

Meeting:	NuLeAF Steering Group, 5 th December 2018
Agenda Item:	7
Subject:	Update on national developments in radioactive waste management
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Purpose:	This paper provides an update on recent developments in radioactive waste management and Nuclear Decommissioning Authority (NDA) operations

Introduction:

This paper updates members on recent developments in radioactive waste management and NDA operations. It covers:

- Reports from Theme Overview Group (TOG) and associated meetings;
- Sellafield update: PAC report and end of reprocessing at THORP;
- NDA and Magnox Update;
- Low Level Waste Repository (LLWR) Update;
- Brexit update;
- Nuclear Industry Association (NIA) Update;
- SCCORS meeting report.

Recommendation:

This report is for noting.

1. Reports from Theme Overview Group (TOG) and associated meetings

NuLeAF's Director attended meetings of the **Site Decommissioning and Remediation (SDR) Theme Overview Group (TOG)** in Penrith on the 18th of September and the 21st November. Across these two meetings and a **GRR industry workshop** (see below) considerable discussion was undertaken on plans for Magnox accelerated decommissioning and work on in-situ disposal.

The 21st November meeting heard updates on the Magnox Decommissioning Strategy and on the Spending Review.

NDA has now received approval from its Board to move away from the 'blanket strategy' of deferral for all Magnox sites. The decision-making process will be influenced by a range of factors and it was noted that stakeholder input would be sought via a **workshop on 28th November**. This workshop will be attended by NuLeAF and a number of local authority representatives. A verbal report will be provided at the Steering Group meeting.

Discussion on the Spending Review centred on the challenges of making the case to Treasury for changes to the spend profile for Magnox decommissioning and the overall NDA mission. This is based on an assessment that increased near term expenditure could deliver lower overall costs. It was also stressed that urgent action was needed at some Magnox sites where the facilities have declined more quickly than originally envisaged. NuLeAF's Director noted that local authorities could provide useful support to NDA in pressing the case to Government.

At the 18th September meeting, NuLeAF delivered a presentation on the need for enhanced engagement between the industry and local authority planners, particularly in relation to plans for accelerated decommissioning of Magnox sites and the development of work around **Proportionate Regulatory Controls (PRC)**. In response, BEIS and the NDA have committed to develop a **National Narrative for In-Situ Disposal** and to work with NuLeAF to prepare **Local Authority Guidance** on these issues.

A large part of the meeting was devoted to discussion on the proposed National Narrative. This is intended to be used to help the NDA and regulators engage with local authorities and stakeholders on the clean-up of individual sites. It will provide context on the range of options for the management of materials and will explain the process by which different options will be considered and credible options identified. Key aspects will be:

- Assessing the technical performance of each option including those which may include in-situ disposal;
- Understanding the confidence in implementing each option;
- Considering the appropriateness of choosing disposal options from a social and regulatory context.

It is likely that there will be several options which are technically credible and provide safe and environmentally sustainable solutions. The ultimate decision making will therefore require a review of options by regulators and planning authorities and an assessment by local, devolved and national politicians.

To support wider work on PRC, the environment agencies have developed **Guidance on the requirements for Release of Nuclear Sites from Radioactive Substance Regulation (GRR)**. A **GRR industry workshop** was held on the 13th of September and attended by NuLeAF and local authority representatives from Cumbria County Council and Copeland Borough Council. The meetings' aim was to develop a collaborative approach to implementation of the guidance which will in turn guide the development of **Waste Management Plans (WMPs)** and **Site-Wide Environmental Safety Cases (SWESC)** for individual NDA sites.

Based on input from NuLeAF and the local authorities the group agreed that engagement with planning officers is vital and that this must be at both a site

level with individual councils and at a strategic level through NuLeAF. It was also acknowledged that:

- The Ministry of Housing, Communities and Local Government (MHCLG) should be involved given their responsibility for planning matters
- There is a need for industry and regulators to better understand the plan development cycle and the role that Elected Members play in determining planning approval
- The planned National Narrative for In-situ Disposal and Guidance for local authority planners are of critical importance in taking the GRR forward through effective engagement with local government.

The **Integrated Waste Management (IWM) TOG** met in Penrith on the 20th September. The meeting focussed on developing NDA work on a risk-based assessment to waste management, something that is supported by the new Radioactive Waste Strategy.

This issue has important implications for future management of waste. At present radioactive waste in the UK is classified in terms of the nature and quantity of the radioactivity it contains and its heat generating properties. In overall terms waste has been managed based on discrete classifications (e.g. ILW, LLW). The NDA is interested in adopting a different approach which it feels may offer more optimised solutions to waste management, particularly for material at the lower end of Intermediate Level Waste (ILW).

While there are merits in such an approach there are also challenges. NuLeAF has consistently argued that any new method of waste classification must be developed in close consultation with local authorities, and that if a change to risk-based management is made then this will require significant levels of engagement with stakeholders and communities.

2. Sellafield update: PAC report and end of reprocessing at THORP The **Public Accounts Committee published their report on risk reduction at Sellafield** on the 31st October¹.

The Committee acknowledged that the NDA and Sellafield Limited have recently met significant milestones that have reduced risk at the high hazard facilities on site. There has also been progress with reducing delays and cost over-runs with a combined lifetime cost estimate of £6Billion.

However, the PAC states that *'Most major projects at Sellafield are still significantly delayed, with expected combined cost overruns of £913million. The NDA has not systematically reviewed why these projects keep running into difficulties.... Until this work is complete, we remain sceptical about its long-term strategy to decommission Sellafield.'* It also adds that *'the NDA must have a firm grip of the work that takes place on the site. We saw this was not the case with the NDA's recently failed contract to decommission its*

¹ <https://publications.parliament.uk/pa/cm201719/cmselect/cmpubacc/1375/137503.htm>

Steering Group, Item 7, National developments in radioactive waste management,
5th December 2018

Magnox sites, and we are no more convinced of its current ability to monitor and challenge progress at Sellafield. At the same time, BEIS must be more streamlined and effective in its oversight of the NDA's performance.'

The Committee also notes that there is still no clarity on what it is intended to do with the plutonium stockpile at Sellafield.

November saw the closure of the **Thermal Oxide Reprocessing Plant (THORP)** at Sellafield, a significant milestone in the transformation of Sellafield to a site solely focussed on decommissioning.

Opened in 1994, THORP dealt with spent 'oxide' nuclear fuel from the UK's nuclear fleet and from overseas, mainly Germany and Japan. The spent fuel was processed to separate the uranium and plutonium which could then be reused as mixed oxide fuel. A decision was taken in 2012 to close the site due to many of the plants' customers opting to store their fuel rather than reprocess it. THORP employed around 800 staff and Sellafield has committed to finding alternative positions for all staff affected by the closure.

Nuclear Energy Minister Richard Harrington commented that *'This marks a new and welcome chapter in Sellafield's decommissioning and environmental clean up journey, protecting the public from hazards, ensuring the land can be re-used in future.'*

Any remaining spent fuel, including future arisings from the AGR fleet, will be stored on site until the 2070s pending a decision to place it in a geological disposal facility (GDF).

3. NDA and Magnox update

The consultation on the draft **Radioactive Waste Strategy** for the NDA estate has closed². NuLeAF submitted a response³. We would like to thank members for the useful comments and additions made to the draft response. The final Radioactive Waste Strategy is due for publication by the end of this financial year.

Magnox is in the process of preparing short (2 page) summaries of the current **lifetime plans** for their sites. The plans provide a brief overview of each site along with priorities, current projects and achievements to date. They contain a timeline for future work which may be useful in providing pointers on when particular projects will be taking place, but do not include the detailed information required by local authority planning officers.

To date NuLeAF has received a few of these plans and others are expected in the coming weeks. We will circulate the whole set to members when available.

² <https://www.gov.uk/government/consultations/nda-radioactive-waste-management-strategy>

³ <http://www.nuleaf.org.uk/document-library/consultation-responses/consultation-responses-2018>

Steering Group, Item 7, National developments in radioactive waste management,
5th December 2018

4. Low Level Waste Repository (LLWR) Update

A Low-Level Waste National Waste Programme Regulators Meeting took place on the 14th October. It was attended, on behalf of NuLeAF, by Richard Griffin of Allerdale Borough Council – NuLeAF thanks Richard for this.

The meeting included discussions around the work being carried out on the potential benefits of decay storage of waste at the LLW/ILW boundary and the potential impact of Brexit on waste management. The NDA also reported that they are in phase 3 of an internal 'way ahead' project which is looking at the design of the whole organisation. Early conclusions were that the NDA needed to have a 'stronger corporate centre' and adopt more of a 'business focused approach'.

The NDA also gave an update on a project they have just launched to look at the scope for near surface disposal of ILW. It was made clear that this was not being looked at as an alternative to the proposed GDF, although the NDA did accept that the two waste management approaches were interlinked.

LLWR is working with RWM and the NDA on an **Integrated Radioactive Waste Programme (IRWP)**. As part of this they aim to develop, in 2018/19, a Radioactive Waste Baseline Review. This will be a 'snapshot in time' of radioactive waste management in the UK nuclear industry and should help to identify gaps, barriers and opportunities. NuLeAF's Executive Director attended an **IRWP Baseline review stakeholder workshop** in Manchester on the 2nd October. The meeting enabled stakeholders to discuss the 10 factors the review is considering which include:

- Programmes, policies, strategy and plans;
- The regulatory environment;
- The stakeholder landscape;
- Current infrastructure;
- People and skills.

In terms of the stakeholder landscape early findings of the review have been:

- Generally the level of engagement is consistent with the risks associated with wastes;
- When stakeholder engagement is explicitly linked to project tasks, the benefit and level of engagement increases;
- There is a reliance on trust established between individuals to enable effective stakeholder engagement between organisations;
- The public input to radioactive waste management projects is one of the greatest challenges faced by organisations;
- The LLW National Waste Programme is viewed as good practice for engaging with stakeholders and should be emulated in terms of Higher Activity Waste (HAW) management.

A further workshop on the review will be held in December.

Finally, LLWR has published its **Plan 2018 to 2023**⁴ and, in conjunction with its parent Site Licence Company (SLC), a **Joint Waste Management Plan (JWMP)** for the next 5 years. The reports offer a high-level overview of LLWR's work in the final 5 years of its contract and show how the SLC is engaging with the National Low-Level Waste Programme to improve implementation and comply with the national LLW Strategy⁵.

5. Brexit update

The Government has laid the first of a planned series of quarterly reports on progress before the house⁶. This covers the three-month reporting period from 26 June until 26 September.

NuLeAF's Executive Director attended the 4th meeting of the **BEIS Euratom Industry Forum** on the 25th October. The overall message given by BEIS was that progress has been good in terms of developing a new strategic partnership with the Euratom states and in delivering nuclear co-operation agreements with the UK's four key non-European partners, namely Canada, the USA, Australia and Japan. It has subsequently been announced by BEIS that all replacement international agreements needed to ensure continuity of civil nuclear trade have been concluded.

Despite the positive progress made on nuclear issues, the ratification of a new deal with the Euratom states is still dependent on a wider Brexit agreement being reached. It was also noted at the Industry Forum that individual Government departments are responsible for determining the detail of agreements in some areas – for example the Department of Health is working to take forward general commitments around future movement of health isotopes.

6. Nuclear Industry Association (NIA) Update

NuLeAF's Chair and Executive Director attended the **Nuclear Industry Association's (NIA) Decommissioning and Existing Generation Group** in Warrington on the 27th September. The meeting included a presentation from NIA on the Nuclear Sector Deal and its implications for decommissioning. In general terms the Association is positive about the Deal and the scope it has for enhancing both the domestic market in decommissioning and in boosting export of technologies. There is an interest in learning from other industries to help innovation in the sector.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757075/LLWR_Plan_2018-2023_double_page.pdf

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717735/LLWR_JWMP_March_2018_Issue_12.pdf

⁶ <https://www.gov.uk/government/publications/euratom-exit-quarterly-update-july-to-september-2018>

Steering Group, Item 7, National developments in radioactive waste management,
5th December 2018

The meeting also heard a range of presentations on new technologies and approaches. These included one on the benefits of the use of human divers (as opposed to robots) in the clean-up of the Sellafield Ponds and on the innovative technical and engineering solutions that are helping to address the major challenges in cleaning up the Sellafield silos.

The NIA has appointed Tim Stone as its new Chair. Mr Stone is a non-executive director of both Arup and Horizon Nuclear Power. He will take over from Lord Hutton in December 2018.

7. SCCORS meeting report

NuLeAF's Director attended a meeting of SCCORS (Scottish Council Committee on Radioactive Substances) in Edinburgh on the 28th August. SCCORS is the equivalent to NuLeAF for Scottish local authorities, although its focus is to some degree different due to the policy regime and nuclear context north of the border.

SCCORS has now formally appointed Co-Convenors, Cllr Jim McEleny of Inverclyde Council and Cllr Michelle Campbell of Renfrewshire Council. Renfrewshire Council is providing secretariat support for the organisation. It is hoped that one of the Co-Convenors will be able to attend the December Steering Group meeting.