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| Meeting: | NuLeAF Steering Group, 15 July 2009 |
| Agenda Item: | 5 |
| Subject: | Scottish Government Policy on the Management of Higher Activity Wastes |
| Author: | Fred Barker |
| Purpose: | To report on progress with the development of a more detailed policy statement by the Scottish Government and the potential implications |

Introduction

The Steering Group will recall that the Scottish Government supports long-term, near surface, near site storage, rather than the geological disposal of higher activity wastes. This report provides an update on the development of a more detailed policy statement and the potential wider implications.

Recommendation

That the Steering Group agree to:

1 Write to the Scottish Government to suggest that the forthcoming consultation should include a question about whether Vitrified High Level Waste from reprocessing spent fuel from nuclear power stations in Scotland should be included within the scope of its policy.

2 Write to the NDA to ascertain the current position with regard to its review of alternative disposal concepts for some Intermediate Level Waste streams, and when it expects to engage with stakeholders on potential ways forward.

Contribution to Achieving Strategic Objectives

The first recommendation is relevant to the following NuLeAF objective:

To encourage 'regional' approaches to nuclear legacy management where such approaches are supported by the affected local authorities in the light of the overall balance of benefits and disadvantages.

1 Background

On 25 June 2007 the Scottish Government announced that its policy for the long-term management of Higher Activity Radioactive Waste would be:

“to support long-term “near surface, near site” storage facilities so that the waste is monitorable and retrievable and the need for transporting it over long distances is minimal. We will be progressing this in conjunction with the regulators and the Nuclear Decommissioning Authority.”

The June 2007 announcement was followed by discussions with representatives of nuclear site operators, waste producers and regulators, Nuclear Decommissioning Authority (NDA), Scottish Local Authorities and other stakeholders. It became clear from these discussions that all parties needed greater clarity on the implications of the policy to enable them to undertake the work, and duties, for which they are responsible.

The Scottish Government is now developing a more detailed policy statement which is intended to enable waste producers to manage Higher Activity Radioactivity Waste arising from operations at, or decommissioning of, nuclear sites in Scotland. The intention is to publish a consultation paper in late summer 2009.

The development of the consultation document is being overseen by a Project Board, chaired by the Scottish Government with membership from Scottish Councils Committee on Radioactive Substances (SCCORS), Council of Scottish Local Authorities (COSLA), Scottish Environment Protection Agency (SEPA), Health and Safety Executive’s Nuclear Directorate (HSE:ND) and Nuclear Decommissioning Authority (NDA). Department for Transport (DfT) and the Office for Civil Nuclear Security (OCNS) have also accepted an invitation to join the Board.

A separate technical advisory group has also been set up to assist in scoping the nature of the Radioactive Wastes which will arise in Scotland as defined in the 2007 UK Radioactive Waste Inventory. This group is also assisting in identifying possible treatment options to minimise the volumes of waste, as well as alternative packaging options. The group is chaired by the Scottish Government and its members are representatives from SEPA, HSE, NDA, Magnox North, Dounreay Site Restoration Limited, British Energy and CoRWM. Department for Transport and OCNS have also accepted an invitation to participate in this group.

2 Pre-Consultation Workshop

On 24 June, the Executive Director (ED) attended a pre-consultation workshop on the Scottish Government’s policy proposals. This discussed the aims of the policy, key definitions, long-term management options, and scope of the consultation document.

The following issues are drawn to the Steering Group’s attention:

Wastes Covered by the Policy

The Scottish Government proposes that the policy cover Intermediate Level Waste (ILW) arising from operations at, or decommissioning of, licensed nuclear sites in Scotland. The proposed policy does not therefore cover:

- The spent fuel arising at nuclear power stations in Scotland. All Magnox spent fuel is scheduled to be reprocessed (Hunterston A has been defuelled and Chapelcross is undergoing defuelling). AGR spent fuel is contracted to be managed at Sellafield (either by reprocessing or storage).
- The proportion of the Vitrified High Level Waste (VHLW) that arises at Sellafield from reprocessing spent fuel from nuclear power stations in Scotland. It is assumed that this VHLW will be consigned to the Geological Disposal Facility that is anticipated to be sited in England or Wales.

Although this VHLW does not arise directly from operations or decommissioning at licensed nuclear sites in Scotland, it is a product of the reprocessing of spent fuel that arises at those sites. The question, therefore, of whether the VHLW should be included within the scope of the proposed Scottish Government policy could be argued to require more discussion. It is recommended that the SG write to the Scottish Government to suggest that the issue be raised as a specific question in the consultation planned for later in 2009.

Consideration of Near Surface Disposal of Short-Lived or Less Radiotoxic ILW

Although the original policy announcement only refers to storage, the current proposals include the possibility of near surface disposal of some types of ILW. It is understood that this may be acceptable to the Scottish Government for ILW containing radionuclides that have half-lives of the order of 30 years or less, which would decay to 1/1000 of original activity levels over a period of 300 years.

Although near surface disposal of some ILW is considered acceptable in principle by the nuclear industry and environmental regulators, it is not clear how the wider stakeholder community in Scotland will view this proposal.

The NDA has been reviewing alternative disposal concepts for some ILW streams, including near surface disposal. It is suggested that the SG write to the NDA to ascertain the current position, and when it expects to engage with stakeholders on potential ways forward.

Application of the Proximity Principle

The Scottish Government is seeking to develop a definition of “near site”, which takes into account:

- The current location of waste
- The location of future waste arisings
- Transportation
- Financial implications and
- Planning requirements

It has considered whether it would be possible to identify a specific distance measurement that would define “near”, but decided there is no basis on which to make a generalisation. Instead it intends to adopt the proximity principle, which would enable wastes to be managed at one of the nearest appropriate facilities. This would enable flexible interpretations of “near site” to be made.

Lack of Consideration of Siting Processes

In principle, the Scottish Government's policy proposals could result in the storage or disposal of ILW at or adjacent to existing nuclear sites, or at new locations, in Scotland.

It is notable that the material presented to the workshop contained no reference to siting processes. Such processes can be an important part of policy development, particularly where new sites are sought. The ED suggested at the workshop that siting processes be addressed in the consultation document.

Commitment to Review

The Scottish Government proposes to use a 100 year time frame to define "long term". It proposes to "review facilities" at 10 yearly intervals. Presumably more fundamental policy reviews would take place if and when required by subsequent Scottish Governments.