

Funded Decommissioning Programme

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Summary and Recommendation:

This report examines the Funded Decommissioning Programme (FDP) Guidance for New Nuclear Power Stations.

Recommendation:

That the contents of the report are noted and taken into consideration when assessing the plans for the proposed new nuclear power station.

1. Introduction

The Government legislated in the Energy Act 2008 (the Energy Act) to ensure that operators of new nuclear power stations will have secure financing arrangements in place to meet the full costs of decommissioning and their full share of waste management and disposal costs. Under the Energy Act, operators of new nuclear power stations are required to have a Funded Decommissioning Programme (FDP) approved by the Secretary of State for Energy and Climate Change (Secretary of State) in place before construction of a new nuclear power station begins, and to comply with this FDP thereafter. Failure by the operator or an associated company which has obligations under the FDP, to comply with the FDP will be a criminal offence under section 57 of the Energy Act.

2. Funded Decommissioning Programme

The FDP guidance sets out step by step the processes and mechanisms that need to be put in place to ensure the effective implementation of a plan. The guidance has broken down the various stages of the process into 4 parts as follows:

- Part 1 sets out the Objective of the FDP regime and what is referred to as the Guiding Factors. It states that the objective of the FDP Regime is to ensure that Operators make prudent provision for:

- the full costs of decommissioning their installations; and
 - their full share of the costs of safely and securely managing and disposing of their waste; and
 - that in doing so the risk of recourse to public funds is remote (the Objective). The Objective applies to the FDP regime as a whole.
- Part 2 sets out information about preparation, content, modification and implementation of FDPs. – Part 2a sets out guidance relating to the FDP as a whole. This part sets out information on the publication of the FDP, record keeping, reporting requirements, provisions on change in ownership of control of the Operator or site and Modification of an FDP.
 - Part 2b sets out the Decommissioning and Waste Management Plan (DWMP) Guidance. This will assist operators in setting out and costing the steps involved in decommissioning a new nuclear power station and managing and disposing of hazardous waste and spent fuel in a way which the Secretary of State may approve.
 - Part 2c sets out the Funding Arrangements Plan (FAP) Guidance. This will assist operators in setting out acceptable financing proposals to meet the costs identified. It will set out information on the factors by which the Government would expect to assess the funding proposals submitted by operators as part of an FDP for approval.

3. Decommissioning & Waste Management Plan (DWMP)

Of key significance to Copeland is section 2b the DWMP. The DWMP should set out and cost the steps involved in decommissioning the nuclear power station and managing and disposing of hazardous waste. The Government's policy is that in the absence of any proposals from industry, new nuclear power stations should proceed on the basis that spent fuel will not be reprocessed. Thus the Base Case assumes that there will be no re-processing of spent fuel and that spent fuel will be disposed of after it has been used. Therefore spent fuel is regarded as waste for the purposes of the FDP Guidance.

The Energy Act requires operators to provide to the Secretary of State details of their plans for managing and disposing of all wastes, the DWMP is that part of the FDP which is called the "Technical Matters". The Technical matters in relation to a site are:

- (a) The treatment, storage, transportation and disposal of hazardous material during the operation of a nuclear installation on the site,
- (b) The decommissioning of any relevant nuclear installation and the cleaning-up of the site,
- (c) Activities preparatory to the matters mentioned in paragraph (b);

A DWP should include:

- A clear timeline showing key milestones and giving scheduling assumptions in each of the three phases of the Base Case.
- A summary of the key assumptions underpinning the operator's DWMP. In particular the operator should provide details of any assumptions that differ from the Base Case, with an explanation of reasons for any proposed deviation from the Base Case.
- A summary of the operator's cost estimates,
- An explanation of the derivation of the cost estimates including the operator's analysis of the level and sources of risk and uncertainty in those estimates.
- An explanation as to how the assumptions and parameters underpinning the DWMP are expected to evolve over time as the new nuclear power station operates and draws near to closure.

A number of assumptions are made regarding the means by which waste may be managed and disposed of and decommissioning carried out by a new nuclear power station operator. These assumptions define a generic lifecycle plan for new nuclear power stations known as the "Base Case".

The Base Case serves two principal functions:

- It sets out the key points which the Secretary of State would expect to be addressed in a DWMP that is submitted for approval.
- It acts as a vehicle to enable the Secretary of State to estimate the range of costs associated with decommissioning and hazardous waste management and disposal.

However, there will be flexibility to allow operators to propose and justify other ways of carrying out decommissioning, waste management and waste disposal if they choose to do so. If an operator chooses to put forward a DWMP that in one or more respects is not consistent with the Base Case, the onus will be on the operator to justify its proposal.

An approvable FDP will require the operator to have a credible disposal route for the ILW and spent fuel. The Base Case assumes that this will be in a Geological Disposal Facility (GDF) that the Government will construct to dispose of higher activity radioactive wastes. The terms on which the Government will agree to take title to and liability for an operator's ILW and spent fuel is expected to be set out in a contract to be agreed between the operator and the Government alongside the operator's FDP.

The Base Case assumes that the spent fuel from a new nuclear power station is kept in interim storage on the site of the power station until the point at which it is disposed of in a GDF, and that the encapsulation of spent fuel is also carried out on-site. In the absence of proposals for

centralised facilities these are considered to be prudent assumptions. However in the event that regional or central facilities were available for either storage or encapsulation of spent fuel that should lead to significant reductions in waste management costs.

The Government expects to take title to and liability for an operator's spent fuel and ILW on a specified transfer date, or schedule of Transfer Dates, aligned with the Operator's decommissioning timetable. It is currently expected that the Transfer Date(s) will precede the assumed disposal date. This is termed "Early Transfer".

Early Transfer does not affect the obligations placed on the operator by the Energy Act. In the event of Early Transfer, the operator's plans to manage the waste prior to its eventual disposal will transfer to Government on the Transfer Date, together with sufficient Assets to carry out the plan, in the form of a Lump Sum Payment. Therefore on the Transfer Date there would be two separate payments to Government by the operator;

- the Waste Transfer Price, which is the price paid by the operator in return for the Government taking title to and liability for their spent fuel; and
- the Lump Sum Payment, which is the payment by the operator to Government to cover the costs of managing the operator's waste between the Transfer Date and the Assumed Disposal Date.

The Lump Sum Payment would be a full and final payment for all remaining waste management costs. The level of the lump sum payment would not be set at the outset but instead would be estimated in the operator's FDP and regularly reviewed.

The operator's plan should also contain an estimate of the Lump Sum Payment, including an allowance for a commensurate risk premium.

4. Implications for Copeland

Firstly the Council needs to be familiar with the requirements placed upon the developer by the FDP and ensure that the proposed new nuclear power station at Moorside has identified and incorporated all the requirements in the guidance into their plan.

Secondly the guidance makes two assumptions:

- That a GDF facility will ultimately become available and that this facility will receive waste from new nuclear power stations
- That spent fuel will be kept on site until the point it is disposed of in a GDF.

However whilst this is the base case the guidance does acknowledge the possibility of a centralised facility for storage and encapsulation and states that a centralised approach would lead to significant savings in waste management costs. This implies that a centralised approach is an option which may be explored further in the future.

Way Forward

Each case will be dealt with on a site specific case and the FDP guidance is not meant to be over prescriptive. However, The Council and New Nuclear Local Authorities (NNLAG) need to be mindful of the content of this document when dealing with proposed new nuclear developers as it is a very useful tool.

Furthermore the Council needs to be mindful that there appears to be an inferred preference for a centralised storage and encapsulation facility. The possibility of such facilities has not yet been proposed and to date new nuclear facilities are working on the base case assumptions (storage on site).

5. List of Appendices –

Appendix A –

Link to the act:

<http://www.decc.gov.uk/assets/decc/Consultations/fdp-guidance-new-nuclear/3797-guidance-funded-decommissioning-programme-consult.pdf>

6. Consultees