

<b>Meeting:</b>	NuLeAF Steering Group, 21 January 2014
<b>Agenda Item:</b>	7
<b>Subject:</b>	Proposed draft response to NDA's Preferred Options for co-locating Fuel Element Debris (FED) treatment and Intermediate Level Waste (ILW) storage on Magnox sites
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<b>Purpose:</b>	To agree a response to the NDA invitation to comment

**Introduction:**

This report proposes a response (attached at Annex A) to NDA's Preferred Options for co-locating Fuel Element Debris (FED) treatment and Intermediate Level Waste (ILW) storage on Magnox sites in England.

**Recommendation:**

That the draft response at Annex A be agreed for submission to the NDA.

**Contribution to 2013/15 Service Plan:**

The activities described in this report relate to the following Key Task:

*Continue to engage with NDA/Magnox colocation options assessment to encourage fairness and equity in waste transfers inc. socio economic support as appropriate.*

## **1. Introduction**

1.1 The Preferred Options for colocation of Fuel Element Debris (FED) treatment and Intermediate Level Waste (ILW) storage affect six Magnox sites at Hinkley, Oldbury and Berkeley in the South West and Sizewell, Bradwell, and Dungeness in the South East. Other intra-site colocation options involving joint Magnox and EDF at 'A & B' stations, and between Wylfa and Trawsfynydd in North Wales, may be considered in future.

1.2 FED wastes arise from stripping parts of Magnox spent fuel rod casings before shipment to Sellafield for reprocessing. NDA considers the best practicable environmental option for FED management is dissolution in acid to make wastes non-reactive (more stable) and to reduce waste volumes (by a factor of 20) for on-going interim storage as ILW. NDA report that sizable FED stocks have arisen at Bradwell, Dungeness, Berkeley, Hunterston, Trawsfynydd, Hinkley 'A', Oldbury and Sizewell 'A' sites.

In 2012 NuLeAF responded briefly to the invitation to comment on credible options for consolidating ILW storage in Central and Southern Scotland<sup>1</sup>.

## **2. NDA Proposals**

2.1 Based on NDA's assessment the following options are preferred:

- Treat FED at Hinkley A and Oldbury on the Hinkley A site in a new treatment plant. Treat FED arisings from Sizewell A at the existing treatment plant at Dungeness A.
- Store ILW from Oldbury at Berkeley, and Dungeness A ILW at Bradwell (and if necessary Sizewell A).

2.2 NDA considers these proposals:

- Makes best use of existing facilities and avoids unnecessary construction.
- Ensures that there is a balance of development across the sites.
- Reduces overall environmental impact.
- Reduces costs by approximately £90M whilst maintaining the highest safety and environmental standards.
- Does not significantly disadvantage any site as regards the timing of Care and Maintenance (C&M) entry.
- Provides opportunities for future consolidation of ILW package interim storage with EDF Energy.

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<sup>1</sup> [Comments on NDA consultation re credible options for storage of ILW in Central and Southern Scotland.](#)

### 2.3 NDA concludes<sup>2</sup>:

“Overall, it is considered that the advantages of the preferred integrated solution (relating to reduced construction) outweigh the disadvantages (such as the transport of some radioactive waste on public roads), especially when potential mitigations are taken into account.

The preferred option reflects a strategy of minimising new construction, thereby making the best use of assets (ILW stores and FED treatment plants). Stakeholder feedback is recognised within this strategy by giving priority to waste transfers on a regional basis.

There are a number of uncertainties, such as those relating to waste volumes, which could affect the ability to implement the preferred option exactly as described in this paper. However, the underlying strategy - i.e. making best use of facilities on a regional basis only - would continue to be applied as far as possible.

Magnox will continue to engage with and involve its stakeholders as the project progresses.”

2.4 A draft response to NDA’s invitation to comment on its preferred options is attached at Annex A. The Steering Group is asked to consider, amend as required, and agree a text for finalisation and submission to NDA before the comment deadline of 31 January 2014.

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<sup>2</sup> <http://www.nda.gov.uk/documents/upload/Optimising-the-number-and-location-of-facilities-on-Magnox-Ltd-and-EDF-Energy-Sites-Preferred-Option-for-Comment-November-2013.pdf>

## ANNEX A



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preferred options Janu