Meeting:	NuLeAF Steering Group, 20 April 2010
Agenda Item:	4
Subject:	Radioactive Waste Management and New Nuclear Build
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Purpose:	To provide an update on developments

Introduction

This report provides an update on developments associated with, or relevant to, radioactive waste management and new nuclear build. It covers:

- Submission of comments on the draft Nuclear National Policy Statement (NPS)
- CoRWM's comments on the draft Nuclear NPS
- The views of the Energy and Climate Change Select Committee
- Guidance from the Infrastructure Planning Commission on local impact reports
- NDA high level feasibility studies on options for managing new build spent fuel
- Government consultation on the 'Financing of Decommissioning and Waste Handling Regulations' and a 'fixed unit price methodology and updated cost estimates'
- Staffing levels and recruitment to new build projects
- The outcome of preliminary discussions with officers of Somerset County Council about potential further work on the radioactive waste management implications of new nuclear build.

Recommendations

It is recommended that the Steering Group agree that:

1 CoRWM be asked for clarification about how and when it intends to take forward work on ways of achieving greater integration in planning for the long-term management of existing, committed and new build Higher Activity Wastes.

2 Discussion take place, initially with the NDA, about briefing potentially affected local authorities on the outcome of the feasibility studies on spent fuel management options, and about the potential role of local authorities in decision-making on preferred options.

3 Authority for submitting comments on the Government's consultations on the financing of decommissioning and waste management be delegated to the Chair and Vice Chair.

Contribution to Achieving Strategic Objectives

The work outlined in this report is relevant to the following NuLeAF objectives:

- To seek to ensure that the Government's Nuclear NPS is open and transparent about the interactions between new nuclear build and nuclear legacy management.
- To seek to ensure that proposals for radioactive waste management and decommissioning of new nuclear power stations do not prejudice effective management of the nuclear legacy.
- To promote debate about the interactions between new build and legacy management and the pros and cons of utilising these interactions to the benefit of the latter.

A full version of these objectives is available at Policy Statement 7.

1 Submission of Comments on the Draft Nuclear NPS

As agreed at the last Steering Group meeting, comments on the draft Nuclear NPS and on the proposed justification decision were submitted to Government in mid February (see Consultation Responses 2010).

The main points in the comments on the draft Nuclear NPS were:

a) There will be a **need for the Infrastructure Planning Commission to consider the radioactive waste management issues** raised in Local Impact Reports and this should be made clear in the Nuclear NPS. These issues might include:
   - the pros and cons of different options for managing spent fuel from new nuclear power stations;
   - the availability of on and off-site treatment and storage facilities for Intermediate Level Waste (ILW), including on any neighbouring nuclear sites;
   - the availability of on and off-site treatment and disposal facilities for Low Level Waste (LLW), including on any neighbouring nuclear sites; and
   - the case for the provision of community funds in association with the development of long-term storage facilities for spent fuel, or for the on-site disposal of LLW or short-lived ILW.

b) On the Government's **preliminary conclusion that effective arrangements will exist to manage and dispose of radioactive wastes**, the central issue is not whether technical solutions to radioactive waste management are known in principle or, in some cases, practice (as they are), but whether current strategies for implementing them will succeed and, if not, whether fall-backs or contingencies can be put in place. Whether current strategies are likely to succeed is essentially a matter of judgement. Certainly the Government's current approach to siting a Geological Disposal Facility (GDF) does offer enhanced prospects for success (compared to previous attempts), but the outcome cannot be known for certain. Whether fall-backs or contingencies (as in the case of alternatives to the current GDF siting process) are likely to succeed could be argued to come down to a question of whether Government has the political will and/or financial resources. Either way, and regardless of the case for or against new nuclear power stations, it is important that the prospects for effective radioactive waste management arrangements should be enhanced by: (a) maintaining adequate levels of Government funding (particularly for the GDF programme); (b) not imposing rigid deadlines for achieving key steps in the voluntary siting of a GDF; (c) ensuring openness and transparency in radioactive waste management strategy development and implementation; and (d) pursuing strategies for managing radioactive wastes that pay full and proper regard to the views of host communities and their local authorities.

c) On the **management of spent fuel**, the draft Nuclear NPS assumes that spent fuel from new nuclear stations will not be reprocessed and that it could be stored on the sites of those stations for up to 160 years. The associated document on the arrangements for management and disposal of wastes (the 'Waste Document') acknowledges that it may not necessarily be the case that the whole interim storage period will be at each reactor site, and points out that the Government does not wish to preclude alternative arrangements. The Waste Document points to one alternative which is for an operator with more than one new nuclear station to construct a central store for the spent fuel from all its reactors. Although not specifically referred to in the Waste Document, other options may be a national spent fuel store, either at the GDF site or at another location. Given the public

interest and spatial planning issues raised, we think it is essential for potentially affected local authorities to be involved in early discussion about the pros and cons of these options and propose that a process for these discussions be agreed at the earliest opportunity.

2 CoRWM's Comments on the Draft Nuclear NPS

CoRWM's comments are available on its website at CoRWM Response on Draft NNPS. These are largely consistent with NuLeAF's comments.

Key points in CoRWM's response include:

- Some arrangements exist that would be effective for the management of Highly Active Wastes (HAW). Whether there will be effective arrangements for all the steps in the management of new build HAW is a matter of judgement. It is for the Government to make this judgement, based on the information available to it. While the current process for siting a GDF is sound, it is at an early stage and success depends on finding a willing host community and a site that is technically suitable to hold enough HAW.
- There is uncertainty about where new build spent fuel would be encapsulated for disposal and by whom. For the regulators' Generic Design Assessment (GDA) process, Westinghouse and EDF are required to demonstrate that spent fuel could be encapsulated at each reactor site if necessary. However, the decision on where encapsulation will occur will be taken by reactors operators. It could occur at a central spent fuel store or, if RWMD agree, at the site of a GDF.
- In the GDA process it is envisaged that no decisions will be taken on how and where spent fuel will be stored until after consent for reactor construction has been given and possibly not until after construction has started.
- CoRWM has concluded that there is a need for prospective operators of new nuclear power stations, with the assistance of NDA, to identify, assess and compare options for the management of new build spent fuel, including the design and location of stores, the storage period and a range of geological disposal concepts.
- In CoRWM's view, the longer the arrangements for spent fuel management remain unclear, the more difficult it will be to gain public confidence that acceptable arrangements will be forthcoming. CoRWM considers it desirable that there is clarification about spent fuel storage arrangements before applications for development consent are made.
- CoRWM agrees that the IPC should not revisit the question of whether the Government is right to be satisfied that effective arrangements will exist. However, CoRWM notes that the IPC will inevitably have to consider some HAW management issues, particularly at the project level.
- CoRWM has reached the conclusion that there is a need for greater integration in planning for the long-term management of existing, committed and new build HAW. CoRWM plans to consider how this might be achieved, including whether there is a need for Government to clarify the remit and role of the NDA with respect to new build HAW.

With regard to this final point, it is not clear from CoRWM's work programme when and how its consideration of the means of greater integration will be undertaken. As this is likely to be a sensitive issue for some member authorities, it is suggested that CoRWM be asked for clarification about how they will take this work forward.

3 The Views of the Energy and Climate Change Committee (E&CCC)

The E&CCC published its report on the proposals for national policy statements on energy on 23 March. The report is available at E&CCC Report on draft NPSs.

The Committee's conclusions on radioactive waste management include:

- Planning consent from the IPC for new nuclear power stations will entail the storage of spent fuel on site for up to 160 years[1]. The Committee believes on-site storage cannot be ruled out from the IPC's deliberations and that the Nuclear NPS should contain significantly more detail on what interim storage will entail for local communities and the integrity of any site chosen.
- The Committee does not dissent from the process adopted by Government for identifying a site for a GDF, but is not convinced that the progress to date supports the Government's robust assertion that suitable arrangements will be in place to manage the UK's waste legacy. However, it notes that Government has no choice but to find a solution and agrees that the waste arising from new nuclear power stations will not pose a significant additional challenge. Therefore, it agrees that this issue of national policy should not be a consideration for the IPC with regard to individual applications.
- The Committee believes that the Government must continue to demonstrate progress in delivering a GDF. Accordingly, it recommends that the Department now sets out key milestones in the Nuclear NPS and reports progress against these to Parliament on an annual basis. This should include establishing which body will be responsible for consenting the site.

It is understood that the Department will be responding positively to the point about demonstrating progress, but is liaising with the West Cumbria MRWS Partnership to make sure that this is done in an appropriate way (for example, avoiding rigid deadlines).

On the final point, the Government has stated that it is minded that the IPC will be the consenting body. NuLeAF's position has been that the Government should discuss this with local authorities that are participating in the GDF siting process before reaching a final decision.

4 Guidance from the IPC on Local Impact Reports

As highlighted above, one of the key points made in NuLeAF's comments on the draft Nuclear NPS was that when considering applications for new nuclear power stations the IPC would need to address the radioactive waste management issues raised in Local Impact Reports.

The IPC has subsequently published an advice note on Local Impact Reports (LIRs), which is available on its website at IPC advice note.

[1] Although the E&CCC assumes that planning consent will entail HAW storage for up to 160 years, this is one option amongst several.

The advice note includes the following points:

- Local authorities in whose areas applications are submitted are strongly encouraged to produce LIRs.
- Relevant local authorities should prioritise preparation of their LIR irrespective of whether the local authority considers the development would have a positive or negative impact.
- During the pre-examination period, the IPC will set a deadline for submission of the LIR and the period within which interested parties will have the opportunity to make written comments on it.
- Local authorities are strongly encouraged to use the pre-application period to start their own evaluation of the local impacts. They should not wait for the deadline to be set as the LIR will be required early in the examination period.
- The content of the LIR is a matter for the local authority concerned as long as it falls within the statutory definition ('a report in writing giving details of the likely impact of the proposed development on the authority's area'). Local authorities should cover any topics they consider relevant to the impact on their area.
- The LIR should be used by local authorities as the means by which their existing body of local knowledge and evidence on local issues can be fully and robustly reported to the IPC.
- It will be very helpful to have the local authority's appraisal of the proposed development's compliance with local policy and guidance, and its views on provisions, requirements and development consent obligations.

The spirit of the advice note therefore confirms that local authorities should set out their views on the local impacts of radioactive waste management in the LIR.

5 NDA High Level Feasibility Studies on Options for Managing Spent Fuel from New Nuclear Power Stations

The Radioactive Waste Management Division (RWMD) of the NDA is engaging with new build operators with a view to undertaking some initial feasibility studies within a short timescale (3 months) to investigate several key issues associated with spent fuel management. It is envisaged that the feasibility studies will have four strands:

- Consideration of alternative GDF design options for new build spent fuel
- Issues associated with a centralised spent fuel store
- Issues associated with an encapsulation plant located at the GDF
- Consideration of alternative spent fuel cask designs

It is intended that the feasibility studies will provide a better understanding of the issues and provide a basis for future decision-making on whether the current baseline scenario (storage and encapsulation of spent fuel at each new build site) should be maintained or revised.

As highlighted above, NuLeAF's comments on the draft Nuclear NPS stated that it is essential for potentially affected local authorities to be involved in early discussion about the pros and cons of different spent fuel management options and proposed that a process for these discussions be agreed at the earliest opportunity.

It is suggested therefore that discussion be initiated, initially with the NDA, about briefing potentially affected local authorities on the outcome of the feasibility studies, and about the

potential role of local authorities in decision-making on preferred options for spent fuel management.

6 Government Consultation on (a) a Fixed Unit Price Methodology and Updated Cost Estimates' and (b) the 'Financing of Decommissioning and Waste Handling Regulations'

The Energy Act 2008 requires the operator of any new nuclear power station to submit a Funded Decommissioning Programme (FDP) for approval by the Secretary of State before the construction of the new power station begins. The objective of the FDP is to ensure that sufficient funds are set aside during the electricity generating lifetime of the new station, so that the operator is able to meet the full costs of decommissioning and radioactive waste management.

Following publication of three pre-consultation discussion papers, the Government has recently launched two formal consultations associated with FDP arrangements.

The first consultation sets out:

- Changes to the Government's policy framework for setting a Fixed Unit Price for the disposal of intermediate level waste and spent fuel as a result of feedback from stakeholders received during the pre-consultation.
- The main stages of the proposed methodology to determine a Fixed Unit Price and worked examples of how it would be calculated using this methodology.
- The Government's updated estimates of the costs for decommissioning, waste management and waste disposal for new nuclear power stations.

A copy of the consultation document is available at Fixed unit price methodology and cost estimates.

The second consultation is on draft regulations setting out requirements for an FDP. It is also a consultation on a draft Order to make certain matters associated with a Funded Decommissioning Programme designated technical matters.

The purpose of the second consultation is to seek views on whether or not the proposals provide clarity for both operators and the public on the financing arrangements the operator of a new nuclear power station will have to put in place to meet the full costs of decommissioning and their full share of waste management costs.

A copy of the consultation document can be accessed at Financing arrangements for nuclear decommissioning and waste handling regulations.

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The two consultations run until 18 June.

At the time of writing, the Executive Director has not had time to review the consultation documents, so it is proposed that authority for authorising comments be delegated to the Chair and Vice Chair. Any comments would taken into account NuLeAF's response to FDP guidance in 2008, which is available at Comments on 2008 FDP consultation.

7 Staffing Levels and Recruitment to New Build Projects

In its comments on the draft Nuclear NPS, NuLeAF pointed to concerns about whether staffing levels in nuclear legacy management can be maintained if people working at NDA sites seek employment in new build projects.

Recent reports highlight the substantial number of jobs and requirements for skills in new build projects. For example, the Sector Skills Council, Cogent, has recently published an audit of current skills and a trajectory for development up to 2025. According to Cogent, the level of job creation in the civil nuclear industry and supporting supply chain could be on the scale of three London Olympics. See:

http://www.themanufacturer.com/uk/content/10387/A_Cogent_skills_assessment

It has also been reported that EDF is to recruit 10,000 scientists, engineers and technicians as part of the proposed new build programme at Hinkley Point and Sizewell. See:

http://www.dailymail.co.uk/money/article-1263328/EDF-recruit-10-000-build.html

8 Outcome of Preliminary Discussions with Officers of Somerset County Council

The Executive Director is meeting with officers from Somerset County Council on 16 April to be briefed on the approach being taken to the application for new build at Hinkley Point, and to explain current developments in radioactive waste management. It is anticipated that the meeting will include exploratory discussion about how further work on the radioactive waste management implications of new build might be taken forward. A verbal report will be given to the Steering Group meeting.