

Nuclear Free Local Authorities **RADIOACTIVE WASTE POLICY** Briefing on the Government Review

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LORDS START POLICY REVIEW

The long awaited review of the management of nuclear waste by the House of Lords Science and Technology Committee has finally been published¹. The review is important because it follows two decades of policy failure and is set to have a significant impact on the way the Government tackles the issue later in the year.

The purpose of this briefing is to provide a commentary on the report's main recommendations (which are in *italics* throughout). Despite important flaws, the Lords' report makes some useful proposals. It also provides a guide to many of the issues that will be exposed to public scrutiny once the Government review - and subsequent public consultation - begins.

It is hoped that this briefing will be used as a primer, so that the groundwork can be laid for a substantial local authority input to the impending Government review. Future briefings will provide advice to seek to influence the debate as it unfolds.

POLICY FORMULATION ON LONG-TERM MANAGEMENT OF WASTES

The House of Lords report makes two key recommendations about policy formulation.

.. the Government should develop a fully comprehensive policy for the long-term management of all nuclear waste.1

This certainly makes sense as present policy for nuclear waste management is highly fragmented. Although Low Level Waste (LLW) is disposed of in a shallow site at Drigg in Cumbria, no long term management option has been decided for Intermediate Level Wastes (ILW) and High Level Wastes (HLW)². There are also materials for which no use is really foreseen - including separated plutonium and reprocessed uranium - which are not yet categorised as wastes but which need to be taken into account.



THE LOCAL GOVERNMENT VOICE ON NUCLEAR ISSUES

The Government should issue a Green Paper which states the problem, the possible solutions and the principal means for implementation of that policy, including for deep repositories, the site selection process. The consultation on the Green Paper should involve as many sections of the public as feasible.

In principle, this recommendation should also be supported. However, sufficient information must be provided to enable consultees to form a view on the relative risks of deep disposal and alternative options.

On deep disposal, the report repeats the assertion that most scientists think that enough is known to begin a new attempt at site selection: in other words, that deep disposal can be acceptably safe. However, there were strong differences of opinion between scientists about aspects of safety at the public inquiry into Nirex's proposal for a Rock Characterisation Facility near Sellafield³. There is also a low level of public trust in 'official' scientists compared to those working for environmental organisations⁴. In the light of this, a process has to be found for establishing just how wide the concurrence of view is amongst scientists. This needs to be done before public consultation starts so that consultees are better able to reach their own conclusions about whether deep disposal can be acceptably safe.

In addition, it is important that the main alternative to deep disposal - interim surface storage combined with research on longer-term options - is fairly presented in the proposed Green Paper. One way of doing this would be for the Government to talk to the advocates of such an approach to seek their views on how their case can be properly presented⁵.

On the way in which public consultation should be conducted, the report highlights that the emphasis should be on dialogue, transparency, moving forward and building trust. It adds that further mechanisms are needed to include the public. One example is the 'consensus conference' that is taking place towards the end of May⁶.

Clearly then, there are a number of steps that need to be taken before the Green Paper can be launched, including the development of a programme for wide-ranging and meaningful consultation.

INSTITUTIONAL CHANGES

The House of Lords report makes a number of far-reaching recommendations for institutional change.

.. a new organisation (should) be set up to oversee the implementation of policy. This should be a 'Nuclear Waste Management Commission', which is outside day-to-day government .. There would be advantages in setting up the Commission initially in a non-statutory way and giving it the task of consultation on a comprehensive policy.

The report adds that the NWMC should be set up, eventually by statute, with a professional staff: "this would be analagous to the Health and Safety Commission (and HSE), but with a much more specific remit and on a much smaller scale."

Although a new organisation might be needed to oversee the implementation of policy, it does not make sense to set it up to undertake the initial wide-ranging consultation on what that policy should be. This would be putting the cart before the horse. Instead there is a strong case that the proposal for a Commission (including its function and terms of reference) should itself be the subject of consultation.

If .. a phased approach to geological disposal is adopted, another new organisation should be set up with the remit to design, construct, operate and eventually close the repository (or repositories) .. This 'Radioactive Waste Disposal Company' should be a nuclear industry organisation .., which needs approval from the Commission for its work programme ..

If a policy of geological disposal is reaffirmed after wide-ranging public consultation, then the proposal for some form of disposal company, separate to the proposed Commission, makes sense. However, it is perhaps surprising that the Lords argue that the company should be a "nuclear industry organisation". Public trust in the company is more likely to be gained if the company is independent of the industry.

For the present, Nirex should be maintained, but when the Commission and the Company are established its roles should be subsumed by them.

There is unlikely to be much opposition to the proposal that Nirex be disbanded. The way the company has tackled its task has left it with little credibility. Whatever replaces it must operate in a genuinely independent and open way.

When the Commission is set up some changes should be made to regulatory arrangements. The Environment Agency should be given a new statutory power over the storage of wastes on nuclear licensed sites.

The report adds that under the proposed new power the Environment Agency's approval would be required for arrangements to treat, package and store waste, and the Agency would inspect these arrangements and require improvements to be made if necessary. Not only would this enable the Agency to fulfil its responsibility to protect the environment, it would increase the information available to the public. As such, the proposal has much to commend it.

REPOSITORY SITE SELECTION

Assuming that a policy of deep disposal is reaffirmed, the report makes the following recommendation on the vexed issue of site selection:

The process of selecting a repository site (or sites, if more than one repository is needed) should be open and transparent, and should involve Parliament and Government. The Commission should oversee the Company's selection of the preferred site or sites. The Company's site choice should be debated in Parliament and examined at public inquiry. The final decision should be made by the Secretary of State.

The report proposes that the site selection process would be enshrined in an Act of Parliament. It also sketches out further details:

- The Commission would: carry out desk studies to identify a "long list" of 15-20 potentially suitable sites, using geological and hydrogeological criteria; derive a short list of sites for possible field investigation based on more detailed appraisal; and derive a final list of sites for field investigation by consultation or by using a 'volunteer community' approach.
- Any volunteering would be on the basis that the local community could not withdraw the site once field investigations had begun. Some form of compensation should be offered to mitigate the blight which would occur once short-listed sites are named.
- The Disposal Company would carry out field investigations at the short-listed sites. It would identify its preferred site (or sites) within the framework of a formal environmental impact assessment in which all the short-listed sites would be compared. It would make an application to develop a preferred site for approval by Ministerial order (as envisaged in the Government's statement, 'Modernising Planning').
- The Secretary of State would refer the application to Parliament for approval. If approved, it would go forward for consideration at a public inquiry, which would focus primarily on local matters. The Inquiry Inspector would make a recommendation. The final decision would be made by the Secretary of State and would be embodied in a Ministerial Order.

According to the report, this process "has the features necessary to balance national need with local concerns in an open and explicit way". This, however, is a highly contentious claim. Indeed, important features of the proposed process - the condition that a 'volunteer community' could not withdraw once site investigations began and the centralised decision making from 'Modernising Planning' - would enable Government to ride rough shod over the views of local communities. As such, these features provide key ingredients for future conflict and dispute.

In order to shift the balance back towards the local level, consideration should be given to building a number of additional features into the process. In particular, if a volunteer community approach is to be used, international experience suggests that such a community should have the ability to withdraw from the siting process at any stage and that the final decision to proceed with repository development should be subjected to local referendum⁷. In addition, volunteer communities need to be empowered so that they can participate meaningfully in appraisal of site investigations. This could involve setting up and funding a local advisory group to ensure that the concerns of the community are adequately addressed as investigations progress.

There are a range of other issues associated with the notion of a 'volunteer community' that require closer examination. For example, at what stage in the site selection process should volunteer communities be sought? What package of measures would be appropriate to encourage communities to come forward and to compensate for the blight associated with repository development? Should neighbouring communities on the transport route be involved in repository decision-making and compensation schemes?

There is therefore a strong case for the Government to carry out a full review of international practice with volunteer communities. This should be started promptly so that the preliminary findings can inform the preparation of the Green Paper.

REPROCESSING AND PLUTONIUM

The House of Lords report makes an important recommendation about the plutonium separated by the reprocessing of spent fuel:

.. the Government should develop a clear policy for the management of the United Kingdom's stock of separated plutonium. Our view is that this policy should be the maintenance of the minimum strategic stock, and the declaration of the remainder as waste.

Although there is scope for disagreement about whether a minimum stock should indeed be maintained⁸, this recommendation is a welcome step in the right direction.

It is unfortunate, however, that the report does not follow the logic of its own position: namely, that if there is a large surplus of plutonium which should be declared a waste, it does not make sense to keep adding to it. This point was recognised by the Royal Society in its 1998 report: "In addition to disposing of some of the plutonium already in the stockpile, steps should be taken to reduce the amount being added to it each year, primarily by reducing the amount of reprocessing carried out. The impact of such a policy on overall costs and proliferation risks would need careful analysis."⁹

The required analysis is a further issue that the Government must get to grips with in preparing the Green Paper.

LOW LEVEL WASTE DISPOSAL

The House of Lords report recommends that:

Plans should be made for the establishment of a new LLW disposal facility, to open before Drigg closes. The Government should also consider alternatives to landfill disposal of less active LLW and produce a national policy that is accepted by all concerned.

As recognised by the report, the issue of landfill disposal is of particular concern to local authorities. Although the Lords did not consider this in detail, they argued that the Government should do so, "in order to produce a national policy that is accepted by local authorities, landfill operators, the nuclear industry, and all those who currently use landfill disposal, rather than leave matters almost entirely to local negotiations"¹⁰. With the possibility of increasing pressure to use landfill sites, the need to identify a widely acceptable national policy is clear. This provides a further issue that local authorities will wish to monitor closely.

CONCLUDING REMARKS

Although some of the lessons from recent policy failures have been identified by the Lords, there is still some way to go. In particular:

- The crucial first stage of policy review must not be rushed. There needs to be wide-ranging consultation on genuine policy options. To achieve this, the Government must prepare carefully, for example, by establishing how wide the concurrence of view is amongst scientists on the assessment of the risks of deep disposal.
- In order to avoid creating pitfalls for the future, the Government must embrace all relevant issues. This includes an analysis of the pros and cons of reducing the amount of reprocessing and looking at the long-term management implications of declaring plutonium a waste.
- The Government must recognise the dangers of adopting a process that would enable a siting programme to be pushed through against the wishes of local communities. This could result in a hard fought and ultimately unsuccessful attempt at repository siting. A review of international practice with volunteer communities should be undertaken to identify ways of balancing national need with local decision making.

Finally, in the light of repeated policy reversals on radioactive waste disposal, the Government should consider whether public acceptance might be more easily secured if a cap is placed on future radioactive waste generation by establishing a phased closure programme for the nuclear industry. Although such a programme is not currently on the policy agenda - and would have to be consistent with achieving future carbon dioxide reduction targets - it may be a necessary prerequisite for achieving social consensus on the long-term management of radioactive wastes.

¹ House of Lords, Select Committee on Science and Technology, 'Management of Nuclear Waste', HL Paper 41, March 1999.

² LLW arises largely as lightly contaminated scrap and requires no shielding. It is compacted into drums and placed in containers which are infilled with cementitious grout and disposed of at Drigg. ILW is more radioactive and generally requires shielding and special handling. It is currently held in storage, mainly at Sellafield and nuclear power station sites. HLW is highly radioactive and arises as a liquid from the reprocessing of spent fuel. The HLW at Sellafield is being vitrified (converted into a borosilicate glass) for longer term storage.

³ Nirex saw the RCF as a key stage in its investigation of whether the site was suitable for a deep repository for ILW. The Secretary of State dismissed Nirex's appeal against the refusal of planning permission for the RCF. In the light of debate at the inquiry, the Secretary of State stated that he was "concerned about the scientific uncertainties and technical deficiencies in the proposals presented by Nirex".

⁴ HoL report, para 5.13

⁵ Both Friends of the Earth and Greenpeace advocate interim surface storage, which is criticised in the HoL report, paras 4.33-4.35. Note also that alternative approaches are not confined to this option. In France, it is intended to subject as many as 10 concepts to detailed technical and economic study between 2002-2006, ranging from near surface storage and shallow disposal to various forms of deep disposal. The retrievability of wastes is one of the central issues that will be explored in these studies.

⁶ The Consensus Conference is being organised by the UK Centre for Economic and Environmental Development. It consists of a 'Citizens' Panel', made up of members of the public, which will take part in informed discussion with expert witnesses of their choice. After the discussion, the panel will publish a report for input into the Government review. In addition to new mechanisms for reaching the public, the HoL report argues that those consulted should include environmental groups, trade unions and local authorities.

⁷ P J Richardson, 'Public Involvement in the Siting of Contentious Facilities', Report to the Swedish Radiation Protection Institute, August 1997.

⁸ The HoL reports suggests that there may be a future use for plutonium as Mixed Oxide fuel in current reactors, or in the much longer term in Fast Breeder Reactors. Both potential uses are highly unlikely in the UK.

⁹ Royal Society, 'The Management of Plutonium', 1998.

¹⁰ HoL, as above, para 4.18.