Nuclear Decommissioning Authority 2012-13

The Explanatory Report of the Comptroller and Auditor General to the Houses of Parliament

Introduction

1. The Nuclear Decommissioning Authority (NDA) is a non-departmental public body set up in 2005 with the purpose to operate, decommission and clean-up of 17[1] of the UK's civil nuclear power or research sites on behalf of the Secretary of State for Energy and Climate Change. It is also responsible for implementing the government's strategy for the long-term disposal of nuclear waste in a geological disposal facility, and for the implementation of the low-level waste strategy.

2. The NDA is responsible for tackling the legacy of waste from the UK's nuclear programme that has accumulated since the late 1940s. In discharging this responsibility, the NDA expends some £3 billion on an annual basis[2] and manages gross liabilities of £60 billion. The largest component of the NDA's liabilities is the nuclear provision which represents the NDA's best estimate of the costs of delivering its objective of decommissioning its nuclear sites and returning these sites to agreed end states over more than a hundred years. NDA's activities in 2012-13 were funded via grant-in-aid of £3,157 million, drawn down from the Department of Energy and Climate Change (the Department) and surrendered cash receipts to the Consolidated Fund of £1,085 million. Elements of the provision also represent the costs of delivering on a number of commercial reprocessing contracts with UK and International customers.

3. The achievement of agreed end states for the sites is dependent on several factors including: the engineering complexity of the sites; historical neglect and poor record keeping; future availability of nuclear expertise and supply chain; changes in technology; and, the creation of a very long-term disposal facility to house the sites' higher activity waste which may stay radioactive for many hundreds of years.

The purpose of my report

4. There is a high degree of complexity and interconnectedness within these financial statements, for example linking nuclear provisions to commercial contract income and expenditure. The delivery model for decommissioning, through licensed operators, adds an additional layer of complication. This report is therefore intended to highlight the key financial results that I judge to be important for the readers to interpret the audited financial statements with respect to the underlying activities and timescales involved.

NDA's Delivery Model

5. Whilst the NDA owns the 17 sites[3] and is responsible for all the sites' assets and liabilities, it does not directly manage on-site operations, decommissioning and clean-up activities. Instead it commissions the delivery of site programmes (decommissioning, commercial fuel re-processing and commercial electricity generation) through management and operations contracts with five licensed operators known as Site Licence Companies (SLCs). The SLCs hold the site operating licences and manage the sites, including

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[1] There are 19 site licences - the Sellafield site includes Calder Hall and Windscale which hold separate site licenses

[2] The accounts show comprehensive net expenditure of £7,348 million this includes funds disbursed, and the increase in provision during the year

[3] This does not include Capenhurst and Springfields which are leased on very long leases to Capenhurst Nuclear Services and Westinghouse respectively – they manage and operate the sites, and are reimbursed by the NDA for decommissioning costs which relate to historic liabilities prior to the sale

preparing site plans, performing and sub-contracting work and keeping accounting records on behalf of the NDA. They also employ the staff working on the sites, some of whom have worked on the sites prior to the creation of the NDA. The SLCs receive fee payments from the NDA to reflect performance during the year.

6. The SLCs, in turn, are owned by Parent Body Organisations (PBOs). A PBO is either a single or consortium of private sector firms which bids for ownership of the SLC through open competition. The winning PBO owns the shares in the SLC for the duration of the contract with the NDA which can run from five to 17 years. At the end of the contract, the shares revert to the ownership of the NDA pending transfer to a new PBO. Some of the PBOs receive dividends from the fees paid by the NDA to the SLCs under the management and operations contracts, with others drawing a management fee. **Figure 1** shows the dividends paid since 2010-11.

7. The model of engaging the market to deliver the site programmes through competed contracts is aimed at stimulating innovation and technology in the nuclear sector as well as making best use of existing expertise.

Figure 1: Dividends earned by Parent Body Organisations

Name of PBO	Owns shares in	Dividends paid, declared and proposed 2010-11 (£m)	Dividends paid, declared and proposed 2011-12 (£m)	Dividends paid, declared and proposed 2012-13 (£m)
Nuclear Management Partners *URS, AMEC and AREVA*	Sellafield Ltd SLC	40.82	42.485	4.00
Babcock Dounreay Partnership Ltd *Babcock International Group, CH2MHILL and URS (from April 2012)*[4]	Dounreay Site Restoration Ltd SLC	0.6	2.0	2.1
Babcock International Group	Research Sites Restoration Ltd SLC	0.35	0.25	0.24
EnergySolutions	Magnox Ltd SLC	0	0	0
UK Nuclear Waste Management Ltd *URS, Studsvik UK and AREVA*	Low Level Waste Repository Ltd SLC	2.9	1.2	2.0

Source: National Audit Office. All information has been taken from SLC financial statements. The figures are dividends paid, payable and proposed in respect of the relevant financial year.

8. The NDA also has four principal subsidiaries[5] which provide a number of services supporting its operations, such as the transportation of nuclear material. These entities are fully consolidated into the financial statements, and are minor components of the group.

Delivery accountability

9. Whilst the delivery of the site programmes is carried out by the private sector through the five SLCs, the Chief Executive and Accounting Officer of the NDA is responsible for the operational and financial management of the NDA. The Shareholder Executive oversees NDA's governance and performance on behalf of the Department.

10. As the NDA is responsible for the assets and liabilities of the 17 sites, it bears the responsibility for meeting the financial costs incurred for all its functions, and it holds those assets and liabilities within the Authority accounts. The external parties used by the NDA to carry out its duties are not required to make financial provision for costs arising from the delivery of the site programmes. The

[4] UKAEA Limited was the PBO prior to April 2012

[5] Rutherford Indemnity Limited, International Nuclear Services Limited, Direct Rail Services Limited and NDA Properties Limited

NDA promotes the performance of the SLCs through fee payments it awards on the achievement of certain targets, set out in the agreed performance plans for each SLC.

11. The delivery of the annual site programme is subject to the availability of funding allocated to the NDA by the Department. The current funding agreement for the Department and the NDA was detailed in the Department's settlement from HM Treasury in the Spending Review 2010 which set out the annual available funding until 31st March 2015[6].

NDA Revenue

12. NDA earned £824 million of revenue from activities in 2012-13 including the generation of electricity and providing spent fuel reprocessing services to external customers. The level of Grant-in-Aid allocated to the NDA in the Spending Review reflects a forecast of the income that NDA will earn.

Figure 2: Revenue Summary

Revenue Type	Reported in 2012-13 £m	Detailed at
Electricity Generation	163	Report paras: 13 Accounts note: 4 Magnox and electricity generation
Commercial Reprocessing	485	Report paras:14-25 Accounts note: 4 Sellafield, reprocessing and transport segment
Plutonium Title	107	Report paras:26 Accounts note: 4 Sellafield, reprocessing and transport segment
Other	69	Accounts note: 4

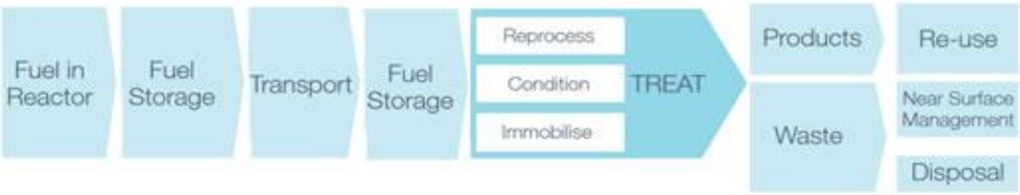
Electricity Generation Income

13. The NDA owns three generating assets Wylfa, Maentwrog and Fellside - only Wylfa is a nuclear plant with one reactor still in operation, and is the world's oldest operating commercial nuclear plant. They are operated by Magnox Ltd and Sellafield Ltd. The electricity is sold on the wholesale energy market by EDF Trading on NDA's behalf, with EDF itself being the buyer of most of the electricity sold.

Commercial spent fuel reprocessing

14. The NDA holds commercial contracts for the reprocessing of spent nuclear fuel that were inherited from British Nuclear Fuels Limited in 2005. The contracts are with UK and International customers and are fulfilled on NDA's behalf by Sellafield Ltd. Spent fuel from nuclear reactors is sent to the Sellafield site to be reprocessed into uranium and plutonium for re-use by NDA's customers. This process gives rise to waste products which need to be treated and stored securely (Figure 3). Due to the nature of the materials, the contracts are long-term with storage services in some cases extending beyond 2075.

Figure 3: Spent Fuel Reprocessing chain



Source: NDA Strategy (p.25)

15. Changing circumstances since the contracts were signed, such as operational difficulties and rising costs, has meant that although significant revenue is still generated, a number of the contracts have

[6] Cm 7942 Spending Review 2010

become loss-making. These losses are separately provided for in the contract loss provision of £1,886 million set out in Note 28 in the financial statements. Seventy-six per cent of this provision relates to contracts for spent fuel originating from overseas customers[7].

16. The principal site of reprocessing activity is the Thermal Oxide Reprocessing Plant (THORP) located at Sellafield. It reprocesses spent fuel under commercial contracts, some of which date back to the 1970s and have been subject to frequent amendments. Services that NDA provides under a typical contract include transport, storage, reprocessing and treatment and storage of waste created. A separate contract will also typically be in place, with one or more of NDA's subsidiaries[8] for the transport costs of returning reprocessed products and waste to customers in the future.

17. The trend over time has seen the replacement of original cost-plus contracts, which guaranteed a profit, with fixed price contracts, for which NDA received a premium. The intention was to share the risk with the customer in respect of the uncertainties of the cost of delivering on the contract and subsequent costs of decommissioning the associated plant.

Commercial revenue liabilities

18. There are two financial liabilities arising from NDA's commercial spent fuel reprocessing activities:
    - Customer advance payments: payments received from customers in advance of NDA delivering the service;
    - Loss making contracts: shortfalls in the revenue generated from the contracts and costs of providing those services (including decommissioning costs).

Customer advance payments

19. British Nuclear Fuels Limited customers paid an advance premium in order to limit their exposure to uncertain future costs and also to facilitate the building of plant such as THORP. This resulted in significant sums of cash being paid over in advance of delivery of the services by Sellafield. Accounting standards require that the advance payments are not recognised as revenue upon receipt but held on the NDA's Statement of Financial Position in Trade Payables as 'Payments on Account'. This reflects the NDA's liability in terms of delivering services of this value to the customer in future.

20. These Payments on Account are not, however, matched by an equal cash balance held by the NDA. The cash balance of £3,923 million[9] that was held by BNFL which related to these advance payments was surrendered to the Consolidated Fund when the NDA was set up in April 2005, and was excluded from the assets and liabilities covering the 17 sites. This was reflected in the opening balance on the NDA's general fund. Activities relating to these contracts are funded by taxpayers via grants in aid from the Department when the NDA is required to deliver that service. The balance to be funded as at 31 March 2013, shown in note 26 to the accounts is £2,548 million[10].

21. NDA's policy for revenue recognition (from its long term contracts), as required by accounting standards, is to record the revenue in the accounts when the actual reprocessing, waste management and storage services are delivered to the customer. The amount recognised each year is based on an estimate of the stage of completion of the services provided under the contract relative to total contract income. The amount of revenue that is apportioned to the financial year using this method is then deducted from the Payments on Account balance on the Statement of

[7] NAO analysis of NDA accounting records

[8] International Nuclear Services Limited and Direct Rail Services Limited

[9] BNFL Annual Report and Accounts 2006 (Note 13f)

[10] NDA Annual Report and Accounts 2012-13 (Note 26)

Financial Position and recognised in the year's reprocessing income in the NDA accounts. Revenue of £396 million was recognised in 2012-13 within Commercial Reprocessing in Note 4.

Loss making contracts

22. In addition to the costs of delivering the reprocessing, waste management and storage services stated in the contracts, the NDA incurs significant decommissioning costs as a result of delivering regulatory, commercial and contractual obligations. For example, THORP itself will ultimately need to be decommissioned. When the future decommissioning costs are added to the costs of providing the contracted services several significant commercial contracts become loss-making. As the decommissioning of plant and sites is a regulatory requirement, these costs cannot be avoided.

23. The lifetime costs to the NDA of delivering these contracts will exceed the total income that is generated from them and the shortfall will need to be funded by the UK Taxpayer. As required by accounting standards when it is probable that total contract costs will exceed total contract income, the expected loss is recognised immediately as an expense and the liabilities recognised as Contract Loss provisions in Note 27 to the financial statements.
24. Contract loss provisions as at 31 March 2013 amounted to 1,886 million[11]. The largest component of this is the loss provision in respect of the Overseas Risk Sharing contracts which totalled £1,438 million[12]. This is a pool of reprocessing and storage contracts with overseas customers. As the additional costs for loss making contracts to the NDA are in excess of the payments from the customers then the short-fall will need to be met via grant funding from the Department of Energy and Climate Change over the reprocessing, storage and decommissioning periods.

25. The NDA's present strategy[13] for these contracts, which it considers to be the most economically viable option, is to complete the reprocessing contracts as soon as is possible and close THORP in 2018. This means that the NDA plans to reprocess the volumes of fuel specified in the contracts and to store other UK fuel that it receives until 2075 before final disposal in the planned geological disposal facility.

Plutonium title transfer

26. In 2012-13 the NDA undertook an exercise to manage civil plutonium stocks in the UK. DECC agreed that the NDA could take legal title to foreign-owned plutonium already stored in the UK if it was commercially acceptable to do so. A series of international swaps was undertaken and the transfer of title to the UK will give the NDA greater control over the use of the plutonium within the country's borders. This arrangement also removes the need to ship the materials overseas which is an expensive and hazardous process. The NDA currently estimate that revenues received will exceed the costs required to store and dispose of the materials in the long-term. Further deals concerning additional overseas plutonium currently held within the UK are now being negotiated between the NDA and its international customers.

NDA Annual Expenditure

Figure 4: Expenditure Summary

Cost Type	Reported in 2012-13 £m	Detailed at
Decommissioning payments to SLCs	2,611	Report paras:27,28; Accounts note:7
Commercial activities	211	Report paras:28; Accounts note:7
M&O fees	102	Report paras:29-32; Accounts note:7
Research, Development and Other	723	Report paras:33-35; Accounts note:7
Administration	39	Report paras:36; Accounts note:5

[11] NDA Annual Report and Accounts 2012-13 (Note 28)

[12] NAO audit of NDA accounting records 2012-13

[13] http://www.nda.gov.uk/documents/upload/Oxide-Fuels-Credible-Options-November-2011.pdf

Contractor costs

27. This covers the annual costs of the NDA carrying out its primary functions to operate, decommission and clean-up the designated nuclear sites undertaken by the five SLCs and Capenhurst and Springfields on a cost reimbursable basis. In 2012-13 the NDA paid £2,611 million[14] to the SLCs to reimburse costs incurred. Of this £2,116 million relates to decommissioning and clean-up activities, which reduces the value of the nuclear provision (see paragraph 48). A further £28 million spent by the SLCs on capital projects, is capitalised in the accounts.
28. A further £256 million of costs are funded by other provisions, mainly the contract loss provision set out in Note 28 of the financial statements. The balance of reimbursable costs paid to the SLCs relates to the operational costs of undertaking the commercial activities of £211 million not charged against provisions as discussed above. Therefore the NDA annual cash spend on commercial activities, excluding amortisation (cost of sales) is £508 million in 2012-13.

Management & Operations contractor fees

29. This stream of expenditure relates to fees awarded by the NDA to the SLCs for meeting the requirements of the M&O contracts. The fees are the mechanism through which the SLCs earn profit from the M&O contracts. The NDA paid £102 million to the SLCs in the financial year 2012-13.

30. The SLCs are awarded fees by the NDA based on the achievement of agreed targets. Examples of mechanisms through which fees can be earned are:
    - Base fees: this fee is built into the M&O contract and is earned regardless of performance.
    - Performance Based Incentives (PBI): these fees are earned by the SLCs through achievement of pre-agreed criteria such as the successful delivery of a milestone to time and budget. The achievement of a PBI requires the pre-agreed evidence to be submitted to the NDA for approval;
    - Efficiency fees: an efficiency target is set at the beginning of the financial year and a percentage fee is earned on how much savings can be demonstrated; and
    - Support and overhead cost reduction fee: this fee is earned by demonstrating sustainable reductions in overhead costs associated with the contracts.

31. The M&O contractual arrangements have limited risk sharing resulting in the taxpayer bearing the impact of delays and cost increases. In my report 'Managing Risk at Sellafield'[15], I noted that significant cost overruns on the construction of evaporator D at Sellafield is likely to reduce the total available fee by £40 million[16] over the project's lifetime however the taxpayer will bear the full increase in the total cost of project, currently estimated at £244 million.

32. In April 2012, NDA completed the competition of the Dounreay SLC contract, awarding to a new Parent Body Organisation formed of a consortium of private firms. The Dounreay SLC contract was awarded on a target cost basis which shares more of the risks of overruns and cost increases between the taxpayer and the private sector.

Other expenditure, including Research and Development

33. This stream of expenditure (including non-cash items of £328 million) totalling £723 million[17] in 2012-13 covers the supplementary functions of the NDA to carry out or promote research, development, dissemination and education on and about the nuclear industry and to provide

[14] NDA Annual Report and Accounts 2012-13 (Note 7)

[15] Report by the Comptroller and Auditor General HC630 (2012-13)

[16] Based on fees calculated at 17.5 per cent of future efficiency savings

[17] NDA Annual Report and Accounts 2012-13 (Note 7)

support to local communities living near the designated sites[18]. This includes the costs linked to the development of the geological disposal facility.

34. The geological disposal facility will be the final repository for the higher and intermediately active waste that is currently held on the other sites. Whilst the waste remains on the other sites, interim storage solutions and additional security is required, incurring additional costs and postponing the ability of the NDA to reach the required decommissioned end states.

35. The site of the geological disposal facility has yet to be determined. A recent vote, by the Cabinet of Cumbria County Council rejected the proposal for further investigations for hosting the site in Cumbria. Construction on the geological disposal facility is not due to start until 2025 therefore the rejection has not impacted on the associated cost provided for in the nuclear provision.

Administration expenditure

36. This expenditure stream totalling £39 million[19] in 2012-13 relates to the actual costs to operate the Authority, which includes the NDA headquarters. The cost of salary and wages for NDA staff was £22 million in 2012-13 (note 6). The NDA has reduced its administration expenditure by £15 million since 2009-10 following a restructuring that reduced headcount by around 100 posts. The remaining £16 million relates to administration costs such as accommodation, IT equipment, legal and professional fees.

Nuclear Provision

37. The nuclear provision dominates the NDA’s financial statements. As at 31 March 2013, the provision was valued at £58,858 million[20] covering the cost of decommissioning and clean-up of the 17 sites and the geological disposal facility. The provision estimate is based on a programme of work due to be completed by the year 2137, and accounts for more than half of the government's total provisions reported in the Whole of Government Accounts[21].

Valuation of the provision

38. The value of the provision is derived by taking data from the underlying decommissioning plans for each site and a series of assumptions to construct management's best estimate in accordance with International Financial Reporting Standards. This includes examining any changes to the plans and revising assumptions in year, either because of changes in the scope of work, or changes in costs.
39. Validation of the estimate involves the NDA's Executive team providing assurance to the Accounting Officer and review by the Audit Committee and Board for final consideration and approval before it is subject to external audit. This valuation process reflects the complexity, volatility and, in some cases, unknown nature of the materials to be handled coupled with the long timescales over which decommissioning and clean-up will take place, and this is disclosed in note 27 to the accounts.
40. The value of the provision has increased over the last six years, as shown in **Figure 5**. The graph shows how the rate of increase has accelerated from 2010-11 to now, although figures for 2012-13 are affected by the change in the discount rate the NDA is required to use (see paragraph 43) which increases the provision by £3.8 billion. As the figure shows, the Sellafield estate continues to be the largest component of the provision value, with the provision components for the Magnox estate, Dounreay and the Research Sites decreasing over the five year period.

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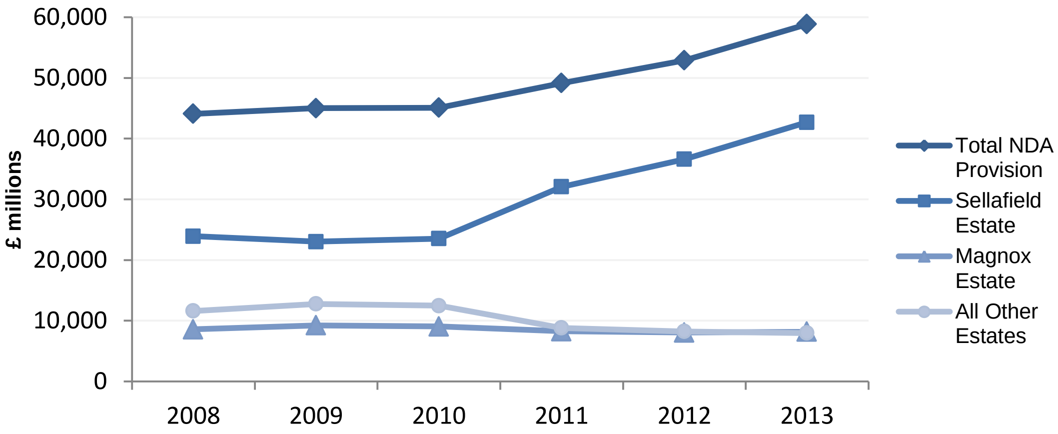
[18] Energy Act 2004, Part 1, Chapter 1 Other functions of the NDA, Section 7

[19] NDA Annual Report and Accounts 2011-12 (Note 5)

[20] NDA annual report and accounts 12-13, Statement of Financial Position. The nuclear provision is split between a current element (expenditure to be incurred in the next 12 months) and non-current element (expenditure to be incurred after the next 12 months)

[21] www.nao.org.uk/wp-content/uploads/2012/10/1213687.pdf

Figure 5: Discounted nuclear provision over time



NOTES

1. The Sellafield estate provision covers Sellafield, Capenhurst, Calder Hall and Windscale. The Magnox estate covers Berkeley; Bradwell; Chapelcross; Dungeness A; Hinkley Point A; Hunterston A; Olbury; Sizewell A; Trawsfynydd and Wylfa.

Source: NDA Annual Report and Accounts 2007-08 to 2012-13

41. In November 2008, the Sellafield Ltd management and operations contract was awarded to Nuclear Management Partners. NDA considered the existing plan prepared by the outgoing contractor to be 'undeliverable', and Nuclear Management Partners were required to derive a new plan. This plan, submitted in January 2011, was used to develop the nuclear provision as at 31 March 2011. NDA's acceptance of the plan resulted in an increase in the estimate of decommissioning the Sellafield sites by around £7.5 billion including inflation of costs.
42. The provision increased in 2012 primarily driven by the change in the government's preferred option for the re-use of civil stocks of plutonium. This led to an increase in the provision estimate of £1,700 million[22], and enhanced site security following a review of the security arrangements gave rise to an increase of £1,104 million. Both elements of the provision are attributed to the Sellafield site.
43. The nuclear provision will be expended over more than 100 years; therefore NDA prepares its estimate in present values in the financial statements. This reports how much it would cost to pay for the entire decommissioning programme on the 31st March 2013. NDA is required to use the discount rates set by HM Treasury. With effect from 1 April 2012, HM Treasury amended the discount rates for cash flows over the next 10 years to be more representative of UK gilt rates. This has led to a further, significant increase in the provision value of £3,770 million in 2013.
44. The elements of change in the provision from 1 April 2012 to 31 March 2013 are detailed in the Chief Financial Officer's review (page 18)[23] .
45. The costs of the provision can be broken down into the separate activities conducted on the sites as outlined in **Figure 6**. This reflects the range of challenges facing the NDA in carrying out safe decommissioning of the sites.

[22] NDA Annual Report and Accounts 2011-12 (Note 3)

[23] Funds spent on decommissioning activity reduces the provision; the unwinding of discount element represents the change in the value of the provision associated with being one year closer to the required work being completed; the inflation element increases the provision value due to rising costs; and the in-year changes to the provision due to work scope changes or cost changes are added to the balance totalling to £58.9 billion as at 31 March 2013.

Figure 6: Activities covered by the nuclear provision

1.1 Nature of Spend	1.2 Description Of Activity	1.3 Value of Provision (£'bn)
Waste Management	Low level waste repository and geological disposal facility.	4.2
Research	Nuclear research site decommissioning.	3.3
Legacy Ponds and Silos	Major hazards on the Sellafield site for which the major challenge is emptying the facilities safely.	8.1
Nuclear Sites	Decommissioning of the sites, including operations and reprocessing.	34.7
Fuel Manufacturing and Generation	Nuclear power generation.	8.6
Total:		58.9

Source: NDA Annual Report and Accounts 2012-13 - Note 27

Timing of cash flows from the provision

46. The nuclear provision covers the costs of decommissioning and clean-up for the sites. The nature of the programmes is very long term indeed, with most site end-states being reached between the years 2080 and 2120. However, some two-thirds of the provision is expected to be spent in the period up to 2030.

Costs of decommissioning buildings, plant and equipment

47. Due to the decommissioning challenges on the sites, the construction of buildings, plant and equipment is required to reduce hazards to a tolerable level whilst decommissioning work is carried out. In addition, there are buildings, plant and equipment that are being used to carry out the operational activities of the NDA such as the spent fuel reprocessing plant. These assets will also require decommissioning once their purpose is fulfilled. The buildings, plant and equipment to be used in decommissioning or operational activities to be decommissioned by the NDA are included in plant & equipment in note 12 to the financial statements, and the estimate of decommissioning those assets included in the nuclear provision is some £6 billion.

Taxpayers' liability

48. Whilst the NDA cannot transfer the liability that arises as a result of holding and processing third party nuclear products, the commercial agreements that NDA holds for spent fuel reprocessing allow some or all of the expenditure required to settle the decommissioning obligation to be recovered from third parties. The net recoverable contract costs are £2,004 million[24] at 31 March 2013. Therefore the taxpayer can expect to fund £56 billion of the total £58,858 million in the nuclear provision as at 31 March 2013 with the remainder recovered from NDA's commercial customers.

The Nuclear Provision in a Wider Context

49. The provision covers the civil nuclear power sites that were designated for decommissioning by the Secretary of State. There are also nuclear provisions held by other parts of government which are reported in departmental accounts and consolidated into the Whole of Government Accounts. The financial statements of the Ministry of Defence included provisions of £4.5 billion[25]. The Department of Energy and Climate Change holds a nuclear provision of £1.9 billion for the costs associated with British Energy contractual historic fuel liabilities[26]. Smaller provisions are held by other government bodies.

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[24] NDA Annual Report and Accounts 2012-13 (Note 15)

[25] MOD Annual report and Accounts 2010-11 (p.145)

[26] DECC Annual Report and Accounts 2011-12 (p.156)

Sensitivities around the Nuclear Decommissioning Provision

50. In Note 27 to the financial statements, NDA reports the sensitivity in assumptions such as cost and delivery timing that might affect the level of the provision. These assumptions cover the processes and methods likely to be used to reach the desired site end-states, reflecting a combination of the latest technical knowledge available, the requirements of the existing regulatory regime, Government policy and commercial agreements. Given the very long timescale involved, and the complexity of the plants and material being handled, considerable uncertainty remains in the cost estimate particularly in the later years.

51. The estimated cash flows associated with the provision are shown in Note 27 to the accounts and are summarised below in **Figure 6**.

Figure 6: Nuclear provision expected timing of cashflows

1.4 Period of Time	1.5 Value (£'bn)
1 year	2.69
2-5 years	11.35
After 5 years	44.82
Total	58.86

Source: NDA Annual Report and Accounts 2012-13 Note 27

52. Sensitivity of the provision to changes in assumptions is also demonstrated by analysis completed by the NDA which showed that opportunities and threats in the decommissioning programme can potentially increase the provision value by £4,930 million or decrease it by £4,230 million. For instance: differences in the geology of the rock in which the Geological Disposal facility might be constructed could increase costs by £1,600 million; and faster emptying of legacy ponds and silos which could reduce the provision by some £100 million. The provision also changes to reflect the discount rate used. The NDA discloses that a movement of plus or minus 0.5 per cent in the discount rates changes the provision some £6 billion. In 2012-13, HM Treasury changed the discount rates used from +2.20 per cent to -1.80, -1.00, and +2.20 for provisions of 5 years and under, 6-10 years and 10 years and over respectively. This increased the provision balance by £3,770 million[27].

Emphasis of Matter

53. I have certified the 2012-13 financial statements with an unqualified audit opinion. I have included in my certificate an "Emphasis of Matter" relating to the significant amount of sensitivity and uncertainty in the provision valuation. Auditing standards define an "Emphasis of Matter" paragraph as one that refers to a matter appropriately presented or disclosed in the financial statements that, in the auditor's opinion, is of such importance that it is fundamental to users' understanding of the financial statements. This means that I have evidence to support the reported value of the provision as being the best estimate that management is able to make using the information available to it.

[27] NDA Annual Report and Accounts 2012-13 (Note 27)

54. In order to obtain that evidence I ensure that management's estimate is comprised using complete information sources from the sites, and that management is able to demonstrate that the scenarios it has used to determine the provision are reasonable and based on preferred and credible options. To demonstrate to the users of the financial statements the sensitivity that could affect the provision the NDA's accounts also include extensive commentary and disclosure over how the provision would change if any of the underlying assumptions was to change.

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