

## DECC MRWS Consultation on a revised Siting Process for a Geological Disposal Facility September 2013 – Annex A to Nuclear Institute Response

1. Do you agree that a test of public support should be taken before the representative authority loses the Right of Withdrawal? If so, what do you think would be the most appropriate means of testing public support, and when should it take place?

The Nuclear Institute is supportive of the principle of gaining public support for this programme but we are not expert in this area and therefore would look to HM Government to implement best practice. All the evidence shows that a community will not allow engagement unless such a test of support is taken before losing the right of withdrawal.

2. Do you agree with the proposed amendments to decision making within the MRWS siting process?

The Nuclear Institute supports the amendments and additionally:

- a. We support the approach of providing information up-front, and promotion of that information widely before seeking expressions of interest. Public education about the repository concept, need, physical attributes etc needs to be more wide reaching than last time (i.e. not just leaflets, newspaper advertorials and public meetings but a full powered campaign). The Nuclear Institute can play an important role in the provision of unbiased public education
- b. We note the initial reports to be commissioned at RWMD (i.e. government) expense on geology and socio-economics for potentially interested communities. Consideration should also be given to environmental impact.
- c. We note the geology report would be produced by the BGS. This places an important obligation on BGS to maintain its position, as the UK's leading geological institution, operating to high standards of science / technology and without bias towards particular outcomes.
- d. Although the process proposes being more continuous, including a continuous right of withdrawal, how realistic is this? Whilst it is important that communities are not forced to make decisions too early, at some point positive decisions will be required and these will need to be taken in a stepwise manner. It would not be effective if a community should opt to withdraw before all the information required to inform a particular decision had been assembled

3. Do you agree with this approach to revising roles in the siting process set out in the White Paper?

Yes, this aligns with what the Nuclear Institute said in our response to the call for evidence <sup>1</sup>. We believe there is no realistic alternative to a GDF in a suitable geology and note that CoRWM remains convinced that this can only be achieved if the host community “volunteer”.

4. Do you agree with the proposed approach to assessing geological suitability as part of the MRWS siting process?

The Nuclear Institute is not expert in geology but we note that the complexity and cost of the safety case will vary between geological formations. We also note that care needs to be taken not to inappropriately exclude areas which would otherwise meet both public acceptability and industry requirements because of lack of detailed knowledge early in the process.

5. Do you agree with this proposed approach to planning for a GDF?

The Nuclear Institute believes it is reasonable but is not expert in this area; we would look to HM Government to establish the appropriate framework for planning.

6. Do you agree with this clarification of the inventory for geological disposal – and how this will be communicated with the volunteer host community?

Whilst it is useful that the Government has provided extra clarity in terms of the baseline inventory, the approach, which defines a very broad range of radioactive wastes for disposal in a single facility, is potentially over ambitious. The MRWS process is based on using international precedence to underpin the way forward (siting, technology options, community benefits etc) yet this is not the case with respect to inventory. No other country is attempting to dispose of such a broad range of materials (physical nature, radionuclide content, chemical nature etc) in a single facility. It has already been made clear in previous studies that the geological environments available in the UK have been found to be complex, therefore attempting to justify disposal of such a diverse range of radioactive wastes in a single facility may prove too demanding.

The RWMD safety case does provide some confidence that these wastes could, in theory, be disposed of in a single facility, however the numerous issues associated with each waste stream provide a fertile arena for challenge. Dealing with all the challenges in a single safety case submission will be very complex and has the potential to threaten the viability of the project.

Specifically:

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<sup>1</sup> Nuclear Institute NI.pdf published 20/09/2013 by DECC in responses\_e\_to\_n[1].zip to the call for evidence [www.gov.uk/government/consultations/managing-radioactive-waste-safely-call-for-evidence-on-the-siting-process-for-a-geological-disposal-facility](http://www.gov.uk/government/consultations/managing-radioactive-waste-safely-call-for-evidence-on-the-siting-process-for-a-geological-disposal-facility)

- a. The Nuclear Institute has concerns over the inclusion of separated nuclear materials such as Plutonium and Uranium in the baseline inventory since HM Government is moving towards a policy of recycling Plutonium in MoX and both the Plutonium and the Uranium inventories have the potential to be reused within various energy scenarios proposed by HM Government's Nuclear Strategy - therefore we query the sense of including these materials in the baseline inventory.
- b. Spent nuclear fuel is a potentially valuable asset and reprocessing may become more economically viable in the future. Therefore, whilst it may be in the baseline inventory, any implementation process should ensure that the option of recovery for reprocessing remains open for a significant time period. Even in an un-reprocessed form this is an asset which the Government has a responsibility to appropriately protect for the use of future generations
- c. Potential host communities should not be presented with such range of nuclear materials to consider. No other nation has moved forward with such a complicated inventory. The nearest is France, with near ideal geology, where they are proposing to treat ILW and HLW in the same facility. In the UK the project is considering HLW, ILW, Pu, U, LLW and Spent Fuel (from several reactor types e.g. AGR, PWR, Magnox, and various experimental reactors).

7. Do you endorse the proposed approach on community benefits associated with a GDF?

Whilst the Nuclear Institute is not expert in community benefits it is clear that, both in the UK and abroad, communities familiar with nuclear technology are more likely to engage in the process. In such cases a broader package than just activities associated with the GDF may be appropriate.

8. Do you agree with the proposed approach to addressing potential socio-economic and environmental effects that might come from hosting a GDF?

The Nuclear Institute is not expert in socio-economic effects and would support the use of good practice.

9. Do you have any other comments?

- a. The Nuclear Institute believes that potential host communities in locations that have promising geology, suitable geography and reasonable communications links (rail etc) should be identified by the RWMD and targeted with "special assistance" to help them make an informed decision. This should not be left to chance.
- b. This Nuclear Institute recommends communicating to the public using a variety of tools to convey concepts. For instance, one approach could be to translate the baseline inventory into some idea of underground and surface footprint and comparing this with similar underground facilities developed or maintained by other industries. E.g. traditional deep coal mining, and the salt mines and underground salt caverns such as in Cheshire.
- c. The document refers to the inclusion of further governance (peer review, use of experts etc) of the underpinning science and engineering without giving any details of how this will be enacted. As a learned society the Nuclear Institute would strongly support good

governance of the science and engineering activities and would like to see the processes mapped out in more detail, including the role of existing bodies such as the UK regulators, CORWM etc.

- d. The document is unclear on the process for engagement with communities in Cumbria and Kent, both of whom played important roles within the previous engagements within MRWS and made decisions not to participate further. There may be a need to review the decision-making authority/arrangements and adapt these to special circumstances e.g. Cumbria, to ensure a legitimate democratic voice that has been involved previously is not sidelined inappropriately.