DEPARTMENTAL OVERVIEW

The performance of the Nuclear Decommissioning Authority 2012-13

OCTOBER 2013
The National Audit Office scrutinises public spending for Parliament and is independent of government. The Comptroller and Auditor General (C&AG), Amyas Morse, is an Officer of the House of Commons and leads the NAO, which employs some 860 staff. The C&AG certifies the accounts of all government departments and many other public sector bodies. He has statutory authority to examine and report to Parliament on whether departments and the bodies they fund have used their resources efficiently, effectively, and with economy. Our studies evaluate the value for money of public spending, nationally and locally. Our recommendations and reports on good practice help government improve public services, and our work led to audited savings of almost £1.2 billion in 2012.

Our vision is to help the nation spend wisely.
Our public audit perspective helps Parliament hold government to account and improve public services.
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Links to external websites were valid at the time of publication of this report. The National Audit Office is not responsible for the future validity of the links.
Introduction

Aim and scope of this briefing

1. The primary purpose of this report is to provide the Energy and Climate Change Select Committee with a summary of the Nuclear Decommissioning Authority’s activity and performance for the financial year 1 April 2012 to 31 March 2013, based primarily on published sources, including the Authority’s own accounts and the work of the National Audit Office (NAO).

2. Part One of the report focuses on the Authority’s activity over the past year. Part Two concentrates on NAO analyses of that activity. Part Three takes the form of a case study, looking in greater detail at the valuation of the nuclear provision, which is the estimated future cost of decommissioning designated nuclear sites. This provision dominates the Authority’s financial statements.

3. The content of the report has been shared with the Authority to ensure that the evidence presented is factually accurate.
Part One

About the Authority

The Authority’s responsibilities

1.1 The Nuclear Decommissioning Authority (the Authority) is responsible for the operation, decommissioning and clean-up of 17 civil nuclear reactor and research sites designated for decommissioning by the Secretary of State for Energy and Climate Change. The responsibilities of the Authority are set out in the Energy Act 2004 which created the Authority by transferring to its ownership the public sector assets and liabilities previously controlled by British Nuclear Fuels Limited and the UK Atomic Energy Authority. The Authority’s primary statutory duties are:

- operating the nuclear installations prior to decommissioning;
- decommissioning of civil nuclear reactor and research sites;
- cleaning up the associated land on the sites to reach an agreed end state; and
- operating facilities for the treatment, storing, transport and disposal of waste material.

How the Authority is organised

1.2 The Authority consists of a board of six non-executive and three executive members, headed by the chairman who is appointed by the Secretary of State. The Authority is led by the chief executive who is also the Accounting Officer, appointed by the non-executive members with the Secretary of State’s approval. The board is responsible for preparing and carrying out its strategy, business plans and its duties under the Energy Act 2004. The Authority is sponsored by the Department of Energy & Climate Change (the Department) and is funded by grant-in-aid from the Secretary of State. The Shareholder Executive, which is part of the Department for Business, Innovation & Skills, oversees the Authority’s governance and performance for the Department.

1.3 The Authority has four principal subsidiaries which provide a number of services supporting its operations, such as the transportation of nuclear material. These entities are consolidated into the financial statements (see Appendix Two). All figures presented in this report include the results of the subsidiaries.

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1 There are 19 site licences – the Sellafield site includes Calder Hall and Windscale which hold separate site licences.
The Energy Act 2004, gives the Authority power “to do all such things as appear to be likely to facilitate the carrying out of its functions or to be incidental to carrying them out” and financial responsibility for decommissioning and clean-up of designated facilities.

This financial responsibility includes, for example under Schedule 1(5) of the Act and the Authority's Management Statement with the Department, the responsibility for the pay, terms and conditions of its staff. The Management Statement sets out the terms of the relationship between the Authority and the Department. It outlines the broad framework, within the context of the legislation, which the Authority carries out its functions including the management of assets and public funds, and accountability for its performance.

The Management Statement also requires the Authority to operate a Remuneration Committee consisting of independent non-executives with responsibility for considering the performance and determining the remuneration of the chief executive and the executive members of the board.

In addition to the executive directors, there are also four directors responsible for Communications, Human Resources, Strategy and Technology and Commercial operations. The responsibilities for each director are described in Figure 1.

The Authority discharges its decommissioning responsibilities through contracts with five licensed operators known as Site Licence Companies (SLCs). The SLCs hold the site operating licences and manage the sites, including preparing site plans, performing and subcontracting work and keeping accounting records on behalf of the Authority. They also employ the staff working on the sites, most of whom have worked on the sites prior to the creation of the Authority. In addition to payments of reimbursable costs under Management and Operation contracts, the Authority pays fees to the SLCs based on their performance during the year, to incentivise them to meet targets, achieve efficiencies and reduce costs.

The SLCs are owned by Parent Body Organisations (PBOs). The Authority runs competitions for the ownership of the SLCs with the winning bidders becoming the new PBO for the SLC. The principle of competition for the ownership of the SLCs was set out in the Authority's draft strategy 2005 and approved strategy 2006. 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 Authority which can run from five to 17 years. At the end of the contract, the shares revert to the ownership of the Authority pending transfer to a new PBO. Fees earned by the SLCs are passed to the PBO through a combination of management charges and dividend payments. The PBOs and related SLCs and sites are shown in Figure 2 on page 8.

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2 The Energy Act 2004 Chapter 1, 10(1).
4 Additionally NDA has liabilities relating to the Capenhurst and Springfields sites which are discharged through separate contractual arrangements.
6 Available at: www.nda.gov.uk/documents/upload/NDA_Final_Strategy_published_7_April_2006.pdf
Figure 1
How the Authority is organised

Chairman

Chief Executive Officer

Chief Operating Officer
- Security, Safety, Safeguards and Environment
- Sellafield
- Operational Performance
- NDA programmes
- Magnox and RSRL
- DSRL

Human Resources
- Human Resources
- Organisational Development
- People Strategy

Communications
- External communications
- Internal communications
- Stakeholder engagement
- Socio-economics

Chief Financial Officer
- Legal
- Business Planning
- Internal Audit
- Financial Planning
- Pensions
- Financial Operations
- Risk
- Insurance

Commercial Director
- Property service
- Revenue and Services
- Contracts
- Japanese MOX programme
- Supply Chain Optimisation

Strategy and Technology
- Strategy
- Fuel Cycle
- Integrated Waste
- Site Restoration
- Research and Development

Note
1 Executive members of the Authority’s board.

<table>
<thead>
<tr>
<th>PBO</th>
<th>SLC</th>
<th>Sites</th>
<th>Contract Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear Management Partners Ltd</td>
<td>SellafIELD Ltd</td>
<td>SellafIELD (including Calder Hall)</td>
<td>To 2025 (the first breakpoint is in 2013)</td>
</tr>
<tr>
<td>(a consortium comprising URS, Amec, Areva)</td>
<td></td>
<td>Windscale</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capenhurst (until December 2012)</td>
<td></td>
</tr>
<tr>
<td>EnergySolutions EU Ltd</td>
<td>Magnox Ltd</td>
<td>Berkeley</td>
<td>To 2014 (the contract is currently being competed)</td>
</tr>
<tr>
<td>(currently owned by Energy Capital Partners)</td>
<td></td>
<td>Bradwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapelcross</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dungeness A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hinkley Point A</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Hunterston A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oldbury</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Trawsfynydd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sizewell A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wylfa</td>
<td></td>
</tr>
<tr>
<td>Babcock Dounreay Partnership Ltd</td>
<td>Dounreay Site</td>
<td>Dounreay</td>
<td>To 2022 – 2025 (dependent on completion of decommissioning at site)</td>
</tr>
<tr>
<td>(a consortium comprising Babcock, CH2M Hill, and URS)</td>
<td>Restoration Ltd (DSRL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research Sites</td>
<td>Harwell</td>
<td>To 2014</td>
</tr>
<tr>
<td></td>
<td>Restoration Ltd (RSRL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Level Waste</td>
<td>LLW Repository (Drigg)</td>
<td>To 2025 (the next breakpoint is in 2018)</td>
</tr>
<tr>
<td></td>
<td>Repository Ltd</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(LLWR)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: www.nda.gov.uk
Where the Authority spends its money

1.10 The Authority received grant-in-aid of £3,157 million from the Department to fund the Authority’s activities in year. Within the grant-in-aid funding, the Authority surrendered to the Department £1,085 million of generated cash receipts from its commercial activities. This means the Authority’s net cash inflow was £2,072 million for 2012-13. The Authority spent net cash total of £1,930 million on its day-to-day operating activities (Figure 3) and a further net cash total of £13 million on investment activities consisting of capital expenditure on tangible assets.

Figure 3
The Authority’s cash flow in 2012-13

<table>
<thead>
<tr>
<th>£ million</th>
<th>Opening cash balance</th>
<th>Grant-in-aid</th>
<th>Surrender of receipts to Consolidated fund</th>
<th>Cash outflow from investing activities</th>
<th>Cash outflow from operating activities</th>
<th>Closing cash balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>+3,157</td>
<td>-1,085</td>
<td></td>
<td>-13</td>
<td>268</td>
</tr>
</tbody>
</table>

Note
1 Figures show the cash flows for the Nuclear Decommissioning Authority including those from the subsidiaries.

Source: Nuclear Decommissioning Authority Annual Report and Accounts 2012-13
1.11 In 2012-13, the Authority recorded gross expenditure of £8.18 billion in its financial statements. An analysis of the costs is shown in Figure 4. Accounting standards require the Authority to recognise all future costs of the decommissioning programme to which it is unavoidably committed. Most of the recognised costs for 2012-13 consist of changes to the estimates of the future costs which are provided for as a liability in the Authority’s financial statements. Adjustments to the Nuclear Provision in 2012-13 amounted to £7.106 billion resulting in a closing valuation of £58.9 billion at the reporting date of 31 March. More detail on the provision can be found in Part Three of this report where we discuss the valuation of the provision as a case study.

**Figure 4**
Where the Authority recorded its expenditure in 2012-13

- **Gross Operating costs in 2012-13**: £8,180m
- **Programme expenditure**: £934m
- **Other expenditure**: £101m
- **Administration costs**: £39m
- **Increase in Nuclear Provision**: £5,842m
- **Unwinding of discount for Nuclear Provision**: £1,134m
- **Increase in other provisions**: £77m
- **Unwinding of discount for other provisions**: £54m

**Note**
Provisions are discounted to bring future costs to an estimated current value. At each reporting period an element of these costs is actually expensed, and the future costs roll forward by one year which changes the impact of discounting. The adjustment in the provision caused by this process of bringing future costs ever closer to the present is accounted for separately as ‘unwinding of discount’.

Source: Nuclear Decommissioning Authority Annual Report and Accounts 2012-13
1.12 The nuclear provision is the dominating element of the Authority’s Gross Operating Costs. Many of the adjustments to the nuclear provision are forward looking, and do not result in cash spend. Other aspects of Gross Operating Costs represent shorter-term expenditure, and include:

- Contractor Costs – These are the annual costs of NDA carrying out its primary functions to operate, decommission and clean-up the designated nuclear sites. Payments are made to reimburse the SLCs for the costs they incur in carrying out the work. The total costs of the SLCs are split between the nuclear provision and programme costs in accordance with accounting rules.

- Management and Operations Contractor Fees – These are the fees awarded by the Authority 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 contracts. These are included within programme expenditure in Figure 5.

- Administration – This covers the administration costs of running the Authority including the employment costs for 207 full-time equivalent staff (see Figure 5). The administration costs of the SLCs are reimbursed by the Authority as part of the Contractor Costs expenditure category and so are included in the Authority’s Programme Costs. The SLCs are incentivised to reduce these costs through the Support and Overhead Cost Reduction fees which can be earned if sustainable reductions are demonstrated.

Recent and planned changes to the Authority’s spending

1.13 The spending review announced in October 2010 secured funding for the Authority until March 2015. The spending review recognised that the Authority’s ability to earn commercial income would decline as the operating assets reached the end of their useful lives and that the Authority would have an increasing reliance on funding from the Department. The settlement published in the Authority’s 2013 business plan and the actual outturn for the first two years of the settlement is shown in Figure 6 overleaf.

**Figure 5**

Key elements of the Authority’s programme and administration expenditure

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>2012-13 (£m)</th>
<th>2011-12 (£m)</th>
<th>Detailed at</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Costs</td>
<td>2,611</td>
<td>2,528</td>
<td>NDA Accounts Note 7</td>
</tr>
<tr>
<td>M&amp;O Fees</td>
<td>102</td>
<td>112</td>
<td>NDA Accounts Note 7</td>
</tr>
<tr>
<td>Administration</td>
<td>39</td>
<td>38</td>
<td>NDA Accounts Note 5</td>
</tr>
</tbody>
</table>

Source: Derived by National Audit Office from Nuclear Decommissioning Authority Annual Report and Accounts 2012-13

The Authority underspent its budget in 2011-12 as it generated more income than expected. The Authority agreed with HM Treasury that the surplus would be spread into 2012-13 and 2013-14 through budget exchange. The Authority had a further underspend against its budget in 2012-13 and agreed with HM Treasury to defer this into 2014-15. However, the Authority has also committed to find £7 million of savings in 2013-14 and £4 million in 2014-15.

Policy and delivery: major developments in 2012-13

In April 2012, John Clarke took over the role of Accounting Officer and Chief Executive of the Authority. He has been an executive director of the Authority since 2008, and has considerable industry experience.

In 2012-13, there were a number of developments and achievements for the Authority including the following:

- Proposals to start detailed searches for potential locations to site the Geological Disposal Facility (GDF) in Cumbria were rejected by Cumbria County Council in January 2013. This sets back the timetable for building the underground nuclear waste store and creates uncertainty over where in the UK it will be located. The Authority is responsible for implementing the GDF following the siting process which is being run by the Department of Energy & Climate Change.

- The contract for the decommissioning of the Dounreay site was awarded to a new PBO in April 2012 following a two-year competition. The plan under the new contract brings forward the end date of decommissioning by 16–19 years to 2022–2025 with the aim of achieving savings of up to £1 billion over the life of the contract.

### Figure 6
Spending review settlement

<table>
<thead>
<tr>
<th></th>
<th>2011-12 (£m)</th>
<th>2012-13 (£m)</th>
<th>2013-14 (£m)</th>
<th>2014-15 (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income expected</td>
<td>948</td>
<td>717</td>
<td>887</td>
<td>873</td>
</tr>
<tr>
<td>Income actual</td>
<td>1,004</td>
<td>824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Funding expected</td>
<td>1,941</td>
<td>2,286</td>
<td>2,280</td>
<td>2,152</td>
</tr>
<tr>
<td>Net Funding actual</td>
<td>1,475</td>
<td>2,072</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The performance of the Nuclear Decommissioning Authority 2012-13 Part One

- The Authority agreed to take legal title to foreign-owned plutonium that was already stored in the UK, allowing the Authority greater control over the stock within the country’s borders. This arrangement, which was subject to ministerial approval and generated revenue of £107 million, also removes the need to ship the materials overseas which is an expensive and hazardous process. The Authority currently estimate that revenues received will exceed the costs required to store and dispose of the materials in the long term.

- LLWR SLC completed its first contractual contract term during 2012-13 and met its contractual commitments for the period. A five year contract extension was awarded by the Authority during the year.

1.17 The Authority reports Site Licence Companies’ performance in meeting their business plan objectives for each of the Authority’s strategic priorities. It reported good performance overall, but with poor performance on the Sellafield site, where the legacy issues are particularly challenging (Figure 7 overleaf). In relation to health and safety, there were five nuclear safety events across the Authority’s estate in 2012-13 that were classed at the lowest level (Level 1 – Anomaly) of the International Atomic Agency’s International Nuclear and Radiological Event Scale (INES), four on the Sellafield site. The average rate of injuries or cases of ill health per 100,000 employees across the estate was 128 which was better than in 2011-12 (244) and lower than the average recorded by the Health and Safety Executive for the UK as a whole (446). It reported 35 incidents of non-compliance with environmental regulations across its estate.

Independent assessments of the Authority’s performance

1.18 In Part Two of this report, we look at the NAO’s assessment of the Authority’s performance in 2012-13. Alongside our work and that of the Energy and Climate Change Select Committee, a number of other bodies regularly produce independent analyses of how the Authority is doing and of the challenges it faces. In this section, we look at some of the most notable of these reports published in the last year.

1.19 The Office of Nuclear Regulation (ONR) is responsible for regulating nuclear safety and licenses all sites for operation under the Nuclear Installations Act 1985. The inspection visits are documented and published on their website. In October 2012, ONR published its report Japanese earthquake and tsunami: Implementing the lessons for the UK’s nuclear industry which documents the actions the licensed sites have taken to implement the recommendations made by the ONR following the original examination of lessons to be learned from the Fukushima nuclear accident. The report identified that adequate progress has been made and the licensed sites have made a positive commitment to deliver improvements to enhance nuclear safety by the end of 2014. ONR restated its requirement to have the most significant improvements implemented by the end of 2014, but recognised that for Sellafield, there are other priority hazard reduction activities required and funding is not boundless.

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9 Available at: www.hse.gov.uk/nuclear/index.htm
10 Available at: www.hse.gov.uk/nuclear/fukushima/implementation-report-oct-2012.pdf
## Figure 7
Site Licence Company performance in 2012-13

<table>
<thead>
<tr>
<th>Site</th>
<th>Key activities in 2012-13</th>
<th>Number of targets completed on schedule</th>
<th>Number of targets behind schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sellafield</td>
<td>Site restoration</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Spent fuels</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Manage nuclear fuel</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Critical enablers</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Magnox</td>
<td>Spent fuels</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Business optimisation</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Critical enablers</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Berkeley</td>
<td>Integrated waste management</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Bradwell</td>
<td>Site restoration</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Critical enablers</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Chapelcross</td>
<td>Site restoration</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spent fuels</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dungeness A</td>
<td>Site restoration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spent fuels</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hinkley Point A</td>
<td>Site restoration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hunterston A</td>
<td>Site restoration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Oldbury</td>
<td>Site restoration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spent fuels</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Critical enablers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sizewell A</td>
<td>Site restoration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spent fuels</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trawsfynydd</td>
<td>Site restoration</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Integrated waste management</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Critical enablers</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
1.20 The Committee on Radioactive Waste Management (CoRWM) provides independent scrutiny of the work of the Authority and other bodies to deliver a geological disposal solution for higher activity radioactive waste. CoRWM reviews the work of the Authority and that of the Authority’s Radioactive Waste Management Directorate and publishes its findings in its Annual Report.\textsuperscript{11} For example, CoRWM looked at the reported costs of the Geological Disposal Facility included in the nuclear provision (£3.840 billion) and considered the uncertainty over the ground rock in which the Geological Disposal Facility will be built which could increase the nuclear provision by £1.6 billion.

\begin{table}[h]
\centering
\begin{tabular}{|l|l|l|l|}
\hline
Site & Key activities in 2012-13 & Number of targets completed on schedule & Number of targets behind schedule \\
\hline
Wylfa & Spent fuel & 1 & \\
 & Business optimisation & 1 & \\
Dounreay & Site restoration & 2 & \\
 & Spent fuels & 2 & \\
 & Integrated waste management & 1 & \\
 & Critical enablers & 4 & \\
Harwell & Site restoration & 1 & 1 \\
 & Nuclear materials & 1 & \\
 & Integrated waste management & 1 & \\
Winfrith & Site restoration & 1 & \\
LLW Repository (Drigg) & Site restoration & 2 & 1 \\
\hline
\end{tabular}
\caption{Site Licence Company performance in 2012-13}
\end{table}

*Note*

1. The targets underpin the planned activity set out in the Nuclear Decommissioning Authority’s Business Plan 2012–2015.

Source: Available at: www.nda.gov.uk/aboutus/progress/2012.cfm

Major developments for the year ahead

1.21 The Authority has the following developments planned for the 2013-14 financial year:

• The Authority has started the competition process for the future ownership of the Magnox and Research Sites Restoration Limited (RSRL) sites with the expectation to complete the process by September 2014. The contract is valued at £7 billion over the next 14 years and the winning contract bid is expected to deliver improvements and cost savings on the existing plans.

• The contract for Sellafield Limited is reaching the final year of its current five year term. The Authority has begun the process of reviewing the contract progress to identify how it should proceed in the next phase of the contract. In our report *Managing risk reduction at Sellafield* we recommend that the Authority should gather lessons from other organisations that use similar contracts to improve the contract incentives to obtain better contract performance.
Part Two

Recent NAO work on the Authority

Our audit of the Department's accounts

2.1 The NAO’s financial audits of government departments and associated bodies are primarily conducted to allow the Comptroller and Auditor General (C&AG) to form an opinion on the truth and fairness of the accounts. In the course of these audits, the NAO learns a great deal about government bodies’ financial management and sometimes this leads to further targeted pieces of work which examine particular issues. In this section, we look at the outcome of our most recent financial audit of the Authority.

2.2 The Comptroller and Audit General gave an unqualified opinion on the truth and fairness of the Authority’s 2012-13 accounts, however, he included an ‘Emphasis of Matter’ to highlight the inherent uncertainties in the provision valuation at 31 March 2013 as fundamental to the users’ understanding of the accounts. The valuation of the nuclear provision is sensitive to assumptions such as the cost, delivery, timing, process and methods used to reach the desired site end-states which in some cases extend to the year 2120. The impact of changes in the current assumptions used at 31 March 2013 on the valuation of the provision is set out in Note 27 to the financial statements. For example, changes in planned efficiencies that can be delivered for Sellafield are estimated to increase or decrease the nuclear provision by £2.2 billion or £2.6 billion respectively. Furthermore, an increase of 0.5 per cent in the HM Treasury discount rate would reduce the provision by £6.26 billion, while a decrease in discount rate of 0.5 per cent would increase the provision by £6.55 billion.
Our audit of the Authority’s effectiveness and value for money

2.3 The NAO’s work to test the effectiveness and value for money of government expenditure in 2012-13 included a report entitled Managing risk reduction at Sellafield, published in November 2012. We examined whether the Authority is cost-effectively reducing risks on the Sellafield site through improvements in the lifetime plan for decommissioning the site and management of the major projects on the site. We concluded it was too early to judge whether the Authority’s appointment of Nuclear Management Partners as the parent body of Sellafield Limited was value for money. The principal findings were:

- The Authority had made progress in agreeing an improved and more robust lifetime plan with Sellafield Limited, but the plan still contained uncertainties about delivery schedules and costs in the long and short term. The contract baseline plan significantly increased the timescales and costs for addressing the highest risks on the site, putting the completion dates back by 10 to 28 years, compared to the 2007 plan. Sellafield Limited were, however, aiming to deliver ahead of the revised schedule. The cost of the contract baseline plan increased from £18.1 billion to £28.1 billion.\(^\text{13}\)

- There had been significant delay and cost escalation to 12 of the 14 major projects on the Sellafield site. The schedules of the seven projects in the planning phase had been put back 57 months and costs increased by £601 million since the projects were initiated. The seven projects in their construction phase were working to completion dates 264 months later than initially scheduled and to budgeted costs £294 million higher than initially approved. During 2011-12, twelve of the 14 projects delivered less than their planned scope of work and five exceeded their budgeted cost.\(^\text{14}\) However, across all its work Sellafield Limited had achieved £425 million of savings against the costs set out in the contract baseline and expected to meet the savings Minimum Performance Standard for the initial period of its contract.

2.4 The Committee of Public Accounts took evidence on this report and concluded that the Authority needed to bring more urgency to its oversight of Sellafield to ensure that the timetable for reducing risks does not slip further and costs do not continue to escalate year on year.\(^\text{15}\) Its recommendations are set out in Figure 8. The Authority has accepted the Committee’s recommendations and the NAO is continuing to monitor NDA’s progress against them.

\(^\text{13}\) Comptroller and Auditor General, Managing risk reduction at Sellafield, Session 2012-13, HC 630, National Audit Office, November 2012, Figures 7 and 9.
### Figure 8
Recommendations from the Committee of Public Accounts

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Authority response</th>
</tr>
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<tbody>
<tr>
<td>1. The Authority develops and applies benchmarks to assess the robustness of the lifetime plan and challenge existing assumptions on costs and timescales for critical projects; and rigorously examine the timetable for the geological disposal facility.</td>
<td>The Authority has committed to use benchmarking in re-baselining the plan for decommissioning the Sellafield site, in early 2014. Further action on the geological disposal facility will be carried out when a volunteer host community for the facility has been identified.</td>
</tr>
<tr>
<td>2. To help ensure there is no further slippage to timetables and costs are kept under control, the Authority should invite the Major Projects Authority to review the most critical and largest projects, and should report publicly on the progress of key risk reduction programmes against budgets and plans.</td>
<td>The Major Projects Authority will review the Authority’s assurance processes and their effectiveness in securing the delivery of major projects and programmes, including a sample review of the largest projects. The Authority is considering further enhancements to its public reporting.</td>
</tr>
<tr>
<td>3. The Authority should determine how and when it will have achieved sufficient certainty to expect Sellafield Ltd to transfer risk down the supply chain on individual projects and then to reconsider its contracting approach for the site as a whole.</td>
<td>The Authority will review procurement strategies at project level at Sellafield by December 2015.</td>
</tr>
<tr>
<td>4. The NAO should review the basis on which savings have been assessed and provide assurance to the Committee that the level of savings achieved at Sellafield has been measured and reported accurately.</td>
<td>The Authority is facilitating a review by the National Audit Office to check the robustness of the Authority’s procedures to measure and report Sellafield savings.</td>
</tr>
<tr>
<td>5. The Authority should ensure all payments are linked to the value delivered and that payments are not made where companies have failed to deliver. It should also routinely provide assurance on the operation of its controls over payments for Nuclear Management Partners’ constituent companies.</td>
<td>As part of its deliberations on whether to renew its contract with Nuclear Management Partners at the end of the first five-year term of the contract, the Authority is looking at options for ensuring that the fee arrangements best incentivise delivery of the government’s priorities at Sellafield.</td>
</tr>
<tr>
<td>6. The Authority and Sellafield Ltd should set out what added value can be achieved from taxpayers’ investment in Sellafield, clarify their roles in delivering this and set performance targets for contributing to the development of regional and national economy and workforce.</td>
<td>The Authority and Sellafield Ltd have committed to publish, by April 2014, a joint summary of the approach to contributing to skills and socio-economic development in and around Sellafield. The Authority has also committed to establish performance metrics against which future performance can be measured, including progress towards meeting the government’s supply chain targets for SMEs.</td>
</tr>
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</table>

NAO work in progress

2.5 Further to our previous report we are reviewing the savings achieved by Sellafield Limited and the Authority's approach to reviewing them. This work is in response to the Committee of Public Accounts' recommendation requesting assurance on whether Sellafield Limited's reported savings are accurately measured and reported. This review is due to be completed by late 2013.
Part Three

Case study: Nuclear Provision

3.1 The nuclear provision dominates the NDA's financial statements. As at 31 March 2013, the provision was valued at £58.9 billion\(^{16}\) to cover the discounted costs of the planned programme of work due to be completed by the year 2137.

3.2 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 process of devising the best estimate 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.

3.3 The value of the provision has increased over the last six years, as shown in Figure 9 overleaf. 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 3.4) which increased the provision by £3.8 billion. As the figure shows, the Sellafield estate continues to be the largest and fastest increasing component of the provision value, with the provision components for the Magnox estate, Dounreay and the Research Sites decreasing over the period.

3.4 The nuclear provision will be utilised over more than 100 years. As required by accounting standards, each year the Authority adjusts the estimate of the future cost of the decommissioning programme to present day values for inclusion in the financial statements. To do this the Authority is required to use a discount rate set by HM Treasury. The resulting valuation is, in effect, the amount that would have to be invested at the reporting date to enable the nuclear liabilities to be met as they fall due, if the discount rate was the rate of return on the investment.

3.5 With effect from 1 April 2012, HM Treasury changed the discount rates used from +2.20 per cent over the whole provision to -1.80, -1.00, and +2.20 for provisions of 5 years and under, 6–10 years and 10 years and over respectively to be more representative of UK gilt rates. Positive discount rates reduce the value of future costs, whereas negative rates inflate them. This change meant that discounted costs up to 10 years in the future were then greater than the undiscounted figures, which led to a further, significant increase in the provision value of £3,770 million in 2013.

\(^{16}\) NDA annual report and accounts 2012-13, 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).
Figure 3.6 shows the elements of change in the provision from 1 April 2012 to 31 March 2013:

- The discharge of decommissioning activity reduces the provision by £2.4 billion. The discharge is included within contractor costs shown in Figure 5.

- The unwinding of the discount element of £1.2 billion represents the change in the value of the provision associated with being one year closer to the required work being completed.

- The inflation element of £1.8 billion increases the provision value due to rising costs.

- The in-year changes to the provision of £1.7 billion due to work scope changes or cost changes are added to the balance totalling to £58.9 billion as at 31 March 2013.
3.7 The nature of the programmes is very long term, 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. While the Authority cannot transfer the liability that arises as a result of holding and processing third party nuclear products, the commercial agreements that the Authority holds for spent fuel reprocessing allows it to recover some or all of the expenditure required to settle the decommissioning obligation from third parties. The net recoverable contract costs are £2,004 million\(^\text{17}\) at 31 March 2013. Therefore the taxpayer can expect to fund £56.8 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.

3.8 The Authority’s provision accounts for the vast majority of the total government’s nuclear provisions. There are also nuclear provisions held by other parts of government which are reported in departmental accounts and consolidated into government’s provision for nuclear decommissioning in the Whole of Government Accounts. The financial statements of the Ministry of Defence included nuclear provisions of £3.7 billion\(^\text{18}\). The Department of Energy & Climate Change holds a nuclear provision of £2.0 billion for the costs associated with British Energy contractual historic fuel liabilities.\(^\text{19}\) Smaller provisions are held by other government bodies.

\(^{17}\) Nuclear Decommissioning Authority, *Annual Report and Accounts 2012-13* (Note 15).


\(^{19}\) DECC, *Annual Report and Accounts 2012-13* (p.188).
## Appendix One

Publications by the NAO on the Department since April 2012

<table>
<thead>
<tr>
<th>Publication date</th>
<th>Report title</th>
<th>HC number</th>
<th>Parliamentary session</th>
</tr>
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<tbody>
<tr>
<td>7 November 2012</td>
<td>Managing risk reduction at Sellafield</td>
<td>HC 630</td>
<td>2012-13</td>
</tr>
<tr>
<td>24 June 2013</td>
<td>Explanatory report of the Comptroller and Auditor General to the Houses of Parliament on the 2012-13 accounts of the Nuclear Decommissioning Authority</td>
<td>HC 236</td>
<td>2013-14</td>
</tr>
</tbody>
</table>
Appendix Two

Nuclear Decommissioning Authority group structure as at 1 April 2013

Notes
1. NDA Properties Ltd manages the non-nuclear estate of the Authority.
2. Rutherford Indemnity Ltd provides insurance cover for the Authority and its estate. It is based in Guernsey.
3. International Nuclear Services Ltd and Pacific Nuclear Transport Ltd carries out the overseas shipment of nuclear material such as returning nuclear waste arising from reprocessing activities to the country of origin.
4. Direct Rail Services operates the rail transportation service for nuclear materials in the UK.
5. The Authority owns 100 per cent of the shares in the four principal subsidiaries. International Nuclear Services Ltd owns 62.5 per cent of the shares in Pacific Nuclear Transport Ltd.

Source: Nuclear Decommissioning Authority, Annual Report and Accounts 2012-13, Note 14 Investments in subsidiaries
Where to find out more

The National Audit Office website is www.nao.org.uk

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