

Special Berkeley SSG meeting 12th February 2015

Q&As

Strategy

1. How do the proposed changes to the waste strategy impact on Berkeley?

Safety, security and the environment are always the top priorities when undertaking operations or decommissioning work on a nuclear site. The revised proposals outlined here do not compromise these in any way.

The new proposals seek to improve value for money for the UK taxpayer and involve:

- Use of alternative ILW containers to package the waste (6m³ boxes)
- A change in waste conditioning – a move from drying to encapsulation
- Potentially a new ILW store for the new waste packages (6m³ boxes)
- The receipt of a reduced number of ILW packages from Oldbury Site compared to that proposed during the previous optimisation project (approximately a 50% reduction). These packages would include a small number of packages containing waste that originated from Dungeness A Site and Sizewell A Site.

2. Do the proposed waste strategy changes impact on the Berkeley care and maintenance (C&M) date?

The intention is that the proposed strategy will not impact on the C&M date for Berkeley. A key part of avoiding C&M entry delays is the plan to continue to implement the current strategy for waste packaging at Berkeley (using Ductile Cast Iron Containers (DCICs)) at the same time as developing the new proposals. It is envisaged that should the new proposals be taken forward it will take approximately two years to fully develop them to allow implementation. During this time DCICs will continue to be used at the site.

Importantly, the first key step in developing the new proposals is the current preliminary engagement with local stakeholders and the relevant local authorities. Should the proposals be taken forward this engagement will continue. Engagement with local authorities is ongoing regarding planning permissions in order to mitigate against any impact to the C&M date.

3. Are you going to fund community benefit?

As part of the planning process there may be discussions with the planning authority and local stakeholders about appropriate levels of community benefit. Magnox and the NDA have been clear throughout all discussions regarding waste strategy that any community benefit agreement would need to comply with the requirements of Section-106 of the planning regulations. This is to ensure that any such agreements are transparent and open.

4. Why has Magnox decided to move away from the original preferred options that were agreed and submitted to the NDA for approval? How confident are you that you will not change your strategy again?

Magnox has been reviewing its waste strategy in a number of key areas to look for improvements - this includes ILW interim storage and FED treatment. Magnox has also been reviewing the learning gained from its various programmes and from outside of Magnox/Research Site Restoration Ltd, such as the use of the concrete boxes at Windscale. In addition, the change of parent body organisation for Magnox/RSRL has introduced new ideas, building on the output from the previous engagement and learning from recent experience across the Magnox sites

Magnox is legally obliged (by the Environment Agency) to periodically review its waste strategy to ensure it reflects modern standards and that it represents Best Available Technique (BAT). That said, for Berkeley the opportunity for further change in waste management strategy is limited. The site is well advanced in terms of waste retrieval projects and, as such, alternative options for packaging and storing the waste are reducing. It is not anticipated that Magnox will significantly revise the waste strategy following this change.

5. We were told that Ductile Cast Iron Containers (DCICs) were the best strategy for dealing with ILW across Magnox and the NDA endorsed this. How can things suddenly change so much? Why weren't these options looked at before, if they are cheaper and better?

The strategy review has concluded that DCICs are still an effective container for the storage of ILW and we still plan to use them across several sites (including at Berkeley). When we reviewed ILW containers during 2008/09 of the containers available, DCICs were thought to be the best option as they offer a self-shielded and therefore more flexible way of managing ILW compared to other options. At this time the 6m³ box container was not available to Magnox. However since then (last 1-2 years) other SLCs - Dounreay Site Restoration Ltd (DSRL) and RSRL have been developing the design and manufacturing capability of the 6m³ concrete box. Magnox believe this is also appropriate for use within the Magnox programme. These containers offer many of the same benefits as the DCICs (i.e. they are self-shielding and robust) whilst being approximately 80 per cent cheaper than DCICs, which present significant cost savings for the UK taxpayer.

6. What confidence do you have that you won't change your mind on the strategy once work is underway on the new store?

Work on the store will not commence until a final decision about the way forward has been finalised and all options relating to use of the existing store (i.e. avoiding the need for a new store) have been exhausted. Construction of the store would not commence until the necessary regulatory and planning permissions have been obtained. In order to ensure that the Berkeley programme C&M date is not delayed, we are already engaging with local authorities in the planning permission process.

7. Will the new store also take waste from other sites – is Berkeley becoming the South West nuclear waste dump?

There are existing or planned stores for all Magnox sites where large numbers of ILW waste packages will be produced (Hinkley Point A, Berkeley, Bradwell, Hunterston A, Chapelcross and Trawsfynydd). However there are four Magnox sites where it may be possible to avoid ILW store construction; Dungeness A, Oldbury, Sizewell A and Wylfa.

The proposals being put forward in terms of consolidation are similar to those put forward previously during the optimisation project i.e. that Oldbury ILW packages would come to Berkeley for interim storage pending disposal to the Geological Disposal Facility (GDF). We also propose to move a small amount of a specific waste called IONSIV cartridges from Oldbury to Berkeley. The intention is that a number of these IONSIV cartridges which have originated at Sizewell A and Dungeness A will have been packaged at Oldbury into DCICs before being put in interim storage at Berkeley. These IONSIVs are estimated to amount to less than one per cent of the overall waste volume which would be stored in the Berkeley store.

Magnox has no plans to import waste from any other sites to Berkeley for interim storage. Realistically the vast majority of waste producers in the UK (including Magnox) have plans in place for interim storage so the scope for any further importation is very limited.

8. When original planning permission was sought, Magnox promised that the Berkeley store would be for only Berkeley waste, then you added in Oldbury, and now you want it to take waste from around England?

The Berkeley ILW store was originally built to store only ILW packages from Berkeley and this was stipulated in the planning application. The second version of the NDA's strategy, published in 2011, recognised that there may be cost and other benefits to consolidating waste storage and encourages Site Licence Companies (such as Magnox) to pursue this approach where appropriate. As Magnox has developed its waste strategy it has become clear that there are significant safety, environmental and cost benefits associated with utilising the predicted spare capacity within the existing Berkeley store to also store ILW packages from Oldbury. This approach would avoid building another store at Oldbury and would have significant cost savings (in the region of £15M) for the UK taxpayer.

We have plans for storing the south east Magnox sites' ILW (excluding the IONSIV cartridges from Oldbury to Berkeley) within the existing Bradwell ILW store and believe them to be achievable. We currently think that all of the packages in the south east will fit into the Bradwell store and as such we have no current proposals to move any other waste packages from the south east to Berkeley.

Packaging

9. Does the proposed strategy take into account the lifecycle costs for the change in package i.e. handling, storage, and disposal?

Yes, it is anticipated that approximately £20M will be saved, even when taking in to account the cost associated with potentially building a new store. Disposal costs are based on a per unit basis which means change in package type does not greatly affect this cost.

10. Is there history of using these new boxes?

Yes, Windscale has experience of using this type of container and we will use the lessons learned from their experience to apply this to our proposed strategy. Also a lot of work has also been completed over the past 18 months to two years DSRL and RSRL in preparation for using these types of packages.

Safety

11. Are there any safety implications resulting from the change to a more cost effective package?

Magnox, and the UK nuclear industry as a whole, always prioritises safety and environmental issues over cost savings. The alternative waste packages offer many of the same benefits as DCICs and will only be used following approval from the regulators. The new containers provide self-shielding in the same way as DCICs. The Windscale concrete waste boxes have been in interim storage since the 90's and at various inspections over the period there has been no evidence of deterioration of these boxes.

12. Are there any changes to security arrangements which need to happen as a result of the change in strategy?

Security within the nuclear industry is regulated by the Office for Nuclear Regulation. As such all Magnox/RSRL sites have to comply with strict security requirements. Berkeley Site complies fully with all of these. A change in strategy will not impact on the security arrangements at site.

13. If Magnox has already built a store at Berkeley to take DCICs why would it want to change to a new type of packaging and then have to build a new store?

The move to the use of new packaging (6m³) boxes for a portion of Berkeley's ILW will result in savings in the tens of millions of pounds - even when taking into account the potential need to build a new store. These boxes are safe and robust and offer many of the same benefits as DCICs.

Current technical underpinning work indicates that there are a number of technical challenges which need to be overcome to enable the storage of the new containers in the existing ILW store. As such at this time Magnox has taken the decision to progress on the basis that a new store is required for these packages whilst at the same time working to overcome these challenges (principally relating to the size and weight of the resultant waste packages). Ultimately should these challenges be able to be overcome in a cost-effective manner then Magnox will not need to construct a new store at Berkeley.

14. Will the original ILW store be fully utilised, or will this result in wasted capacity?

Should a new store be required the existing ILW store will not be fully utilised and there will be spare capacity. Once we start filling the waste boxes, we will know with more certainty what the actual packing volumes in the boxes will be and thus the actual storage space for the boxes required in the store. The store was originally designed to have 15 per cent spare capacity to make sure that there was enough space should Berkeley's ILW volume be greater than predicted at the time. Magnox recognises that the new proposals will result in less utilisation than was originally planned for.

15. Why is the Dungeness A/Sizewell A waste not being returned to where it originated from once it has been processed and packaged?

In order to optimise the processing of these waste packages and minimise transportation – these are small waste volumes – the proposed strategy is to store the IONSIVs in the Berkeley store. The SZA/DNA waste is less than one per cent of the overall waste volume proposed for the Berkeley store. Please also see response to question 7.

16. Plans for new store weren't being proposed when South Gloucestershire and Stroud (SGS) College announced its plans to build a college on the Berkeley Centre site. What, if any, is the potential impact on the college?

Magnox will continue to work closely with its new neighbour SGS College as both organisations' plans develop.

The college has issued a statement:

"Magnox has been talking to South Gloucestershire and Stroud (SGS) College for a number of months about the possibility of extending the storage facilities at Berkeley Site and we are generally supportive of the proposals.

Berkeley Site already stores intermediate level waste and it makes logistical and financial sense to safely store small amounts of additional waste on the site. We have every confidence in the inspectorates responsible for considering this proposed change and Magnox, who will implement any changes to the highest possible safety, environmental and technical standards.

SGS College, Magnox and NDA are committed to working collaboratively together to ensure the success of the proposed new college at the Berkeley centre."

Transport

17. Will taking Dungeness A/Sizewell A IONSIVs result in more transport movements?

Current proposals would involve fewer transport movements than had been envisaged in the proposals discussed last year because it avoids the need to build facilities at the DNA and SZA sites. However the importation of the IONSIV containing packages will result in a small increase in the number of movements at Berkeley compared to each site storing its own waste.

18. Why are you proposing to consolidate ILW packages at Berkeley?

The importation of ILW packages from Oldbury to Berkeley for interim storage was the subject of extensive stakeholder engagement during 2013 and 2014. Magnox's understanding of the feedback received was that stakeholders in the Berkeley and Oldbury area broadly recognised the significant benefits which consolidating storage at Berkeley (in terms of minimising overall HGV numbers, minimising the risk to the public and worker and also in saving approximately £15M for the tax payer.

With respect to importation of waste from other sites, the current direction of travel is to propose the importation of a small number of packages from Dungeness A/Sizewell A (less than one per cent of the total waste volume at Berkeley). Magnox identified that there are significant safety and cost benefits associated with transferring this waste to Oldbury for packaging because consolidating IONSIV cartridge packaging avoids having to set up complex retrieval kit at two more sites (DNA and SZA). Whilst it is true that the packaged waste could be returned to the sites of origin, it is Magnox's preference to minimise the number of times which this waste crosses the country and we would prefer instead for them to make the short journey with them to Berkeley.

19. How will the 6m³ boxes be transported to sites? How does this compare to DCICs?

The 6 m³ concrete boxes would be transferred to Berkeley by HGV, with one container being able to be carried by each HGV. This is the same as required for the Type VI DCIC (the larger cuboidal DCIC). As such the proposed change will have no discernible impact in this area.