# Comments on State Aid case C 39/2004 (ex N 613/2003) - Nuclear Decommissioning Authority

#### INTRODUCTION

### **Summary of Greenpeace's views**

- 1. Greenpeace welcomes the Commission's decision to initiate the procedure under Article 88 (2) of the EC Treaty concerning the Nuclear Decommissioning Authority (NDA) and its relationship with British Nuclear Fuels Limited (BNFL) and, more particularly, with the company that will retain those activities of BNFL that are not transferred to the NDA (New BNFL).
- 2. Greenpeace endorses and supports the Commission's preliminary conclusions that the notified measure (the Measure) involves the grant of State aid contrary to Article 87(1) of the EC Treaty in that the State aid distorts competition and affects trade between Member States. Greenpeace believes that it is of fundamental importance to ensure the safe decommissioning and cleaning up of nuclear sites. It is equally fundamental that the polluter pays principle should apply to the nuclear industry just as it does to other industries; and that State-funded exceptions to that principle should not be permitted unless there is no alternative.
- 3. In that respect, Greenpeace agrees with the Commission's conclusion in the notice published in the Official Journal on 21 December 2004 that:
  - "...the Governments' responsibility for the decommissioning and clean-up of nuclear sites is a responsibility of last resort. The primary responsibility for the decommissioning and clean-up of sites remains with the undertakings. Competition issues may precisely occur in particular in cases where an undertaking is relieved by the State of this responsibility while being allowed to continue its other, potentially profitable, activities."
- 4. However, Greenpeace does not believe that, when deciding whether or not the State aid can be approved as being compatible with the common market, the issue is merely one of comparing a positive impact on the achievement of the safe and efficient management of nuclear liabilities (which may be considered to be within the objectives of the Euratom Treaty) with the impact on trading conditions, as the Commission appears to suggest.
- 5. The Euratom Treaty does not override the polluter pays principle, which is just as strong an element of the common interest as the objective of achieving the safe and efficient management of nuclear liabilities. Indeed, it is difficult to comprehend the idea of the safe and efficient management of nuclear liabilities without including within it the principle that the polluter should pay.

1

<sup>&</sup>lt;sup>1</sup> For the avoidance of doubt, Greenpeace does not dispute the Commission's conclusions regarding the application of the Measure to the United Kingdom Atomic Energy Agency (UKAEA).

- 6. Greenpeace therefore believes that, in its current form, the Measure is incapable of being declared compatible with the common market under Article 87(3)(c) of the Treaty. In addition, the Measure cannot be regarded as compensation for the achievement of a service of general economic interest if only because the service in question is nothing more than the service of relieving polluters of the obligation of themselves bearing the burden of cleaning up their own pollution.
- 7. Due to the closed accounts of the organisations at the centre of the investigation, Greenpeace's comments are limited in scope: the financial and technical information that it would like to comment on is held by BNFL and the NDA either as 'commercial in confidence' or under 'national security' rules.
- 8. Subject to the remarks set out above, this submission is, therefore, directed mainly at raising issues that the Commission may wish to pursue with BNFL, its Westinghouse subsidiary and the NDA itself.

## **Summary of issues**

- 9. The issues raised by the Commission's investigation into a possible breach of the State aid rules in relation to BNFL and its subsidiaries and the NDA concern, in broad terms:
- whether or not the effect of the Measure on NDA's and BNFL's operation of reactors, fuel fabrication plants (uranium and MOX), spent fuel reprocessing and disposal sites would affect trade and competition; and
- whether or not the objectives of the Euratom Treaty particularly in terms of health and safety and waste management override concerns about potential distortions of competition resulting from the Measure.
- 10. In addition Greenpeace raises the following questions:
- Can the New BNFL operate without State aid?
- How will the various commercial operations of New BNFL operate in relation to each and will there be cross-subsidy involving State aid funding?
- Can the NDA be classed as a non-government body if it is benefiting from the profits from commercial nuclear activities?<sup>2</sup>
- Which organisation BNFL or the NDA will make the final decision on whether an operation is classed as commercial and how will the monies be allocated?

2

<sup>&</sup>lt;sup>2</sup> UK Government Spending Review. See Chapter 16 Department of Trade and Industry http://www.hm-treasury.gov.uk/media/BE0/4D/sr2004\_ch16.pdf

- Will it be possible for the NDA to divert money from decommissioning and clean up activities (e.g. B30 spent fuel pond) into subsidising operations at THORP and the SMP?
- Will there be secondary organisations which will benefit e.g. utilities using subsidised MOX?
- Should NIREX be classed as 'State aid funded' and therefore come under the scrutiny of this investigation?

#### The nuclear industry and competition – is the NDA case a bad precedent?

- 11. Although Greenpeace is making this submission on the anti-competitive nature of the State aid to BNFL and the NDA, Greenpeace opposes the nuclear industry generally; and it is Greenpeace's view that a nuclear power or reprocessing programme is environmentally unacceptable, whether or not it is competitive. However, whether or not one agrees with that, the present case raises very serious State aid and environmental issues and is likely to set a precedent for other cases. As the Commission will be aware, there are major questions over the potential anti-competitive nature of State aid to some of BNFL's competitors for both reprocessing and reactor construction.<sup>3</sup> The deputy head of nuclear fuel of EDF has been reported as saying that the transfer of decommissioning liability to the French state is an essential step for commercial reasons.<sup>4</sup> That indicates that the whole European nuclear industry will be looking to the EC's investigation of the NDA and BNFL to see if it sets a precedent for allowing the nuclear industry to off-load its liabilities onto the taxpayer, thus exempting that industry, in whole or in part, from the principle that the polluter pays a principle that is otherwise applicable to industry generally and to the energy sector in particular.
- 12. Given the above, Greenpeace wishes to note that this submission is made without prejudice to further comments by Greenpeace on those other cases which the Commission may investigate.

#### **BACKGROUND**

## Reasons behind the NDA

13. The Commission's decision to initiate proceedings (the Decision) suggests that the motive behind establishing the NDA was a sudden realisation by the Government that it seriously needed to address the growing nuclear waste crisis in the UK. Indeed, this is the impression given in the Legacy White Paper, as it notes that that organisation is meant to be focused "squarely on [dealing with] the nuclear legacy". However, it was certainly not clear in the White Paper that the NDA would be so intimately involved with allowing the continuation of waste creating activities such as reprocessing.

<sup>&</sup>lt;sup>3</sup> European Renewable Energies Federation, Press Declaration, 13<sup>th</sup> December 2004 *EU investigation requested into illegal aid to Finnish nuclear plant* http://www.eref-europe.org/downloads/pdf/2004/EPRFinland.pdf

<sup>&</sup>lt;sup>4</sup> EDF seeks transfer of waste liability to French state, Nuclear Fuel, 1st March 2004.

<sup>&</sup>lt;sup>5</sup> DTI (July 2002) *Managing the Nuclear Legacy: A Strategy for Action*, paragraph 1.12. http://www.dti.gov.uk/nuclearcleanup/pdfs/whitepaper.pdf

- 14. That the NDA would become so financially dependent for a significant proportion of its income from commercial nuclear activities such as reprocessing, the operations of loss-making reactors or the possible commissioning of the Sellafield MOX plant, is not indicated in the White Paper. With the Commission is referred to Chapter 6 on the White Paper which discusses the NDA's funding arrangements.
- 15. The above are important points to keep in mind when considering the future activities of the NDA and its relationship to BNFL, both of whom are in fact intended to operate as commercial entities.
- 16. A further key point to bear in mind is that the decision to establish the NDA was predicated on the Government's finding that BNFL was 'technically' bankrupt<sup>6</sup>. That shows that the real motive behind the UK Government's actions in establishing the NDA was to do specifically what the Commission is so keen to investigate: that is, free BNFL so as to allow it to operate in the commercial sector without being encumbered by its liabilities, unlike other undertakings.
- 17. The importance of the real rationale for the NDA cannot be underestimated: the actions of the Government from the time when it announced the establishment of the NDA indicate that it has deliberately pursued a policy of setting up an organisation to carry on 'business as usual' with BNFL relieved of its nuclear waste liabilities. In addition, the Energy Act provides not only for BNFL to be relieved of it liabilities through the establishment of the NDA but also for future private nuclear operators to be bailed out by the Government.<sup>7</sup>
- 18. From the inception of the original Nuclear Decommissioning Authority Bill's introduction, into Parliament in June 2003<sup>8</sup>, through the Energy Bill and the passage of the Energy Act into law in 2004, <sup>9</sup> Greenpeace has challenged the role and purpose of the NDA. It has made several submissions on that issue to Parliament and official agencies. <sup>10</sup>
- 19. Greenpeace also wrote to the Commission on this issue and provided a legal opinion on the State aid aspects of the Energy Bill with reference to those parts concerning the NDA.<sup>11</sup>
- 20. Greenpeace would also like to draw the Commission's attention to the debates on the Energy Bill that took place in the House of Lords and the House of Commons. For example, on a number of occasions, the issue of funding for the NDA and liabilities arose during the

 $paris.org/index.html?/english/othersnews/year\_2002/othersnews020620a.html\&/english/frame/menu.html@/english/frame/menu.$ 

http://www.dti.gov.uk/nuclearcleanup/pdfs/print-05publication.pdf

<sup>&</sup>lt;sup>6</sup> See Ministerial statement in Hansard on this at: <a href="http://www.publications.parliament.uk/pa/cm200102/cmhansrd/vo011128/debtext/11128-10.htm">http://www.publications.parliament.uk/pa/cm200102/cmhansrd/vo011128/debtext/11128-10.htm</a> See also *Sellafield 'nuclear black hole*' Paul Brown, 14 June 2002. http://www.wise-

The Energy Bill - Government set to repeat failure to protect public purse from nuclear liabilities bailout, Greenpeace UK briefing, March 2004.

<sup>&</sup>lt;sup>8</sup> Draft Nuclear Sites and Radioactive Substances Bill, 2003.

<sup>&</sup>lt;sup>9</sup> Energy Act 2004, http://www.legislation.hmso.gov.uk/acts/acts/2004/20040020.htm

See Greenpeace's evidence to the House of Commons Select Committee (http://www.parliament.the-stationery-office.co.uk/pa/cm200203/cmselect/cmtrdind/968/968we07.htmsee to Parliament, etc).

<sup>&</sup>lt;sup>11</sup> For completeness, Greenpeace will provide this document as part of this submission.

debate. Greenpeace would ask the Commission to study carefully those parts of the debates on this issue.

## Transfer of assets and liabilities from BNFL to the NDA

- 21. As the Commission has noted, allowing BNFL to transfer certain of its assets and liabilities to a government authority means that it escapes its duties to pay for its liabilities. BNFL made much of this when it announced its annual accounts, noting that its £303m losses would not be repeated once it had transferred its liabilities to the NDA (some of the losses were also due to having to buy MOX fuel from Belgonuclaire in order to fulfil its contracts). 12
- 22. The transfer of liabilities from BNFL to the NDA also appears to be in direct breach of the UK Government's policy on the issue of 'the polluter pays'.<sup>13</sup>
- 23. This is noted in the UK's report to the International Atomic Energy Agency (IAEA) on compliance with the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, where it states (page 7):
  - "B-14 The UK Government's policy on radioactive waste management is that it should be based on the same basic principles as apply more generally to environmental policy, and in particular on that of sustainable development. The principle of sustainable development is outlined at length in 'Sustainable Development the UK Strategy' which also sets out the following supporting principles:
  - a) decisions should be based on the best possible scientific information and analysis of risks;
  - b) where there is uncertainty and potentially serious risks exist, precautionary action may be necessary;
  - c) ecological impacts must be considered, particularly where resources are non-renewable or effect may be irreversible;
  - d) cost implications should be brought home directly to the people responsible the polluter pays principle." (Emphasis added).
- 24. The report also goes on to note (page 8):
  - "B- 18 The producers and owners of radioactive waste are responsible for bearing the cost of managing and disposing of the waste, including the costs of regulation and

<sup>&</sup>lt;sup>12</sup> BNFL losses widen to £303m, David Gow, The Guardian, 1<sup>st</sup> June 2004

<sup>&</sup>lt;sup>13</sup> UK's 'National Report on Compliance with the Obligations of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management:

http://www.defra.gov.uk/environment/radioactivity/internat/pdf/ukreport pt1.pdf

 $IAEA's\ \textit{Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive\ Waste\ Management\ \underline{\text{http://www.iaea.org/Publications/Documents/Infcircs/1997/infcirc546.pdf}}$ 

those of related research undertaken both by themselves and by the regulatory bodies. They should cost radioactive waste management and disposal liabilities **before** these are incurred and make appropriate financial provisions for meeting them. They should regularly review the adequacy of these provisions." (Emphasis added).

- 25. There are other sections of that report which Greenpeace recommends to the Commission:
- financing decommissioning operations (page 50);
- on the issue of waste management itself, see Minimising the Generation of Radioactive Waste (page 73); and
- Reporting on General Safety Requirements on Articles 11 to 17 of the Convention (page 99).
- 26. Greenpeace refers to these as there are questions over whether reprocessing should continue and whether it is in the best interest of radioactive waste management. Both these issues have been raised in the consultation process by the UK's Committee on Radioactive Waste Management <sup>14</sup> and in the BNFL Stakeholder Dialogue meetings. <sup>15</sup> It is not therefore a 'given' that there is consensus over the need to reprocess either Magnox fuel or AGR and PWR fuel in THORP as the safest way of handling the UK's spent fuel.
- 27. Greenpeace notes that, at present, the UK Government does not designate its plutonium, uranium and spent fuel stockpiles as radioactive waste as per the definition given in the above-named IAEA Convention.
- 28. However, at present, there are no plans for the UK to reuse its civil plutonium stockpile, to reuse all the uranium recovered from reprocessing or to reprocess all the spent fuel that is being created (see the Commission's decision on British Energy's restructuring). These materials are to all intents and purposes wastes and how they are dealt with should be raised in conjunction with the UK's obligations under the Euratom Treaty. A key question is: is it in the best interests of handling radioactive waste which might distort competition and create disadvantage through State aid to continue to allow those processes?
- 29. As the EC's invitation to comment notes:

"The management of nuclear liabilities in an efficient and safe way will be the NDA's only objective. The NDA will have the possibility to continue to operate the physical assets that will be transferred to it **if** the continued operation of these assets cover more than their avoidable costs and therefore contributes to reducing the value of their liabilities." (Emphasis added).

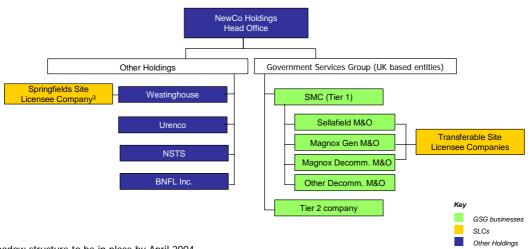
<sup>14</sup> http://www.corwm.org.uk/

<sup>&</sup>lt;sup>15</sup> BNFL Stakeholder Dialogue reports, Environment Council website: http://www.the-environment-council.org.uk/templates/mn\_template.asp?id=221

- 30. As noted earlier, due to the closed nature of BNFL's accounts it is hard to determine if the NDA would be justified in the continued operation and/or commissioning of the facilities it will take ownership of. Some information is, however, in the public domain; and, in the case of specific facilities, this is presented as part of this submission.
- 31. The Commission should be aware that the National Audit Office has expressed an interest in examining the 'value for money' implications of the transfer of assets from BNFL to the NDA. This is noted in a letter from the NAO to the former Environment Minister, Michael Meacher.<sup>16</sup>

#### THE NDA AND BNFL RESTRUCTURING - AN OVERVIEW

## April 2005<sup>1</sup> Schematic Organisational Structure<sup>2</sup>



- 1) Shadow structure to be in place by April 2004
- 2) This may not reflect the final management structure, which will be developed over the period to April 2005
- 3) Status of Springfields still under consideration
- 4) The future position of the current Spent Fuel Services organisation (incorporating UK Transport (DRS), International Transport (62.5% of PNTL)), DEVA (drums), BNFL Instruments and UAM, is still under consideration
- 32. Greenpeace has held several talks with officials from the Department of Trade and Industry (DTI) on both the NDA and proposals to restructure BNFL. It understands that the DTI has held talks with the Commission concerning BNFL's restructuring. The Commission is,

<sup>&</sup>lt;sup>16</sup> Letter from Sir John Bourn, Comptroller and Auditor General, National Audit Office to Michael Meacher, MP, 8 September 2004.

therefore, aware of how the plans will be progressed. These are explained in full in an Explanatory Note issued by the DTI.<sup>17</sup>

- 33. The NDA will take ownership of substantial assets owned in the UK by BNFL on 1<sup>st</sup> April 2005.
- 34. How BNFL will look once restructuring has taken place is *partly* explained in the above diagram from the DTI's note on this matter. This is reproduced here as an aid to understanding the break up of BNFL's operations into different entities and how they may lead to unfair competition or disadvantage to other commercial organisation within the EU.
- 35. The four separate business groups which BNFL is to be re-organised into are:
- a clean-up and decommissioning company, British Nuclear Group (BNG);
- Westinghouse;
- Nuclear Science & Technology Service (NSTS); and
- Spent Fuel Services (SFS).
- 36. All of these will become stand-alone companies on 1<sup>st</sup> April 2005, apart from SFS (the eventual organisational position is still under discussion between BNFL and the Government). All will be held by a parent holding company. The parent company will also continue to own a 33.3% share in Urenco, a uranium enrichment company. It is not clear where BNFL's share of AWE Management Ltd (which operates Aldermaston on behalf of the UK Ministry of Defence) will reside.
- 37. As a result of this change, and potentially through State aid funding via the NDA, BNFL/NDA operations may be in competition or create disadvantage to other companies. This is explained in the diagram on page 19.
- 38. The Government's restructuring of BNFL looks like an exercise in removing liabilities so as to allow a bankrupt nuclear company to continue 'business as usual' and re-emerge in future as a profitable enterprise, giving it unfair advantages over its competitors by virtue of the fact that it:
  - a. no longer has to make provision for accrued waste liabilities;
  - b. no longer has to make provision for capital expenditure; or
  - c. has ongoing revenue subsidies upon which the company is dependent.

<sup>&</sup>lt;sup>17</sup> Conclusions of BNFL Strategy Review: Explanatory Note http://www.dti.gov.uk/nuclearcleanup/ach/explanatorynote.doc

39. As noted earlier with regard to those organisations that BNFL/NDA is in competition with – or that may be disadvantaged by the Measure – some may also benefit from State Aid funding directly from their own Governments (e.g. EDF) or from being a customer of subsidised operations (e.g. Finland's new reactor project which is backed by guarantees from the French and German governments). The discussion on BNFL/NDA is then not one of just of State aid being an issue for the UK nuclear industry, but probably the first of many such instances that we believe the Commission will find itself investigating. However, for the purposes of this paper, Greenpeace will limit the discussion to those areas concerning BNFL/NDA.

## **How will BNFL and the NDA work together?**

- 40. When the NDA takes ownership of the liabilities and assets of BNFL it will become a 'client' for BNFL, which will operate a number of facilities on a commercial basis on behalf of the NDA, e.g. the THORP reprocessing plant. The NDA will receive the profits from these activities (money in) but will also have to pay BNFL to operate the plant (money out).
- 41. BNFL's restructuring into four separate business groups, and proposals for possibly involving the private sector in the individual groups, could eventually see some of BNFL's businesses sold off or operate in partnership with the private sector in some other way. This may be true of the Spent Fuel Services group (SFS), over which there is particular concern.
- 42. In the DTI strategic review of BNFL, it is noted that the future of the SFS has not been decided (see footnote to restructuring diagram on page 7 of this submission).
- 43. SFS has around 500 staff. It manages commercial reprocessing and mixed-oxide contracts with international customers and includes BNFL's international nuclear transport business. The fact that the eventual form of SFS is still to be decided makes it difficult to formulate the exact questions which the EC should be asking. Which entity, for example, will make the decision to spent tens of millions on new nuclear waste ships?<sup>18</sup> What is certainly not clear is which organisation will make the final decision on reprocessing contracts and therefore the costs etc. One of the overheads (Clean up and decommissioning) reproduced in the Final Report from the BNFL National Stakeholder (at page 33) notes that:

"the business (BNFL) has been re-structured accordingly, British Nuclear Group established May 2004. Spent Fuel Services will manage commercial business." <sup>19</sup>

44. Will this be at the behest of the NDA, or will the NDA be told what is considered best by SFS/BNFL? What is known is the NDA is expected to continue to run reprocessing plants at Sellafield for 'revenue generation' purposes. That is raised in the DTI's explanatory note:

<sup>&</sup>lt;sup>18</sup> CORE briefing: *BNFL to order new nuclear cargo ship(s)*. 27<sup>th</sup> January 2004. Document on BNFL's tender attached.

<sup>&</sup>lt;sup>19</sup> The report referred to is the BNFL National Stakeholder Dialogue, Main Group Meeting 13 & 14 October 2004 Summary Report 8 December 2004 is only available in hard copy. It can be requested by emailing the Environment Council on <a href="mailto:info@envcouncil.org.uk">info@envcouncil.org.uk</a>. Other reports are available on: http://www.the-environment-council.org.uk/templates/mn\_template.asp?id=221

"The THORP and SMP plants at Sellafield will also be designated to the NDA. They will be operated by British Nuclear Fuels plc as the Sellafield site licensee company and were outside the terms of the review. (section 2.1)".

- 45. As this reprocessing is linked to the decisions of the SFS, the question arises: why was this left outside the terms of the review when this is such a key area of activity?
- 46. In response to written questions on that topic from a number of NGOs (following a meeting with DTI officials), the DTI simply replied.<sup>20</sup>

"As you know, the current draft Annual Plan is based on data from UKAEA and BNFL with little or no strategic input from the NDA. The same can be said about any current forward forecasts in terms of annual income and expenditure and this will not really change until we see the NDA's Strategy during the course of next year."

- 47. The position is therefore unclear. Further, whether or not the contracts for reprocessing cover the full value of services provided will depend on whether or not State aid is used to subsidise reprocessing operations. For example, if reprocessing and MOX fuel fabrication plants are being operated at Sellafield on the basis that they are only required to recoup 'avoidable costs' that would be unfair to BNFL's competitors who may be required to recoup both avoidable and unavoidable costs.
- 48. Some of those issues are highlighted further in diagrams that accompany the text on THORP's reprocessing operations on pages 23 and 24.
- 49. Another of the main questions for the NDA to answer is which out of BNFL/Westinghouse and the NDA is the commercial organisation?
- 50. For example, if BNFL is simply paid to operate the THORP plant, but the profits go to the NDA to pay off liabilities (that BNFL would have had to pay if it had remained in charge of Sellafield), which is regarded as the commercial venture?
- 51. If BNFL is left to make commercial decisions for part of its operations, but is simply a contractor in other areas (e.g. decommissioning Sellafield), then at what point will the NDA, as owner of Sellafield, stand down from its role as a client and make decisions as an owner?
- 52. As can be seen from the example flow chart on reprocessing at the THORP plant (page 14), there is not only clear competition with other companies, and companies which are disadvantaged, but there is also the potential for a significant amount of cross-subsidy between various linked divisions of BNFL at Sellafield. For the purposes of the investigation, each part of BNFL's operations may need to be viewed as separate commercial operations.
- 53. The Commission will have to establish exactly how the money will flow through BNFL's accounting system, particularly in complex areas such as the THORP plant. For example:

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<sup>&</sup>lt;sup>20</sup> Email to Greenpeace and other NGOs, from DTI, November 2004

- will money for reprocessing, from customer utilities, go directly to the NDA, or will be it channelled through BNFL?
- how will those financial transfers be covered and what kind of oversight will there be from the Government?
- 54. As both the House of Commons Committee of Public Accounts report and the National Audit Office (NAO) report showed, the DTI failed to keep a close eye on the financial situation of British Energy when it was privatised.<sup>21</sup> Accordingly, specific provision ought to exist under the Measure in order to remedy that defect.
- 55. However, it is unclear from the NDA's remit exactly how all of this will operate. What is known is that the Annual Plan published by the NDA is predicated on a 'business as usual' approach with commercial activities at Sellafield being ongoing and – it appears – with little challenge to those commercial activities (see the comments from the DTI quoted earlier). That leaves the NDA in a position in which it will gain from commercial activities. That may lead it in the future to continue those operations particularly for revenue generation.
- 56. For the NDA to profit from commercial nuclear activities which create waste is contrary to the aim of the NDA as originally stated – and contrary to what the Government has said on NDA funding in terms of a segregated fund. The Government's original proposal that the NDA would operate under a segregated fund into which decommissioning funds would be placed allowed the NDA to budget in ten year cycles (a necessary requirement for confidence from the businesses investing in long term decommissioning contracts). That position has now changed to a limited three year cycle. A good explanation of the background to the present situation on this issue is provided in a report from the Public Service Interest Research Unit of the Business School of the University of Greenwich.<sup>22</sup>

## The NDA: how will it relate to BNFL's restructuring and State aid?

- 57. The DTI's Explanatory Note details how it plans to break BNFL up into a clean-up division (now BNG) and 'other holdings.'
- 58. BNG (which includes the U.S. subsidiary BNFL Inc.) will operate as a separate business with its own brand and logo and become a stand-alone company on 1st April 2005. BNG employs 15,000 of BNFL's 23,000 employees. It will start life as the incumbent management contractor for the NDA at Sellafield and at the Magnox reactor sites. Although it will eventually have to compete with other companies, such as US contractors Bechtel and Fluor, for the contracts when they are put out to tender, the fact that it will begin life as an incumbent contractor must inevitably give the company an unfair advantage. The

Report by the Comptroller and Auditor General. HC 264 Session 2003-2004: 6 February 2004

http://www.nao.org.uk/publications/nao reports/03-04/0304264.pdf

House of Commons Committee of Public Accounts

Risk management; the nuclear liabilities of British Energy plc. Thirty-seventh Report Session 2003-04

http://www.publications.parliament.uk/pa/cm200304/cmselect/cmpubacc/354/35403.htm

 $<sup>^{21} \</sup> Risk\ Management:\ The\ Nuclear\ Liabilities\ of\ British\ Energy\ plc.$ 

<sup>&</sup>lt;sup>22</sup> 'The UK Nuclear Decommissioning Authority,' Steve Thomas, Public Service Interest Research Unit, based at the Business School, University of Greenwich. For report see: http://www.psiru.org/reports/2004-12-E-NDA.doc

Commission must decide whether or not this unfair advantage is necessary in order to maintain the safe operation of these sites.

- 59. BNG will also receive a fee from the NDA for continuing to run four operating Magnox stations. Continuing to operate these loss-making reactors imposes an unfair competitive disadvantage on other European electricity generators. Justifying the continued operation of these reactors based only on avoidable costs, rather than on all costs, puts at disadvantage those companies which still have to pay back the costs of the original capital invested in their generating capacity.
- 60. In addition, as the above diagram shows, the 'clean up' group contains a number of operations which are commercial in nature (e.g. THORP) which also *create* radioactive waste.
- 61. Given all of this, and despite the supposed separation of function, it is extremely difficult to draw a line between the activities of the NDA and BNFL. Unravelling exactly which organisation stands to benefit from income and or lose through outgoings is not clear. Nor is it clear if the NDA is the commercial entity which benefits from State aid or if it is BNFL.

#### **Government funding and BNFL**

- 62. The issue is further complicated by the DTI's Strategic Review which discusses the future for BNFL but does not make a clear distinction in terms of financial links between the Government (either directly or as the NDA). Indeed, in a number of instances it is quite clear that the distinction has not yet been resolved by the DTI.
- 63. We know that the NDA will receive money from BNFL's operation of THORP. In relation to this, the NDA's Draft Annual Plan<sup>23</sup> (the Plan) notes that, on waste and nuclear material management (page 45), that:
  - "Representing approximately 24% of the Sellafield budget, this major work area encompasses historic legacy waste retrieval plus conditioning and treatment of new waste arising from commercial and decommissioning operations to support ongoing operations." (Emphasis added).
- 64. The Plan notes that the total monies in from the operations listed on page 46 (including reprocessing, storage, MOX production) etc. will amount to £860m. Outgoings for the site, will amount to £1,017.9m.
- 65. What is not clear is how much of the NDA's money is going into treating 'legacy' waste and how much is going into support treatment of new waste arisings and ongoing operations. There is no indication as to whether or not the NDA will be expected to set aside monies

12

NDA Draft Annual Plan Rev A1 http://www.oxfordshire.gov.uk/draft041012ndaannualplan.pdf

from its income to pay for liabilities arising from new waste creation – yet it clearly expects to benefit from such activities.

- 66. This issue is discussed in more detail in the attached briefing from Cumbrians Opposed to a Radioactive Environment (CORE). <sup>24</sup>
- 67. To add to CORE's comments. In its response to questions from NGO's on the issue of the NDA's annual budget, the DTI replied:

"The current Spending Review settlement sets out the NDA budget for 2004/05, 2005/06 and 2006/07 and the last figure is indicative only. These are the only numbers that have been committed to thus far, although there are financial commitments that are covered by the Energy Act (see below). The figures agreed with Treasury (£2.2bn, £2bn and £2bn) do assume a reduction in revenue from commercial assets even in this three year spending envelope (roughly from £1bn in year one to £500m in year three) and that will obviously reduce further each year thereafter, subject to the conditions set out in the White Paper on THORP and SMP business.

As you know, the current draft Annual Plan is based on data from UKAEA and BNFL with little or no strategic input from the NDA. The same can be said about any current forward forecasts in terms of annual income and expenditure and this will not really change until we see the NDA's Strategy during the course of next year."<sup>25</sup>

- 68. It is estimated that THORP reprocessing will stop around 2010 depending on whether or not new reprocessing contracts are allowed. That would mean that, beyond three years hence, a substantial amount of money will be coming into the NDA's coffers from reprocessing but there is no indication of where this will go. Will some money be set aside for liabilities arising from operations between 2005 and 2010? If, not, this begs the question of how much money will have to be 'found' by the Government to continue to pay for future decommissioning operations from both historic and new activities.
- 69. The DTI plans to drop the budget for the NDA, but inflation is not factored into the budgets proposed for the next 3 years and so there will probably be tremendous pressure on the NDA to continue reprocessing in order to generate revenue for decommissioning and clean up. It is strange that the Government is willing to establish the NDA without first resolving these major issues as this raises a number of issues. For example, will the proposed funding arrangements mean that the Nuclear Liabilities Investment Portfolio (NLIP) will be drawn down more quickly than the Government originally planned? What are implications of this over the long term on the availability of decommissioning funds if the funds are being 'raided' now?
- 70. In relation to that, a 2002 report for an Irish MEP looked at how BNFL's account had underestimated liabilities, overestimated profitability and also how the company's liabilities funding is highly questionable. It notes that:

<sup>&</sup>lt;sup>24</sup> CORE Briefing, January 2005 on THORP. CORE is a Cumbrian based NGO which has campaigned on health and safety and financial issues concerning Sellafield since 1980. Its website and publications are on: http://www.corecumbria.co.uk/

<sup>&</sup>lt;sup>25</sup> DTI, November 2004, ibid

- a. Nuclear liabilities are continuously underestimated by the industry, with a constant need for upward revisions for example BNFL increased its estimate for liabilities for which it has management responsibility by £7 billion in 1999/2000 alone, an increase of 26% over the previous year's estimate. Underestimation of future liabilities overstates the profitability of reprocessing operations. Further underestimation of liabilities arises because separated plutonium and reprocessed uranium have now been shown to be liabilities and not assets. The costs of managing and disposing of these materials should be included in BNFL liability estimates. This Report also identifies other areas where BNFL accounting practice may lead to overstatements of profitability.
- b. BNFL has set aside *provisions* for future nuclear liabilities, but such provisions are not matched by *liquid funds*. In cash flow terms, BNFL benefited from early prepayments on THORP reprocessing contracts. This Report raises questions as to how this cash has been used. Some may have been invested in unprofitable plant, such as the Sellafield MOX Plant. Some may have been invested in non-earning assets on the Sellafield site, at levels not anticipated when setting the reprocessing prices. The problem with such investments is that funds are not then available to deal with the consequent waste management liabilities which may extend for up to 100 years.
- c. BNFL also benefited, in a narrow accounting sense, from the 1998 merger with Magnox Electric. The Magnox "dowry" comprised £3 billion ex-Fossil Fuel Levy which BNFL has passed into its NLIP, and also the Secretary of State's Undertaking (SSU) to meet Magnox liabilities after 2008. BNFL uses the NLIP and SSU to report a healthy current cash position, and to derive a healthy Level of Funding for nuclear liabilities. This Report questions whether the BNFL presentation of Funding information is valid. BNFL is using the NLIP to meet current liabilities, which seems inconsistent with the NLIP's purpose of funding long term liabilities. BNFL may be using the NLIP to subsidise current operations if this were true, then BNFL's avoidable cost argument for continuing Magnox generation is tenuous. <sup>26</sup>
- 71. Will the same hold true for how the NDA accounts for liabilities and profits and how might this affect the flow of State aid in supporting operations which would be closed under the criteria used by purely commercial ventures? The current position is unsatisfactory and entirely lacking in transparency.

<sup>&</sup>lt;sup>26</sup> EXAMINATION OF BNFL REPORTS AND ACCOUNTS Mike Sadnicki 12 March 2002. This Report has been sponsored by Nuala Ahern MEP, member of the Green Group of the European Parliament. Version 1 of this Report was submitted on 24 August 2001 to the Consultation on the Justification of the Sellafield MOX Plant. This Version 2 incorporates results from the full BNFL Report and Accounts 2001, which were published in the week beginning 13 August 2001, too late for consideration for Version 1. Version 2 also discusses recent evidence by BNFL and British Energy to the Cabinet Office's Performance and Innovation Unit, and the announcement on 28 November 2001 by the Secretary of State for Trade and Industry of the proposal to set up a Liabilities Management Authority. Version 2 completely replaces Version 1, and is being submitted in March 2002 to the UK Government Consultation on Managing Radioactive Wastes Safely.

72. With regard to this, the Commission's attention is drawn to the final paragraph of CORE's briefing on THORP where it discusses the massive increase in Sellafield's operation budget referenced in the different Draft Annual Plans for the NDA.

## Privatisation issues related to 'other' BNFL business

73. The DTI's Strategic Review noted that:

"The new clean-up group will, at least at the outset, be part of the public sector. But it will be free to pursue discussions with possible private sector industrial partners to assist it in improving its performance. Those discussions could extend to possible equity investments in the clean-up group and partnerships of various forms at individual sites. It will need to agree with the Government its future strategy and any proposals for partnering while the Government remains its owner." (Emphasis added).

- 74. What is not clear from this and what the Commission would have to establish is how much might go into the private sector, or operations as commercial ventures, while receiving Government money?
- 75. As the Commission has noted, there are concerns not only with BNFL's clean up operation, but with how State aid may impact on those companies coming under 'other' BNFL business and investment. With regard to that, the Strategic Review Note states:

"The review has recognised that UK clean-up will be the principal focus of the new parent company. The Government has therefore asked the BNFL Board to manage the other businesses to deliver value and in a way that limits and controls risk to the UK taxpayer."

- 76. To date, there is no publicly available explanation as to how the Government intends to control this even though it failed in its oversight of British Energy's finances.
- 77. Note is also made in the Strategic Review of Westinghouse's operations at Springfields. At the time the explanatory note was written, it had not been decided that the NDA would take over clean up of the site. This, however, has now been resolved and the NDA will pay for clean up at Springfields but, as the Note explains:

"The site is likely to continue to be operated by Westinghouse under transitional arrangements which ensure that clean-up funds are not used to subsidise commercial activities." (section 4.1.4)

78. On Westinghouse itself, the Review notes:

"The review has concluded that only limited synergies exist between Westinghouse and other BNFL business units, including those concerned with UK clean-up. Westinghouse does, however, rely heavily on its parent for guarantees and other balance sheet support in relation to both its site clean-up obligations and some contracts with its customers." (Emphasis added).

- 79. The Westinghouse Electric Company (WEC), with around 8,000 staff, has assets which include the Springfields nuclear fuel fabrication plant. It also has a share in two joint venture companies: Westinghouse Government Environmental Services Company (which carries out non-defence related work for the US Government); and Westinghouse Government Services Company (which carries out defence related work for the US Government).
- 80. WEC is an international supplier of nuclear plant products and technologies, including nuclear fuel and also owns the AP1000 reactor design, which is being considered as the design for new nuclear reactors should they be built in the UK. BNFL's 2003 Annual Report says that WEC now supplies up to 20% of France's nuclear fuel.
- 81. When BNFL persuaded the Treasury to allow it to buy Westinghouse in 1998, it was widely seen as a step towards privatisation of the parent company; but, now that wholesale privatisation has been ruled out, Westinghouse's global ambitions sit awkwardly with its state ownership.<sup>27</sup> Initial reports suggested that the Strategic Review would conclude that BNFL should sell its American assets. The Treasury was pushing hard for a sale of Westinghouse, which has a turnover of about \$1bn, but BNFL successfully argued that Westinghouse is financially important and a central part of its business strategy.<sup>28</sup> It also argued that its main competitor, the French company Areva, is heavily backed by the French government<sup>29</sup>, and has a direct competitor (the EPR) to Westinghouse's AP1000 reactor. The Strategic Review concluded that Westinghouse relies heavily on its BNFL parent "for guarantees and other balance sheet support" but that it has been working toward greater financial independence, to allow future share flotation or sale.

## 82. Questions which arise are:-

- To what extent does the fact that the NDA is taking on Springfields liabilities represent a subsidy to fuel fabrication?
- How can Westinghouse be disentangled from the need for balance sheet support from the BNFL parent?
- 83. That could, as the Commission notes, mean unfair competition for companies bidding on reactor construction contracts either in or outside the EU. It is believed that BNFL guarantees could be used to support unfair reactor bids. As the Commission is aware, a similar complaint has been levelled over the reactor currently under construction in Finland.<sup>30</sup>
- 84. However, the Government does not go on to make it clear how it will ensure that there is no cross-subsidy from the operations legitimately run under the NDA/BNFL and

<sup>&</sup>lt;sup>27</sup> "On to the global stage, with government in tow", by Andrew Marshall, Independent on Sunday, 28<sup>th</sup> June 1998.

<sup>&</sup>lt;sup>28</sup> "Ministers to let BNFL keep US Arm", by Sylvia Pfeifer, Sunday Telegraph 30/11/2003

<sup>&</sup>lt;sup>29</sup> "BNFL faces ministerial pressure to sell US business" By Mary Fagan Sunday Telegraph 16/11/2003.

<sup>&</sup>lt;sup>30</sup> EREF 3<sup>rd</sup> December 2004 ibid

Westinghouse. As the Explanatory Note states, there is a continued interest in opening up this division for greater private activity:

"The Government has agreed with the BNFL Board that steps will be taken to enable the business to operate with greater financial independence from its parent, so that possibilities for private sector participation are opened up."

- 85. How will Westinghouse achieve 'greater financial independence' if it is heavily reliant on its parent company for guarantees and other balance sheet support? Will monies be paid back, as suggested might be the case for the US Department of Energy in loans it has given for the development of Westinghouse's latest design, the AP1000? <sup>31</sup>
- 86. With regard to Westinghouse/BNFL and reactors, concerns were expressed during the debates on the Energy Act, in both the Houses of Lords and the House of Commons, that money for research for the NDA into clean up might be diverted into monies which keep the nuclear option open (as per the Government's policy outlined in the Energy Review 2003). Could this, *inter alia*, feed into Westinghouse's work to sell reactors? This is raised in the Explanatory Notes, when BNFL's Research and Technology division is discussed:

"In addition, it performs important work for external customers (primarily BE and MoD) and carries out broader, strategic activities that have relevance to keeping the nuclear option open in the UK. A new Nuclear Science and Technology Service (NSTS) will also be established, initially as a subsidiary of the new parent company, and will provide services to the NDA, site licensee companies and third parties on a commercial basis. NSTS will negotiate rights of access to the Research and Technology facilities at NDA sites." (Section 4.1.5).

- 87. NSTS will devote around 70% of its research efforts to supporting BNG, but will also support BNFL's manufacturing activities. In addition, it performs important work for external customers, primarily British Energy and the Ministry of Defence.
- 88. In those areas in which BNFL's clean up work cross over with the NDA's clean up work, there may be a risk of subsidisation of a commercial venture. For example, the Explanatory Note, in discussing BNFL Inc (which undertakes clean up work overseas), comments:

"The review has concluded that BNFL should continue to seek routes to reduce significantly its exposure to the US clean-up market, and should manage BNFL Inc. in a way that minimises the risk to the UK taxpayer."

89. But while there is talk of minimising risk, there is – yet again - no explanation of the mechanism through which that might be achieved. That is particularly relevant at this stage in BNFL's work in the US, as reports have suggested that there is a possibility that the

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<sup>&</sup>lt;sup>31</sup> Final design approval of AP1000 gives reactor a commercial boost Nuclear Fuel,16 September 2004

company could lose up to £300 million on US clean up contract.<sup>32</sup> It is understood that it is still under discussion as to how, if at all, this will be repaid to BNFL. <sup>33</sup>

- 90. That leads to the obvious question of whether the Government can undertake the task of effectively monitoring and controlling all the risks of BNFL which might expose taxpayer funds.
- 91. In questioning the ability of the UK Government to police the financial arrangements between the NDA, BNFL, Westinghouse and other divisions of BNFL, the Commission has already seen evidence that the system might not work (see reports referenced earlier from the House of Commons Committee of Public Accounts and the National Audit Office on British Energy).
- 92. The Commission should be aware that the Trade and Industry Select Committee of the House of Commons announced on 20<sup>th</sup> January that:

"The Committee now intends to conduct a brief inquiry into the progress made by the NDA since its establishment and the arrangements made by the DTI for the transfer of responsibilities and assets to the Authority. The Committee's review will include funding arrangements, capital expenditure and running costs, operation of commercial installations and facilities, R&D and the development of the nuclear industry skills base." <sup>34</sup>

#### **BNFL sold off?**

93. Will the company be sold off, particularly the spent fuel services? Recent press speculation suggests that the Government may be preparing to break up BNFL into its constituent parts.<sup>35</sup> That accords with part of the strategy review where it is noted:

"The Government does not intend that the parent company and its holdings will be privatised as a whole by flotation. The Government and the Board have also agreed that a sale of the entire group as an integrated structure is not an objective. However, proposals for involving the private sector in individual businesses will be examined on their merits, consistent with the Government's overall objectives of focusing on a more competitive market in UK clean-up, maximising the value and mitigating the risk of BNFL's businesses to taxpayers; and ensuring that safety, security and environmental standards are maintained."

94. There have been rumours for several months that Sellafield will be broken-up by the Government - that appears to be confirmed by comments made by the NDA's CEO, Ian

<sup>&</sup>lt;sup>32</sup> Nuclear Firm could face £300m bill, Gabrial Rozenberg, Timesonline August 30, 2004

<sup>&</sup>lt;sup>33</sup> The wait goes on for BNFL and its \$500m refund from the US, Tim Webb, Independent on Sunday, http://news.independent.co.uk/business/news/story.jsp?story=584981

House of Commons Trade and Industry Select Committee 20<sup>th</sup> January 2005 PRESS NOTICE: NEW INQUIRY The Nuclear Decommissioning Authority http://www.parliament.uk/parliamentary committees/trade and industry/tisc pn

<sup>&</sup>lt;sup>35</sup> Bechtel and Lockheed in frame as Labour plots nuclear sell-off, Independent on Sunday, Jason Nissé 09 January 2005. US firms in UK nuclear 'carve up' Richard Orange The Business, Sunday 5th December 2004

Roxburgh, which were reported in an industry journal.<sup>36</sup> Yet the Government White Paper Cm 5552 (July 2002) explicitly states that Sellafield will be managed as a single whole. What amounts will be involved in subsidies to 'other' businesses of BNFL? What mechanisms are there, and how effective will they be, to prevent subsidies or 'risk' to the taxpayer? What sell off plans is the Government developing and how might other private companies benefit from subsidies if the sell-off goes ahead?

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<sup>&</sup>lt;sup>36</sup> NDA may break up Sellafield cleanup work into more pieces Nucleonics Week 4 November 2004

## Diagram 1 NDA

Competitors/disadvantaged Beneficiaries under NDA scheme BNFL -Other decommissioning decommissioning companies services **BNFL Magnox** All other electricity electric producers in Europe Cogema THORP Companies offering reprocessing spent fuel storage Magnox Companies offering reprocessing spent fuel storage BNFL/Westinghouse Other reactor construction companies Springfields fuel Other pu and uranium fabrication fuel producers Other pu and uranium fuel MOX plant fabrication companies Other waste disposal/management **NIREX** companies

#### **THORP** reprocessing operations

- 95. The diagrams on pages [23] and [24] explain the potential for primary and secondary beneficiaries of State aid depending on how monies will flow through BNFL's and the NDA's accounting system.
- 96. The Commission document (page 9) regarding THORP notes that the:

"UK authorities argue that some of the spent fuel to be reprocessed by the plant has already been transferred to Sellafield. It would be difficult and [sic] for customers to turn now to BNFL's competitors for these services, all the more as France, the Member State where BNFL's largest competitor - Areva – is located, has a ban on import of spent fuel for long term storage. Safety and time considerations would also be critical."

- 97. The questions which arise from this are:
- How much spent fuel is held at reactors sites of BNFL's customers which need not be transferred to the site for reprocessing?
- Can this be reprocessed or stored by a non-subsidised competitor?
- How will subsidies impact on new contracts?
- 98. On the issue of spent fuel not already sent to Sellafield we also refer the Commission to the attached briefing from CORE on THORP for costs for reprocessing and technical issues associated with the non-reprocessing option.<sup>37</sup>
- 99. The Government claims that Cogema would not be a position to offer reprocessing services for AGR fuel; but that disregards the fact that Cogema or other companies even the customer companies themselves may be able to offer storage facilities as an alternative to reprocessing.

#### BNFL's price offer on reprocessing - is it realistic?

- 100. Greenpeace does not have access to all the contracts with overseas customers and so does not know what price is being offered for spent fuel reprocessing, plutonium repatriation as MOX or the full amounts of the storage/disposal of low-level and intermediate level wastes arising from reprocessing.
- 101. However, some costs are known. In a document to the Commission on the British Energy investigation NERA noted that BNFL is charging BE £150,000 per tonne for spent

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<sup>&</sup>lt;sup>37</sup> CORE briefing on THORP, January 2005, ibid

fuel services. Harvard estimated the cost of storage of spent fuel *storage* to be £110,000 per tonne.<sup>38</sup>

- 102. As the Commission's decision on BE notes, from the Restructuring Effective Date the payment to BNFL from BE will be the *only* payment made to BNFL for spent fuel management and that BNFL/the Government will pick up any short fall in the amount needed for long term storage or disposal. BNFL's fixed price (£150,000 per tonne) contract for spent fuel storage is slightly above international storage prices (£110,000 per tonne). BNFL will assume the costs and risks of *disposal* approximately an extra £220,000 per tonne over 'spent fuel services' alone.
- 103. That raises the following questions:
- How is this shortfall accounted for once the NDA is operating?
- Which entity takes the risk BNFL (SFS) or the NDA in deciding on whether or not to continue reprocessing?
- Will the NDA set aside money for this or will it spend the income from reprocessing on subsidising ongoing operations contrary to the statement in chapter 6 of the Legacy White Paper?
- 104. In addition THORP's operations at present are heavily influenced by the rate at which high level liquid radioactive waste is being immobilised (see the CORE briefing). That is part of the overall decommissioning and clean up operations of Sellafield and is subject to a direction by the Nuclear Installations Inspectorate. In the case of delayed reprocessing due to failure to immobilise highly radioactive High Activity Liquor (HAL) who covers any monies lost at THORP?
- 105. The issue of reducing the amount of liquid HAL in storage is a graphic example of how the supposed main aim of the NDA decommissioning and clean up might be undermined by its need to generate revenue from processes which add to the overall stockpile of such wastes. In the instance of reducing HAL stocks how are the aims of the NII, and those of Euratom in terms of the reducing the risk of radioactive waste being met if the NDA is being pressured to allow reprocessing for revenue generation?

Response to Questions Raised Based on Reference 334004. Nirex Letter to RWMAC. November 2000.

The Future of Nuclear Power: An Interdisciplinary MIT Study

Massachusetts Institute of Technology. July 2003. http://web.mit.edu/nuclearpower/

The Economics of Reprocessing vs. Direct Disposal of Spent Nuclear Fuel. Belfer Center for Science and International Affairs. M Bunn. Harvard University. December 2003. http://www.puaf.umd.edu/faculty/papers/fetter/2004-NT-repro.pdf

<sup>&</sup>lt;sup>38</sup> Restructuring Aid for British Energy: Issues for the European Commission, National Economic Research Associates (NERA). Gordon MacKerron, March 2004. http://www.nera.com/Publication.asp?p\_ID=2063

## THORP REPROCESSING

Government Money NDA

Money in from operating THORP and sale of pu for MOX?

Money out for operation of THORP

## **Beneficiaries**

1st tier: BNFL/THORP

Money in from NDA – operating, decommissioning and spent fuel reprocessing subsidies Money in from customers for reprocessing Money out to NDA

Money out to NIREX? - from BNFL or NDA for storage/disposal

**1** 

2<sup>nd</sup> tier: Spent fuel customers Money out for reprocessing Money' in' for subsidised reprocessing Competitors/disadvantaged

1<sup>st</sup> tier

Other reprocessing or spent fuel storage companies

2<sup>nd</sup> tier

Other nuclear companies not receiving subsidised reprocessing or spent fuel storage Flow though chart:

## Diagram 3 THORP REPROCESSING

Government/NDA money
Money in from operating THORP and sale
of plutonium for MOX?
Money out for operation of THORP

#### **Beneficiaries**

1st tier: BNFL/THORP

Money in from NDA – operating payment (subsidy) for decommissioning Money in from customers for reprocessing Money out to NDA from 'profit' Money out to NIREX?- from BNFL or NDA for storage/disposal

2<sup>nd</sup> tier: Spent fuel customers Money out for reprocessing Money' in' for subsidised reprocessing

3<sup>rd</sup> tier – BNFL/ MOX plant

Money/subsidy in to operate or commission plant from NDA Money out to NDA from MOX sales?

Money for MOX sale – to NDA?

#### 4th tier:

Companies using plutonium and/or uranium in MOX from subsidised reprocessing

Money 'in' from subsidised MOX Money out for MOX Competitors/ disadvantaged

1<sup>st</sup> tier

Other reprocessing or spent fuel storage companies

2<sup>nd</sup> tier

Other nuclear companies not receiving subsidised reprocessing or spent fuel storage

**3<sup>rd</sup> tier** Other fuel production companies – Uranium and plutonium

## 4<sup>th</sup> tier – but MAIN DISADVANTAGED

All other energy producers not enjoying subsidised services

5th tier NIREX

Operating costs subsidised

5th tier – other companies that can manage waste

#### **MOX**

106. The SMP is not yet commissioned into operation and continues to experience difficulties. The attached letters from the NAO highlight the concerns there are within some parts of the Government over the planned operation of the SMP. This is also discussed in a report by independent consultant, Ian Jackson, in a submission to the UK's Committee on Radioactive Waste Management, where it is estimated that:

"at best SMP will probably only realistically produce about 50 tonnes of MOX fuel per year compared with its design target of 120 tonnes of MOX fuel per year"; and

Assuming that SMP manufactures 50 tonnes of MOX per year (converting 3 tonnes of plutonium per year) the NDA may need to operate SMP for around 12 years (2017) to convert the 37 tonnes of foreign-owned plutonium before it can be returned to overseas customers as MOX fuel. And more importantly perhaps a further 35 years (2052) to process the 105 tonnes of plutonium held in the UK stockpile. <sup>39</sup>

- 107. The same commentator goes on to note that these timescales are of course not very attractive as an effective management option for plutonium, claiming that there may be a need for assistance from European MOX plants operated by either Belgonucleaire or Cogema to help with MOX production. Greenpeace would take the view that this provides a more pressing reason along with financial considerations as to why a different plutonium 'disposition' programme is needed; one that would see the plutonium classed as a waste, not a reusable nuclear material, and immobilized with a view to no future use.
- 108. On this Greenpeace refers the Commission to the work undertaken by the Plutonium Working Group on the BNFL Stakeholder Dialogue. In this, the possibility of not using the MOX plant for MOX production but to immobilise the plutonium prior to long term management/disposal is included as an option for further consideration. The issue of competitors aside, there is then the question of whether the plutonium held by BNFL including stocks for overseas customers and the UK's own plutonium might be managed in another way than incorporation into MOX. That raises questions over whether non-MOX 'use' is best in terms of meeting Euratom and IAEA safeguards objectives and also in terms of costs and State aid subsidies.
- 109. With regard to this, Alan Edwards, former head of the DTI's Liabilities Management Unit, publicly expressed doubts over whether SMP will ever open. CORE has also provided an updated briefing on this which details the technical and financial problems currently facing the SMP.

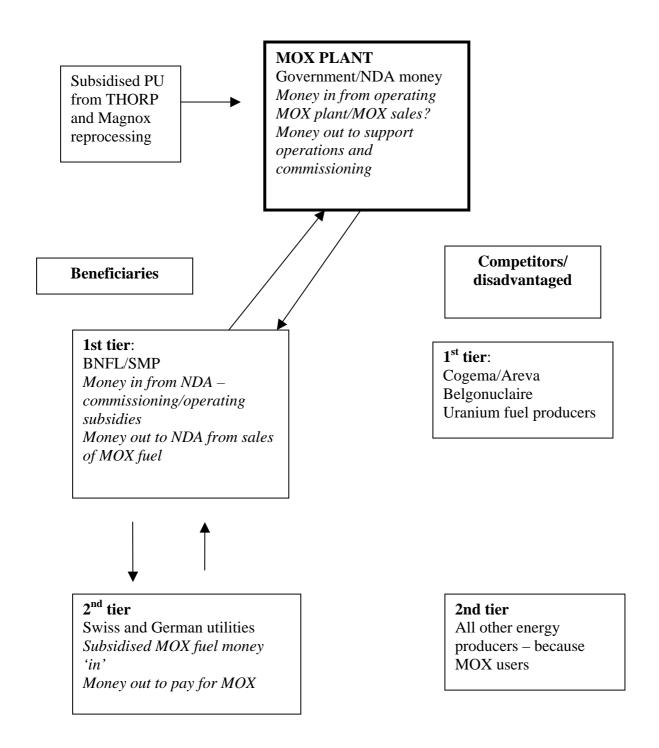
26

<sup>&</sup>lt;sup>39</sup> Jackson Consulting Consultation Response:PSE1 Long Term Radioactive Waste Management http://www.jacksonconsult.com/downloads/CORWM1-1.pdf

<sup>&</sup>lt;sup>40</sup> BNFL National Stakeholder Dialogue, Plutonium Working Group http://www.the-environment-council.org.uk/docs/PuWG Report Mar 03.pdf

<sup>&</sup>lt;sup>41</sup> Speaking at the 6<sup>th</sup> Irish and UK Local Authorities Standing Conference on Nuclear Hazards, Glasgow 25-26 March 2004.

<sup>&</sup>lt;sup>42</sup> CORE briefing on the Sellafield MOX Plant, January 2005



## Magnox electric and Magnox reprocessing

- 110. On Magnox electric, Greenpeace agrees with the Comments by the Commission. The size of Magnox electric's contribution to the national grid has in fact been used by BNFL as a justification for the continued operation of loss making reactors.
- 111. Magnox electric contributes roughly the same amount of electricity to the UK's supplies as the renewables industry. It is, however, subsidised and, in UK terms alone, that obviously confers an unfair advantage on Magnox electric over renewables in particular and other electricity producers in general.
- of this submission. In particular, this looks at the Government on that issue as part of this submission. In particular, this looks at the Government's examination of the 'justification' for Magnox reactor operations an issue which remains controversial. Attached is a memo on the justification issues on operation of the Magnox reactors and how it relates to magnox reprocessing <sup>43</sup>. In particular the Commission is asked to note that BNFL now concedes there are alternatives to reprocessing Magnox fuel. These store and/or conditioning options not only have financial implications, but also potential impacts in terms of whether Magnox reprocessing is the best environmental option for dealing with this spent fuel under international environmental criteria (Magnox reprocessing accounts for 80% of the radioactive discharges from the Sellafield site).

## Westinghouse

113. As noted earlier in this submission, and in the DTI Explanatory Note on BNFL's restructuring, Westinghouse relies heavily on parent company guarantees. It is assumed that this could extend to guarantees for reactor construction projects and could put Westinghouse at an unfair advantage over those companies which do not have what are Government backed guarantees. Greenpeace encourages the Commission to investigate this area further for new build is being promoted by the nuclear industry within and outside the EU.

#### **Springfields**

114. See earlier notes on this in relation to Westinghouse in paragraphs 77-86 of this submission.

#### **CONCLUSION**

115. Greenpeace considers that the basic problem with the Measure is that it is a device, entirely lacking in transparency, by which: (a) a commercial undertaking (BNFL/New BNFL) is freed by the State from significant liabilities and thereby enabled to compete on several markets with an advantage that does not derive from normal competitive conditions; and (b) another undertaking (the NDA) is enabled to carry on commercial operations on a State-subsidised basis.

<sup>&</sup>lt;sup>43</sup> The Economic of Magnox Stations, Greenpeace Memo Updated January 2005

- 116. The State aid resulting from the Measure is not compatible with the common market under the Commission's guidelines on State aid for environmental protection and its guidelines on State aid for rescuing and restructuring firms in difficulty.
- 117. It is not compatible with the common market under Article 87(3)(c) of the Treaty because, even though the decommissioning and cleaning up of nuclear sites can be said to be consistent with the common interest and with the objectives of the Euratom Treaty, it is a fundamental principle and equally consistent with the *common* interest that the polluter must pay for the consequences of his actions.
- 118. Any departure from that principle would have to be clearly reasoned and based upon a compelling justification, not least because of the precedent that it would undoubtedly set for the rest of the nuclear industry, the whole energy sector, and for industry generally.
- 119. For its part, Greenpeace is completely unable to identify any rational basis upon which a departure from the polluter pays principle could be justified.
- 120. Accordingly, Greenpeace considers that the Measure cannot be declared to be compatible with the common market.
- 121. Greenpeace requests the opportunity to comment further on the issues raised by the measure in the light of the comments from other interested parties and any further information obtained by the Commission in the course of these proceedings concerning not only the State aid issues but also the question whether or not the measure could be viewed as compensation for the achievement of a service of general economic interest (which Greenpeace considers is not the case for the reason stated at the beginning of this submission).