

**FUNDING ISSUES**

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**PURPOSE**

1. The purpose of this paper is to allow CoRWM to consider the range of issues concerning funding of a geological disposal facility (GDF) and of safe and secure interim storage, to note current developments and to identify issues that require further consideration or where CoRWM should develop advice to Government.
2. CoRWM1 identified as one of its guiding principles, the need to ensure an efficient and cost effective process that will inspire public confidence This will involve:
  - ensuring the adequacy and security of funding for a geological disposal facility and for safe and secure interim storage.
  - ensuring the adequacy and security of funding for engagement with communities
  - ensuring the security and adequacy of funding for community benefit packages.
  - ensuring that funding mechanisms and funding flows are used efficiently and effectively, achieve value for money and help maintain and enhance safety.

**NDA FUNDING**

3. Since NDA has been identified as the implementing body for geological disposal and has a key role with regard to interim storage, CoRWM needs to consider whether NDA funding levels and funding mechanisms are appropriate to provide confidence that interim storage and a GDF will be delivered efficiently and cost-effectively.
4. At present NDA funding flows from two sources:
  - commercial revenue (e.g. from Magnox Reactors, THORP etc)
  - grant in aid

So, for example, for 2008/09 of a planned expenditure of £2,855m, £1,536m is grant in aid, £1,318m commercial income.

5. The level of funding for the NDA is determined as part of the Governments normal Comprehensive Spending Review (CSR) process whereby public bodies are allocated money for three years ahead. Funds flow from the BERR Departmental budget with NDA funding taking approximately 47% of the department's budget. Concern has been expressed in some quarters about the level of available funding. The amount being spent on decommissioning and liabilities management has increased year on year. Set up with an anticipated annual expenditure of £2.2billion, the NDA's budget for the next three years is set to be over £8bn. But estimated life-time costs have also consistently risen and the BERR Select Committee believes that "public funding of NDA will almost certainly have to increase significantly in the coming years over and above current plans". BERR recognises this point and notes that the grant has already increased significantly and the expectation has always been that it would need to do so as commercial income has declined.
6. In recent years NDA has been working to identify with certainty estimates of future costs – an essential for sound financial planning. NDA and Government recognised that a significant early challenge for the newly formed NDA was to baseline historical liabilities. It is hoped that this work will be completed this year.
7. At the same time NDA's commercial income has proven to be volatile. Whilst maintaining its budgeted expenditure, the NDA has had to prioritise its available funding, balancing what is desirable with what is affordable. This has led to deferral of projects, sometimes at short notice, and this has led to calls for funding arrangements to be reviewed.
8. In the past year a number of organisations have reported on NDA funding and financial management. The National Audit Office which is concerned with efficiency, effectiveness and value for money, in its report "The NDA : Taking Decommissioning Forward", January 2008 , acknowledged the scale and uncertainty of the task taken on by the NDA, the significant resources now allocated to decommissioning , the development of a national strategy and the development of comprehensive and consistent framework for drawing up decommissioning plans at site level. It also raised a number of areas of concern:
  - the continuing failure to pin down cost estimates of future decommissioning
  - short notice changes to sites' funding levels. These have led to significant uncertainties for both site licensees and contractors and additional costs for the taxpayer which lessen value for money
  - lack of flexibility in budgets leading to stop- starts at sites thereby incurring extra costs to the taxpayer
  - expressed the view that present cost-reimbursement contracts are not well-suited to the delivery of decommissioning activities on longer timescales.

9. The House of Commons Public Accounts Committee Report following on from the NAO Report recommended, inter alia:
- in future NDA should give ranges of decommissioning costs not simple numbers.
  - BERR, the NDA and the Treasury should examine arrangements for planning and resourcing NDA's work e.g. with a view to building reserves as a buffer against unexpected demands.
  - BERR should ensure that the operators of new nuclear power stations make adequate provision for decommissioning, so that costs do not fall back on the taxpayer.
10. The Select Committee on Business and Enterprise in its April 2008 Report, "Funding the Nuclear Decommissioning Authority" noted a number of technical problems in the NDA funding arrangements but, more fundamentally, noted:
- the volatility of the NDA's commercial income
  - the fact that commercial income will decline as sites progressively close.
  - the prospect of unexpected and urgent expenditure commitments
  - the lack of a segregated fund for the NDA to withdraw from in emergencies
11. The Select Committee's final conclusion was:
- " We believe the NDA's funding model is unsustainable . We note the Department's assurances that a solution has been found for the current Comprehensive Spending Review period. However, in view of the volatile – and declining nature of the NDA's commercial income we are sceptical about how watertight such an assurance can be. Nuclear decommissioning is too important to be left to the mercy of changing priorities in the Treasury and uncertain commercial income; as the Permanent Secretary acknowledged , a new system of funding is needed and work on this needs to begin urgently."
12. Although the focus of the NAO Report and the Select Committee Report were on the efficient and effective use of public money , there is also a question of whether the problems with funding and financial management impact on safety. This has been considered by NuSAC at its open meeting in July and subsequently [Papers available on the NuSAC website : NuSAC(2008)P19 &20],. NuSAC's conclusion is that NDA funding allocations have not affected safety on their sites in the short term but there are concerns about the longer term.
13. The fundamental issue is that the provision of safe and secure interim storage and the development of a GDF is long term and requires long term planning including financial planning but the standard current public spending planning mechanisms provide certainty for only a three year period. However it is important to note that the length of government funding does not and has not precluded the NDA, or other public bodies, from entering longer term contracts. The guarantee of future funding being available flows from Government commitment to the policy aim..

14. It is important to note that government have responded to the recent reports from the NAO and the BERR Select Committee.. For example, financial oversight of the NDA has been moved to the Shareholder Executive which it is hoped will lead to better financial governance.
15. In response to the Select Committee the Government has agreed that it will consider whether there are changes that can be made to the NDA funding model to better enable its funding to be managed effectively while maintaining the right incentives and controls. It has been agreed that these options will be considered by the Treasury in advance of the next spending review. [ Government Response to the Business and Enterprise Committee Report Funding the Nuclear Decommissioning Authority, July 2008]
16. At our recent meeting the NDA Chair and Chief Executive confirmed that they were exploring with government funding flows, contingency funding, flexibility re year-end funding. and possible ring-fencing)..
17. CoRWM will clearly want to monitor developments in the NDA's funding model. What mechanisms can be used to ensure that there will be adequate funds to cover long-term interim storage and the development of a geological disposal facility? . Will there be enough certainty about the availability of funds to promote efficient long term financial planning?
18. These are issues which are of concern now. Security of funding is an issue for communities who might be considering expressing an interest in hosting a GDF and proceeding to participate. They need to be reassured that the project will proceed and that it will not fail because of lack of funding in future years. [Ref: 17/07/08 meeting with Nuleaf.]
19. We also need to raise the ethical consideration of inter-generational equity. Is it fair to pass on the cost of storage and disposal of our waste to future generations of taxpayers?
20. Therefore CORWM should welcome the moves to explore more long term funding mechanisms for NDA. We need to monitor any proposals that emerge. Will they provide confidence to communities about the security and adequacy of funding for interim storage and the development of a GDF? Will they take account of intergenerational equity? What is the commitment of the present generation to address the burden of dealing with legacy wastes? Will they promote efficiency, effectiveness and value for money?

## **FUNDING A GEOLOGICAL DISPOSAL FACILITY**

21. NDA's Annual Report and Accounts for 2007/08 (pages 35-36) sets out an estimate for the costs of a GDF of £12.2billion undiscounted of which the NDA's share will be £10.1bn [£3.4billion discounted], the rest flowing from e.g. MoD.(Discounting is the process of determining the present value of a payment or stream of payments to be made or received in the future - a pound

available today is worth more than a pound tomorrow because of its capacity to earn interest) . It is important to note that these are indicative costs only, and given the extremely wide range of uncertainties surrounding a GDF it is hard to say how realistic they are. This caveat must apply to any cost estimates for a GDF..

22. However the figure is useful in highlighting the scale of the GDF project. This is a large, one-off project representing major investment over a period of many years. The range of uncertainties is extremely wide [Ref CORWM paper 2006]. As such there must be a significant risk of costs escalating way beyond original estimates. Though it should be noted that there is also the potential for cost savings by optimizing the disposal solutions and by efficient delivery. As the programme develops and risks are either mitigated or removed the cost certainty will improve.
23. The costs given in the Annual Report are based on the assumption that all waste will be co-located in one facility. However, the NDA has developed a cost model to assess costs for a range of scenarios.
24. The NDA is providing BERR with a range of costs for different scenarios, including more than one facility, to assist with their development of a unit price cost for disposal of new build waste.. CoRWM should welcome this approach . Notwithstanding the caveats set out above, it is clearly important that financial planning and modelling encompasses a range of different scenarios.
25. The Annual Report also sets out an anticipated expenditure profile (Pge 36) showing significant peaks and troughs over the likely lifetime of the project. The staged implementation of the project will also allow costs and value for money to be assessed at different stages.
26. The spending profile highlights the issue of intergenerational equity – with most of the spend significantly in the future.
27. Price Waterhouse Cooper are presently exploring funding mechanisms for a GDF.
28. CORWM should welcome the work being done to develop an understanding of the financial costs of a GDF. We should particularly welcome an approach based on parametric costings i.e looking at the implications of a range of different scenarios. We should welcome the work being undertaken by Price Waterhouse Cooper. We should seek to comment on this work to the extent which any funding mechanisms provide confidence about the security and adequacy of this funding and meet the test of intergenerational equity?

## **FUNDING FOR ENGAGEMENT PACKAGES**

29. CoRWM in its 2007 report “ Implementing a Partnership Approach”, Doc No 2146 , recommended that the Government should fund engagement activities and, in particular, should fund community partnerships as soon as they were established and throughout their existence. CoRWM noted that both Nirex and NuLeAF supported the establishment of a separate fund for this purpose.

CoRWM stated that whatever mechanism was chosen there needed to be a secure basis for funding over time.(paras307-309).

30. The MRWS White Paper states that :

“6.48 ....costs of local community engagement in the process will be funded , either partly or wholly, through Government .....What support, and the point at which it is available will be something to be considered by in the scope of initial discussions following an Expression of Interest.”

31. CoRWM needs to monitor how these discussions develop. In particular we would want to see more clarity about who is funding these packages, how and how easy they are to access.

## **FUNDING OF COMMUNITY BENEFIT PACKAGES**

32. CoRWM in “Implementing a Partnership Approach” stated that “Confidence that any Community Package will be delivered is fundamental to the success of the entire process”. One mechanism might be an independent fund, independently managed. If not by this means, it was essential that funds were ring-fenced and protected over time and that the mechanisms for achieving this were transparent. (para 335).

33. The MRWS White Paper states that amongst the responses to the preceding consultation the need for clear funding criteria for community benefits packages was mentioned. However the White Paper does not directly address this point.

34. The key point in the White Paper is that the nature and scale of any benefits package will be subject to negotiation between the Government , the NDA and local communities. It acknowledges that benefit packages will have to have an intergenerational element and that “delivery mechanisms ....will be developed as discussions progress”. [6.58].

35. This developmental approach may well be correct. However there is a risk that questions of supporting funding might arise sooner rather than later. Communities will want to have confidence that there are funding mechanisms available that will ensure the adequacy and security of funding intergenerationally. This issue has already been raised by NuLeAF as a potential barrier to communities coming forward.

36. There is also a need to clarify who will pay for the community package and how funding will be legally guaranteed. If payment is to be through the NDA, the problems mentioned above about long-term NDA funding arise. Any guarantee would probably need to be backed by Government if it is to have the required longevity. CoRWM needs to continue to monitor these issues.

## **NEW BUILD**

37. The Energy White Paper which invited energy companies to bring forward plans to build and operate new nuclear power stations stated that operators had to meet the full costs of decommissioning, including a full share of waste management costs . The Energy Bill ( presently still being considered by the

House of Lords) includes a framework to ensure that energy companies set aside sufficient funds to cover decommissioning and management of waste. This follows the approach which exists in other countries such as Sweden and Finland.

38. Operators of new plants will have to have a Funded Decommissioning Programme (FDP) approved by the Secretary of State. FDPs must include:

- details of steps necessary to decommission and manage and dispose of hazardous waste
- estimate of the costs of taking these steps
- details of the security to be provided in relation to meeting these costs

39. The BERR “Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations”, Feb 2008 sets out the main components of FDPs and how they will work.

40. An operators “full share” of waste management costs will be:

- costs directly attributable to disposing of new build higher activity waste into a Geological Disposal Facility
- a contribution towards the fixed costs of constructing a GDF
- a significant risk premium over and above these costs to take account of uncertainties re cost of construction and the timing of when a GDF will be able to accept new build waste
- the cost of managing waste pending disposal.

41. FDPs must include a schedule of when the government will take title and liability for waste and spent fuel. For most waste this will not be until decommissioning is complete. However, the Government expects to retain the power to take title to and liability for intermediate level waste and spent fuel before the end of the generating life of a station, should a disposal route become available (see also below).

42. To provide certainty for operators the Government will set a fixed unit price for disposal costs. The fixed unit price will be set at a level over and above expected costs and will also include a significant risk premium. The BERR Consultation sets out the methodology for cost calculations and states that the Government will use the results of BERR’s and the NDA’s cost modelling work to determine the fixed unit price.

43. It has been argued that having a fixed unit cost is effectively giving a subsidy to new operators – no matter how big a risk premium is built in. The range of uncertainties about a geological disposal facility ( siting, design, construction , timescales for emplacement etc ) are so great as to make the estimation of future costs extraordinarily difficult. Any modelling approach risks producing such wide ranges as to be of little value.

44. The BERR Consultation assumes that new build waste will be co-located with legacy waste in a single facility . It is not yet clear what the implications of new build waste are for GDF size and design. However the NDA has told us that in

its costing work it has considered the scenario of more than one facility and has provided this cost information to the contractors who are carrying out the new build funding modelling for BERR.

45. The Consultation Paper sets out a number of proposals to ensure the security of funding.
46. Operators will have to have a Funding Arrangements Plan, again approved by government, to deliver sufficient moneys to cover the costs of decommissioning and waste management including disposal. This must involve the setting up of a fund or funds which are independent of both the operator and of government. Within the fund or funds there must be separation of the liabilities for decommissioning and those for waste disposal.
47. A new independent body, the Nuclear Liabilities Financing Assurance Board will provide independent advice to the BERR Secretary of State and scrutiny on the suitability and adequacy of these independent funds. It is the Secretary of State who will approve the Funded Decommissioning Programme and Funding Arrangements Plan.
48. Operators will pay into these funds from day one of generating. The funds will set the contribution levels and may require frontloading of payments.
49. The Consultation Paper does state that the moneys to cover waste disposal will be paid to the government when title and liability for the waste passes. However they "...are considering whether there is a case for some of this amount to be paid to the government during the power station's generating life". If they decide to do this they will agree a schedule of payment at the same time as any FDP is approved.
50. CoWRM should note and continue to monitor the provisions being made for the funding of the management of new build wastes. We need to continue to challenge any assumptions that new build waste will automatically and readily be co-located with legacy waste or that there will only be a single facility. We also need to continue to reiterate that the issues regarding the funding of legacy wastes are separate from those to do with new build waste.

## **FUNDING OF REGULATORS**

51. Clearly it is important that regulators are appropriately funded to enable them to carry out their functions efficiently and effectively. Their funding for regulation of radioactive waste management comes mainly from the waste producers, through cost recovery schemes. NDA currently has a range of agreements to facilitate cost recovery for regulatory scrutiny and engagement with the GDF programme. These costs, and future regulatory costs, will be budgeted for in the same way as other expenditure on the GDF programme. CoRWM should seek further information from Government and regulators on this issue.

## **CONCLUSION**

52. CoRWM is asked to:

- consider the issues in this paper , in particular the conclusions underlined in each section.
- decide the issues on which we need to develop advice to Government
- consider whether there are other issues regarding funding which we should explore (Working Group D has already decided that this is a question that could be put to stakeholders at a PSE event.)
- report again when there have been further significant developments, probably in early 2009.