

SCOTTISH GOVERNMENT CONSULTATION HIGHER ACTIVITY WASTE

Questions and issues for presentation on 10th March 2010 at DSG meeting.

1. The consultation document talks about 10s of metres underground – is there a maximum (bearing in mind that the Deep geological facility is 250 metres deep). Given that storage/disposal could be 10s of metres underground why is deep geological facility a 'no' and proposals in this consultation document deemed to be acceptable?
2. What does proximity really mean?
3. Proximity principle – is only one of the 9 IAEA fundamental principles of radioactive waste management that are recognised world-wide as standard. Why has the proximity principle been used and not the rest of the IAEA principles.
4. Siting of new ILW facilities is the biggest problem with the policy. If each site has to have its own storage/disposal facility, that means approximately 5 ILW stores, especially as most of the sites are remote from each other so the proximity principle comes into play regarding transport of the material. However, if the sites are in the south of Scotland and they are not suitable to house a storage/disposal facility onsite, and the nearest facility is Sellafield (as it is with Chapelcross and Hunterston), why ship it potentially much further through greater populated areas in the other direction? This appears to negate all the stress on proximity principle – just so the waste does not cross the border (ie a political decision supersedes a practical, safety orientated one).
5. How would regulation be undertaken – if you go down the storage route then the facility would be regulated by NII, if disposal then it falls to SEPA. How are you going to make sure the same standards apply regardless of who regulates?
6. There is no information on costs – can you tell us why. For some sites this could potentially increase costs substantially.
7. Figure 8 (page 14) does not indicate the higher activity radioactive waste that the Clyde site produces, despite identifying it as a site.
8. Policy does not appear to cover nuclear submarines in Rosyth – why?
9. Will Vulcan waste be stored/disposed of along with Dounreay waste? We are aware that there is a contract between Vulcan and Dounreay for operational waste but Mod waste does not appear to be covered by this policy?
10. If the MoD considers their waste issues from a national prospective how does Scottish Government policy affect them?
11. It appears that the approach is to propose near surface storage/disposal policy when the policy document states (ch 3.22 of Environment Report) that one quarter of the waste in Scotland is unsuitable for this method and

must wait for some hypothetical future advance, which may or may not arrive. The vast majority of this waste is at Dounreay – therefore our understanding is that Dounreay will need to go down the storage route and a safety case for the building can only be made for 100 years – if this is the case new stores are going to be needed every hundred years until waste is deemed 'safe'. Can you confirm this is correct?

12. There is some incompatibility of using 100-300 years institutional control time for the policy with the fact that decay times for nuclides in ILW is many thousands of years as this ILW (both historic and now) is not short lived LILW as in France, Spain, etc. This goes against internationally established IAEA waste management principles (Principle 1, par 307, Principles 4 and 5). In light of the 10,000 year geological conditions for the new Dounreay LLW site, how does this square with a higher level storage/disposal facility only using 300 years as a policy baseline? A 10,000 year geological condition component may mean that all the existing nuclear sites are unsuitable and all new off-site storage/facility places must be found.
13. Facilities under the seabed have a greater risk of being compromised due to water ingress, and present greater difficulties in containing or localising leakage to the environment if they are compromised. Why are such facilities being considered, particularly with no specification in the policy as to the type of material that may be disposed of there, either in terms of activity, half life, or form (solid, liquid, sludge etc.)?
14. For disposal options retrievability is still an option – so why change policy to cover storage or disposal?
15. Is it likely that the substances and materials described in paragraph 6.04.02 will be classified as Waste in the future, given that it is probable that most of them would be deemed to be HLW and as such they would not be covered by this Policy?
16. The Highland Council policy is for near site, near surface – what happens if the site opts for a different storage/disposal route – we presume that Highland Council would reconsider their policy and fall into line with Scottish Government?
17. In addition, Highland Council policy only covers waste – it does not cover fuels and therefore there is a transport issue which needs to be addressed by NDA, Scottish Government and Highland Council.
18. If each site has own facility, who pays for this when the nuclear sites have reached their interim end state? As this policy is against the UK Government stated policy and their Treasury pays for NDA (who apply UK Government policy) who is responsible?

Presumably if Scottish Government chose their own policy, then they must be responsible for the sites when the NDA has ceased institutional control after the site has been decommissioned (as per their remit). The NDA remit under the Energy Act 2004 does not state that it has to apply and pay for Scottish Government policy that is in conflict with UK Government policy?

This is even more pertinent if the storage/disposal facility is not located on the nuclear site itself – if the SLC has decommissioned the site to an end state approved by the UK regulatory bodies and the control is moved to another body, what happens about an off-site store/disposal facility?

19. How long does Scottish Government deem as infinite storage? Funding must be an issue – this is an expensive process and there is no guarantee on funding for the next few years let alone 100s of years down the line.
20. We believe that if storage or disposal facilities are adopted then there is an issue on skills retention (and funding). We estimate that we are looking at 10 generations which will need metallurgists, structural engineers, nuclear engineers, health physics, security and regulators. How can you, NDA or UK Government guarantee the necessary skills are always available? Inter-generational equity was weighted towards the deep geological facility because eventually something has to be done about this.
21. The document sells itself short on innovation – while it is recognised within the document there is no mention as to how you would incentivise the waste producers to come forward with innovative ideas?

The same argument applies for unconditioned waste – where is the money for research and development for new treatments coming from?
22. The policy emphasises the need to take advantage of new technologies to treat waste (6.02.04), presumably most applicable to the longer lived wastes ("lifetimes of some of the radioactive contamination will last many thousands of years" as stated in 6.02.04), but does not favour storage over disposal for these wastes. Why is there not a presumption against disposal for longer lived wastes?
23. [6.04.02] The Policy does not cover:
 - waste arising from the decommissioning and dismantling of redundant nuclear submarines including those berthed at the former Defence Establishment at Rosyth;
 - waste which has already been dealt with under the policies of previous governments;
 - waste which is the subject of previous or existing contractual arrangements, including waste sent to facilities outside of Scotland;
 - waste categorised as High Level Waste (HLW) as there is no longer any such waste at nuclear sites in Scotland; and
 - radioactive substances and material which are not currently classified as radioactive waste, such as spent nuclear fuel, plutonium, uranium or other such radioactive fuels and materials.]
24. The document does not specify how much waste small users must generate before they have to provide their own storage/disposal facilities. Then they must be responsible for what would presumably be a licensed nuclear site when they themselves are not nuclear site licence companies. Would such companies have the resources, knowledge, SQEP staff to provide such a thing? How could they do such a thing without being an SLC?

The report also states that these small users would normally have agreements to send their waste to one of the nearest available new storage/disposal sites located on or near a nuclear site. What if the wastes are not suitable for the storage/disposal sites (eg High active sealed sources) and are thus not accepted by SLCs. The cash strapped SLCs in the future are not going to spend their site budgets expensively processing non-compatible off-site ILW from small users unless someone pays.

25. Since the Scottish Government has withdrawn from the CoRWM process, does that mean for the new storage/disposal sites, particularly if they are in new off-site locations, that Scottish Government will be organising and paying for all the stakeholder engagement processes involving all the same steps (as the CoRWM process would have if Scotland had been participating)? If the Scottish Government is not using a similar process to consult with local communities about the siting of these new storage/disposal facilities, how do they intend to ensure they comply with their stated aims in the consultation document to consult widely with local communities? What body will be in charge of this siting consultation process with communities and who will provide oversight to this body?
26. Will the Scottish Government also be providing the Community benefit packages to all the local communities that will be hosting these facilities? Since it is a Scottish Government policy not a UK Government policy – how will they organise and set up a system of community benefit packages and what criteria will they use to judge and decide applications for these packages?
27. The policy needs a common-sense approach rather than a political one. One facility, ie the deep geological facility, means that one standard applies for all of UK's waste. Given the focus on Scottish Government policy how do they intend to ensure that standards are applied across all Scottish sites?

Dounreay Stakeholder Group
1st March 2010