

Twenty-Eighth Report of Session 2019-21

Department for Business, Energy & Industrial Strategy

The Nuclear Decommissioning Authority's management of the Magnox contract

Introduction from the Committee

The Nuclear Decommissioning Authority (NDA) is the government agency, sponsored by the Department for Business, Energy & Industrial Strategy (the department), with responsibility for decommissioning the UK's civil nuclear sites that are no longer producing electricity. The NDA's estate includes 17 sites, 12 of which (10 power stations and two research facilities) had been managed by Cavendish Fluor Partnership (CFP) under a contract awarded in 2014 (the Magnox contract). In 2018 we reported on the catastrophic failure of the NDA's procurement and management of this contract. We reported that the failure had cost the taxpayer around £122 million and that a lack of commercial skills in the NDA, compounded by inadequate knowledge of the Magnox sites, were key causes of the failure. The NDA negotiated the termination of the Magnox contract with CFP in 2017, with a consequent additional £20 million cost to the taxpayer to leave the contract. In September 2019, after a two-year contractual notice period, the NDA brought the Magnox sites under the management of its wholly owned subsidiary, Magnox Ltd. We took evidence from both the department and the NDA on the termination of the Magnox contract. The evidence covered a wide range of topics relevant to the NDA and the department's management and oversight of the decommissioning of the UK's nuclear sites. This report, therefore, covers both the decommissioning of the Magnox sites and broader strategic challenges facing the department and the NDA.

Based on a report by the National Audit Office, the Committee took evidence, on 5th October from the Department for Business, Energy & Industrial Strategy. The Committee published its report on 27th November. This is the government's response to the Committee's report.

Relevant reports

- NAO report: [Progress report: Terminating the Magnox contract](#)– Session 2019-21 (HC 727)
- PAC report: [The Nuclear Decommissioning Authority's management of the Magnox contract](#)– Session 2019-21 (HC 653)

Government responses to the Committee

1: PAC conclusion: *There remains significant uncertainty over the cost and timetable for decommissioning the Magnox sites and estimates continue to increase.*

1: PAC recommendation: *The Nuclear Decommissioning Authority should set out how it will develop a clearer means of reporting publicly on the level of uncertainty and risk across its sites.*

1.1 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

1.2 The risks and hazards the NDA manages are amongst the most challenging anywhere in the world and internationally there are few programmes of the same scale and complexity.

1.3 The NDA has five principal documents which communicate its forward plans and costs. These documents set out its key milestones, intended programme of work and information in relation to its lifetime cost estimates:

- [NDA Strategy](#)
- [NDA Business plan](#)
- [NDA Mission progress report](#)
- [NDA explanation of the Nuclear Provision](#)
- [Uncertainty ranges provided in our Annual Report and Accounts](#)

1.4 These documents are also the NDA's means of publicly communicating the challenges and uncertainties associated with its mission. Of these documents, the Mission Progress Report and the Nuclear Provision document are the most important for explaining the long-term nature of the mission and the levels of uncertainty across the sites, including the Magnox sites. The NDA will develop these, and the versions published in 2021 will draw out the specific issues related to the Magnox sites.

1a: PAC recommendation: *The Nuclear Decommissioning Authority should also set out how it will prioritise its work on its sites in order to decommission them in the safest and most efficient way.*

1.5 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

1.6 The NDA has been considering the best approach to decommissioning its Magnox sites. The strategy it has had to date assumed a uniform approach to each of its Magnox sites. This consisted of site clearance of most buildings and then leaving the sites in a safe and secure state for several decades, before final site clearance. This is referred to as a "care and maintenance" approach.

1.7 Based on the experience and lessons learned from successfully putting the Bradwell site into care and maintenance, the NDA is now in a position to propose a more bespoke strategy which allows some stations to use the care and maintenance approach and others to be fully decommissioned with final site clearance in one continuous process, with no (or a reduced) period of safe and secure storage stage. This new strategy allows a programme of decommissioning to be put in place and will result in a reduction in costs.

1.8 NDA's consultation period for its [new strategy](#) has recently concluded. Under this new strategy the NDA would revise its specifications for Magnox reactor decommissioning to reflect the change to site-specific decommissioning strategies. Following this, a timetable will be determined that best suits each site and a business case developed to set out the benefits and cost and schedule impacts of any changes. This strategy will also see the decommissioning of the reactors at the Trawsfynydd site brought forward as the lead example.

1.9 The NDA will include the key dates for some of the Magnox sites under this new strategy in its Business Plan to be published in Spring/Summer 2021. A more complete list will be included in the Business Plan published in Spring/Summer 2022.

2: PAC conclusion: *The uncertainty affecting the Magnox sites reflects a wider uncertainty about the costs and timetable of decommissioning the whole civil nuclear estate.*

2a: PAC recommendation: *Taking into account the feedback from its public consultation, the Nuclear Decommissioning Authority should exploit opportunities to reduce the time taken to decommission its sites and should identify the impact of such reductions on the cost profile.*

2.1 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

2.2 The NDA is charged with the mission to clean-up the UK's earliest nuclear sites safely, securely and cost-effectively.

2.3 In April 2019, it launched One NDA. The One NDA approach to working is firmly based on maximising the opportunities that come from working more effectively and efficiently as a group of businesses.

2.4 The benefits it is striving to achieve from the One NDA approach are:

- Increased value for money for the taxpayer
- Enhanced performance and delivery of outcomes
- Strong organisational health
- Improved stakeholder confidence and trust
- Improved culture for our people

2.5 The NDA seeks opportunities to reduce the time and cost of its decommissioning activities at all of its sites. It examines and revises its strategy on a regular basis to look at better ways of approaching its mission. The example given in 1.4 and 1.5 above in relation to the revised approach to decommissioning the Magnox sites provides an indication of its work to optimise its portfolio of work.

2.6 While the NDA expects the new site-specific decommissioning strategies to be defined over the next 12 to 18 months, they will be continuously reviewed and optimised using the learning obtained from the sites being decommissioned.

2.7 The NDA will report back to the Committee following publication of the new strategy. The NDA and Magnox Limited will subsequently update the lifetime plans for the Magnox sites. The NDA's key document setting out dates for decommissioning is its Business Plan which is updated annually in the Spring. The edition of the Business Plan published in Spring 2021 will take account of the Committee's recommendations and as set out in the answer to section 1.4 to 1.7, further data on indicative timing and expenditure will be published in the Business Plan for 2022 and will be confirmed in future spending reviews.

2b: PAC recommendation: *The department and the Nuclear Decommissioning Authority should take whatever steps are necessary to provide a firmer estimate of the cost of decommissioning the sites of the Advanced Gas-Cooled Reactors so that the public has a more reliable indicator of the scale of the public liability.*

2.8 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

2.9 The department will continue to work with the Nuclear Decommissioning Authority (NDA) and EDF to understand the scale of the liability for decommissioning the Advanced-Gas-Cooled Reactor stations (AGRs).

2.10 The AGRs are owned and operated by EDF Energy, which under existing contractual arrangements is responsible for submitting plans for decommissioning activities and estimating costs. The decommissioning of the stations will be funded by the Nuclear Liabilities Fund (NLF), a segregated fund managed by trustees and underwritten by the government. The NDA is responsible for scrutinising and approving EDF Energy's decommissioning plans and certifying that costs qualify for payment by the NLF. EDF Energy, NLF and BEIS annual reports each contain estimates of the costs of decommissioning the AGRs (and the Pressurised Water Reactor at Sizewell B, also owned and operated by EDF Energy) – all derived from EDF's decommissioning plans.

2.11 The department is undertaking further work with EDF Energy and the NDA to consider how efficient and cost-effective decommissioning can be planned for and delivered in the future. This includes consideration of how the stations will be owned and managed in the future and is expected to conclude in Spring 2021.

2c: PAC recommendation: *The Nuclear Decommissioning Authority and the department should make it a priority to progress their plans to find a location for a Geological Disposal Facility in order to reduce interim storage costs at Sellafield and elsewhere, and should confirm when they consider such a Facility might feasibly become available for the storage of waste.*

2.12 The government agrees with the Committee's recommendation.

Recommendation implemented

2.13 The NDA and the government agree that it is a priority to identify a location for a geological disposal facility. A process to identify a location is currently underway. The Authority expects a geological disposal facility to be operational by the 2040s.

2.14 In addition, the NDA is examining the technical feasibility of disposing of a proportion of less hazardous radioactive waste currently stored at Sellafield in a [near surface disposal facility](#). The type of waste under consideration for disposal in a near surface facility is less hazardous intermediate level radioactive waste. This waste does not require the isolation and containment of geological disposal to be disposed of safely. More of this type of waste will arise in future as decommissioning progresses. This exploratory work supports government policy which requires the NDA to consider other disposal options that could improve the long-term management of higher activity waste.

2.15 Disposing of less hazardous intermediate level waste in near surface facilities could result in earlier and more cost-effective decommissioning of nuclear sites. It could reduce the need for interim storage at Sellafield and elsewhere. The NDA estimates it could take approximately 10 years to obtain the necessary regulatory permissions and build a near surface facility. It is also exploring whether an existing facility for the disposal of low-level radioactive waste could also take intermediate level waste that is close to the boundary between intermediate level waste and low-level waste.

3: PAC conclusion: A shortage of the right skills within the Nuclear Decommissioning Authority and across the nuclear industry remains a significant barrier to progress.

3: PAC recommendation: Within 6 months of publication of this report, the department and the Nuclear Decommissioning Authority should publish a detailed plan for how they plan to meet the demand for skills across the UK nuclear industry over the next 5–10 years of waste.

3.1 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

3.2 The development and retention of a skilled workforce for the UK nuclear industry is a key focus for NDA and the department, this is reinforced in the Nuclear Sector Deal and in the work of the Nuclear Skills Strategy Group (NSSG). The department and NDA are both members of the NSSG and the current Chair of the Group is a director of the NDA. The NSSG's stated intent is to meet the future demands for skilled workforce in the nuclear sector and it has published a [Nuclear Skills Strategic Plan](#), plus an [update in 2018](#) in order to summarise its proposals. This Strategic Plan highlights the importance of developing the right skills in the right place through a partnership between the government and industry. The NDA and the department will continue to work with the NSSG to inform these plans to meet the demand for skills over the next 10-year time horizon and beyond.

3.3 The NDA and the department will work with the NSSG to review the Nuclear Skills Strategic Plan and to assess whether the current plan needs to be updated.

4: PAC conclusion: For the new delivery model to work, it will be vital that the department exercises strong oversight of the Nuclear Decommissioning Authority and implements the findings of forthcoming reviews into the failure of the original Magnox contract and the role of the Authority.

4a: PAC recommendation: On publication of the Holliday report and tailored review, the department and the Nuclear Decommissioning Authority should set out publicly what has been learnt from them and how the reports are being used to inform the development of the new delivery and governance models.

4.1 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

4.2 The NDA and the department have implemented many changes to its ways of working as a result of the recommendations and lessons learned from the interim Magnox inquiry report published in 2017. Following publication of the final report and the departmental review report, the NDA and the department will review the findings and subsequently publish a summary of the lessons learned and how these will be implemented.

4b: PAC recommendation: *In responding to this report, the department should set out clearly its rationale for relying on UK Government Investments to represent it on the Board of the Nuclear Decommissioning Authority, rather than such oversight being provided directly by its own team which is dedicated to looking at the NDA.*

4.3 The government agrees with the Committee's recommendation.

Target implementation date: Summer 2021

4.4 The government's assurance and oversight of the NDA has been strengthened over many years, including the appointment of a UK Government Investments (UKGI) director to the NDA Board in 2017 as part of the shareholder function. This has allowed the NDA Board to benefit from UKGI's expertise as government's centre of excellence for corporate governance and corporate finance. This capability is unique, especially when coupled with the added value drawn from learnings across the portfolio of UKGI assets. UKGI also brings essential consistency and corporate memory to oversight of the NDA.

4.5 The NDA Board provides the ultimate level of assurance and performance monitoring within the NDA itself. The presence of a UKGI director on the board ensures that the NDA delivers a consistent message on their overall performance and assurance but can also help to bring about change where required.

4.6 UKGI does not function at arms' length. It operates on behalf of BEIS in delegated areas, as set out within the UKGI/BEIS MOU, and the NDA Framework Document. The UKGI shareholder team reports directly into BEIS at DG level and the shareholder team works in partnership with the BEIS Sponsorship and Policy team. As set out above, the department feels that the sponsorship of the NDA has already been strengthened, however the government looks forward to reviewing the recommendations of the Departmental Review of the NDA and the Magnox Inquiry and considering how it can use those to further strengthen the oversight of the NDA.

5: PAC conclusion: *The Nuclear Decommissioning Authority is not doing enough to exploit its various assets, either for the benefit of local communities or the UK economy as a whole.*

5: PAC recommendation: *The NDA should develop a strategy for maximising the economic benefits of developing and, where appropriate, exporting its knowledge and assets to alleviate the burden on the taxpayer. These include the skills and experience of the UK nuclear industry, the decommissioning technologies it has developed, and the land and other physical assets the NDA holds.*

5.1 The government agrees with the Committee's recommendation.

Target implementation date: Winter 2021

5.2 NDA's forthcoming [Strategy](#), a draft of which was recently subject to consultation, discusses the economic benefits of the NDA's work, its support for the Nuclear Sector Deal and its strategy to support international opportunities and collaboration.

5.3 NDA's mission is to deliver safe, sustainable and publicly acceptable solutions to the challenge of nuclear clean-up and waste management. In doing this the NDA are cognisant of the need to consider value for money to the taxpayer and the interests of the workforce and communities around its sites.

5.4 The NDA group has an annual budget of circa £3.3 billion of which around £1.9 billion flows through the supply chain. The main socio-economic impact generated by the NDA's work comes from local wages and supply chain expenditure. NDA has a supply chain strategy that seeks to build commercial capability to maintain a resilient, sustainable, diverse, ethical and innovative supply chain that optimises value for money for the UK taxpayer when sourcing goods and services. There are many examples of companies within the UK supply chain developing techniques and equipment which they are then able to deploy on specialist work in other countries such as at Fukushima in Japan, and in other sectors. The NDA already supports the UK Nuclear Sector deal, the skills agenda for the nuclear industry and the Department for International Trade's export agenda,

5.5 In addition, the NDA generates significant commercial income from its current operations (£789 million in financial year 2019-20) which includes revenue from our overseas reprocessing contracts amongst other sources. This income is used to offset some of the costs of the decommissioning programme.

5.6 The NDA will report on progress in this area in its annual report to provide greater transparency.

6: PAC conclusion: *Public accountability is hindered by a lack of transparency about the scale and nature of the challenge of decommissioning and the performance of the NDA.*

6: PAC recommendation: *NDA should be more transparent about its current and future plans with the local communities surrounding its 17 sites to strengthen public accountability and make clear the socioeconomic impact of its planned activities.*

6.1 The government agrees with the Committee's recommendation.

Target implementation date: Winter 2021

6.2 The NDA's annual Business Plan is the key document to explain decommissioning activities around its sites. In the next edition to be published in Spring 2021 the NDA will make particular efforts to explain the main decommissioning work on a site-by-site basis in clear language with transparent dates and indicative figures on expenditure. The Business Plan is subject to public consultation allowing individuals, groups and organisations to submit their views, so that we have a good idea of what local communities would like to see in it prior to finalisation and publication.

6.3 Moreover, the NDA holds regular engagements with the stakeholders local to its sites through a series of site stakeholder groups.

6.4 The Business Plan allows local communities to see the socio-economic impact of the NDA's activities. However to further increase transparency, NDA also provides a further in-depth analysis of its work, for instance the impacts associated with the Magnox sites were [reported and published](#) in 2018.

6.5 During 2021 the NDA will update its report on economic impact assessments and report back to the committee. This study will cover all of the NDA's sites, using a similar methodology to the 2018 study which covered direct employment effects, supply chain expenditure and indirect effects of local expenditure on hotels and local shops.