconsistencies in information at the time they arise.

vi) British Energy executives may receive bonuses as a result of improvements in the company's finances accruing from restructuring funded by the taxpayer, including the Government's £410 million credit facility. The Department should require that financial improvements brought about through its support for restructuring are excluded when considering directors' remuneration and bonuses. One way such an exclusion could be achieved might be through a memorandum of understanding regarding the terms of directors' contracts overseen by the appointment of a partnership director on the remuneration committee.

vii) British Energy's management did not respond effectively to the changes in the electricity market and the Department did not challenge the company's strategic direction. British Energy's failure to invest in domestic electricity supply significantly contributed to the company's eventual difficulties. Where departments may have to bear residual liabilities from private companies, they should undertake strategic benchmarking of the company against its major competitors and seek explanations for significant variations as a matter of course. In future where departments face significant risks reverting back to them, they should consider whether a Public Private Partnership, with its closer relationships between departments and the private sector and scope for joint risk management, would provide a more appropriate arrangement than privatisation.

Treasury Minute response (continued)

7 The Department does not accept that its responsibility for the New Electricity Trading Arrangements impacted negatively on its handling of BE. According to BE's own modelling, electricity prices would fall, but the company nonetheless embraced the new arrangements and believed it could mitigate a fall of the level forecast and operate effectively in the new market.

8 The Department does not accept the Committee's recommendation. The Committee should note that, following the decision on 22 September 2004 by the European Commission to approve the Government's restructuring aid to BE, the company cannot make any further drawings on the credit facility and all outstanding amounts under the credit facility have been repaid with interest so it cannot be used to pay bonuses. For the future, Government is contributing to the cost of discharging of BE's historic nuclear liabilities and underwriting the NLF. It is not contributing to the company's operating costs. The restructuring agreements with BE put arrangements in place that protect taxpayers' financial exposure to the nuclear liabilities, but also enable BE to operate as a commercial venture with control over its nonliability related operating and financial decisions. Furthermore, it would be impractical to isolate the financial improvements brought about through the Department's support for restructuring from those financial improvements which are not.

9 The Department accepts the Committee's conclusion. The Shareholder Executive was established in September 2003 to advise, and in the case of DTI manage, government departments on their interests in commercial businesses. One of its key objectives is to agree with management an appropriate strategy and corporate governance regime for each of these businesses. In the event that this leads to the conclusion that it would be appropriate to open up a business to private sector participation, the Shareholder Executive would as a matter of course consider the full range of options including a Public Private Partnership.

Action since the Public Accounts Committee report (continued)

different teams is not shared quickly and evaluated as a whole (paragraphs 20 and 3.19).

Payments made to former Directors who left the Company were limited to contractual entitlements. Without the Department's support for restructuring the payments to former Directors could not have been made, but as long as the Company remained in existence the Company needed to be mindful of existing contractual arrangements or face possible legal action (paragraphs 2.23 and 2.24).

Since October 2004, the Shareholder Executive has been responsible for managing the risks to the taxpayer arising from the financial position of British Energy. While the Department plays no formal role in approving the Company's commercial strategy following the completion of restructuring, it intends to monitor the strategic direction of the Company through a framework of financial information and meetings with Company management established through the Liabilities Agreements (paragraphs 3.3 to 3.5 and 3.19).