

THE ENERGY ACT 2008

Funded Decommissioning Programme Guidance for New Nuclear Power Stations

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Introduction

1. 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. The Energy Act makes provision for the Secretary of State to publish guidance about the preparation, content, modification and implementation of an FDP. The Energy Act also requires the Secretary of State to publish guidance about the factors which it may be appropriate to consider in deciding whether or not to: a) approve a programme; b) approve a programme with Modifications or subject to conditions, or; c) make a proposed Modification to a programme or the conditions subject to which it is approved.
3. On 7 December 2010 the Government published for public consultation draft Guidance on what an approvable FDP should contain, together with specific questions for consultation. The Government has taken account of views expressed in this consultation in preparing this Guidance. Alongside this Guidance a Government Response to the consultation is also being published.
4. The Guidance sets out principles that the Secretary of State will expect to see satisfied in the FDP prepared by an Operator. The Guidance gives information on ways in which an Operator might satisfy those principles, thereby providing assistance to Operators in understanding their obligations under the Energy Act.

Structure of the Guidance

5. The Guidance is structured as follows:

- Part 1 sets out the Objective of the FDP regime and what is referred to as the Guiding Factors.
- 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.

Part 1: Guidance under section 54(6) of the Energy Act 2008

- 1.1. Under section 54(6) of the Energy Act 2008 (Energy Act) the Secretary of State must publish guidance about factors which it may be appropriate to consider in deciding whether or not:
 - to approve an FDP;
 - to approve an FDP with modifications or subject to conditions; or
 - to make a proposed modification to an FDP or the conditions, subject to which it is approved.
- 1.2. Any Operator of a nuclear power station is responsible for dealing with any waste that it produces and ensuring that the site is decommissioned and remediated in accordance with relevant legal and licensing requirements. The purpose of Chapter 1 of Part 3 of the Energy Act is to establish a regime whereby Operators of new nuclear power stations have in place plans for decommissioning their stations, and managing and disposing of the waste that they produce. They must also make prudent provision to meet the full cost of their decommissioning and their full share of waste management and waste disposal costs (i.e. the Designated Technical Matters).
- 1.3. Section 45 of the Energy Act places a duty on a prospective Operator of a nuclear power station to submit an FDP to the Secretary of State for approval. Section 45(7) requires the Operator to set out in its FDP its plans and the corresponding cost estimates for the Designated Technical Matters, and to provide details of any security provided in connection with meeting those estimated costs.
- 1.4. Under section 54(7) of the Energy Act the Secretary of State must have regard to any guidance made under section 54 of the Energy Act when making a decision to approve, approve with modifications or conditions, or to modify an FDP. The Secretary of State will call on the advice of the Nuclear Liabilities Financing Assurance Board (NLFAB) when making a decision.

- 1.5. The NLFAB¹ was created to provide independent advice to the Secretary of State on the suitability of the Funding Arrangements Plan (FAP) within the FDP submitted by prospective Operators of new nuclear power stations as required by the Energy Act. The suitability of a FAP will be determined by the extent to which the proposals put forward by Operators will meet the Objective outlined in this Guidance.

Objective of the FDP Regime

- 1.6. Given the purpose behind Chapter 1 of Part 3 of the Energy Act, the Secretary of State's overriding concern, and therefore 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.

Approval of the FDP

- 1.7. When considering whether to approve, to approve with conditions or to modify an FDP which has already been approved, the Secretary of State will consider whether such an FDP or modification satisfies the following factors (the Guiding Factors), namely that the FDP:

1. provides a clear structure;
2. contains realistic, clearly defined and achievable plans for decommissioning, waste management and waste disposal;
3. contains robust cost estimates which take due account of risk and uncertainty;
4. is transparent;
5. contains clear terms and clear divisions of roles and responsibilities;

¹ http://www.decc.gov.uk/en/content/cms/meeting_energy/nuclear/new/waste_costs/nlfab/nlfab.aspx

6. is a durable arrangement; and
 7. sets out a Fund structure that demonstrates:
 - a) independence of the Fund;
 - b) measures to ensure sufficiency of the Fund;
 - c) restrictions on the use of Fund Assets; and
 - d) insolvency remoteness.
- 1.8. Operators' proposals will be considered on a case by case basis. It will be for the Operator to demonstrate how the FDP meets the Objective and how it complies with each of the Guiding Factors. More detail on each of the Guiding Factors is set out below.

1. Clear structure of the FDP

- 1.9. The Secretary of State would expect an FDP to be divided into two parts. The first part, referred to as the Decommissioning and Waste Management Plan (the DWMP), will fulfil an Operator's obligations under sections 45(7)(a) and (b) of the Energy Act by setting out details of the steps to be taken in relation to what are called "Technical Matters" and the estimates of costs likely to be incurred in connection with the "Designated Technical Matters"². Further details of what the Secretary of State would expect in respect of a DWMP are set out in Part 2b of this Guidance.
- 1.10. The second part, referred to as the Funding Arrangements Plan (the FAP), should set out details of any security to be provided, as required under section 45(7)(c) of the Energy Act, in connection with meeting the estimated costs of carrying out the plans (as set out in the DWMP) for the Designated Technical Matters. Further details of what the Secretary of State would expect in respect of a FAP are set out in Part 2c of this Guidance.
- 1.11. The purpose of this division is to aid clarity of terms in the FDP. It is not, however, a statutory requirement and an FDP compiled on an alternative

² See section 45(6) of the Energy Act for a definition of Designated Technical Matters and section 3 of The Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010 at www.legislation.gov.uk.

basis would be acceptable for the purposes of the Energy Act, although it may require additional consideration and therefore may result in a more complicated approval process. The remainder of this Guidance presupposes a structure consisting of a DWMP and an FAP as set out above.

- 1.12. Elements of the FDP may be reinforced through, or may include, contractual arrangements between interested parties.

2. Realistic, clearly defined and achievable plans

- 1.13. The Operator must set out plans in the FDP for the decommissioning of the site and for the management and disposal of waste arisings that are realistic, clearly defined and achievable, and are capable of being undertaken in a way which is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. Any technology or other gaps in the plans should be identified and additional plans to remedy any such gaps in a timely fashion should also be set out in the FDP. As set out in paragraph 1.9, the Secretary of State would expect details of these plans to be contained in the DWMP. Further details of what the Secretary of State would expect in this regard are set out in Part 2b of this Guidance.

3. Robust cost estimates

- 1.14. The Secretary of State would expect the FDP, by way of the DWMP, to contain effective mechanisms for ensuring that the cost estimates for the Designated Technical Matters are robust; kept up to date; and are consistent with the state of knowledge and technology at the time of calculation. Major project risks must be identified and due account taken of risk and uncertainty. Further details of what the Secretary of State would expect in this regard are set out in Part 2b of this Guidance.

4. Transparency

- 1.15. The FDP must ensure that the arrangements set out under the FAP to accumulate, maintain and manage funds to meet the estimated costs for the Designated Technical Matters are transparent and visible to the Secretary of State and to other persons with obligations under the FDP.
- 1.16. An Operator may also provide to the Secretary of State supporting explanatory documents where appropriate, separate to the FDP, to provide clarity on how the provisions of the FDP satisfy the Objective and Guiding Factors.

5. Clarity of terms and responsibilities

- 1.17. The FDP must have clear terms. The FDP must also set out clearly the roles and responsibilities of the Fund, the Operator and any other relevant entities ((including the Verifier (as defined in paragraph 2a.22) and any person with obligations under the FDP)) for the Secretary of State to form a clear view of their responsibilities and, where relevant, obligations under the FDP.

6. Durability of arrangements

- 1.18. The FDP must be durable so that the arrangements set out in the FDP are likely to remain applicable for the generating lifetime of the station, throughout decommissioning and until the Operator has satisfied all of its obligations under the FDP.

7. Fund structure

- 1.19. The FDP, by way of the FAP, must set out, as required under section 45(7)(c) of the Energy Act, the details of any security to be provided in connection with meeting the estimated costs for the Designated Technical Matters.
- 1.20. The Government would expect the security provided under section 45(7)(c) of the Energy Act to, at a minimum, constitute assets held, managed and administered by an entity (the Fund) which is independent of the Operator and the Government.
- 1.21. The FDP, by way of the FAP, must provide that the relationship between an Operator and the Fund will be structured in order to meet the Objective and comply with the Guiding Factors. Further details of what the Secretary of State would expect in this regard are set out in Part 2c of this Guidance.

7(a) Independence of the Fund

- 1.22. The Secretary of State will expect the FDP to contain arrangements under which the Fund entity is governed in a manner that is independent of the Operator and of the Government, subject to the ongoing monitoring set out in the Energy Act and in this Guidance. Independence means the absence of the ability to control, directly or indirectly, the structure, governance and functions of the Fund entity once it has been established. Further details of what the Secretary of State would expect in this regard are set out in Part 2c of this Guidance.

7(b) Sufficiency of Fund Assets

- 1.23. The FDP, by way of the FAP, must set out mechanisms to ensure that sufficient assets will be available to meet in full the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters.
- 1.24. The FDP, by way of the FAP, must also set out what remedial action the Operator will take to restore the Fund Assets to sufficiency in circumstances where they are insufficient against the Target Value. Further details of what the Secretary of State would expect in this regard are set out in Part 2c of this Guidance.

7(c) Restrictions on the use of Fund Assets

- 1.25. The FDP, by way of the FAP, must set out arrangements to ensure that the structure and governance of the Fund is such that the Fund Assets cannot be disbursed for any purpose other than the discharge of the Operator's decommissioning, waste management and waste disposal liabilities to which the FDP relates, as and when those liabilities fall due, and irrespective of any reorganisation of the group or parent to which the Operator belongs.
- 1.26. The above does not preclude the FDP from making provision for the costs of discharging the Fund's administrative duties and functions relating to the FDP to be met from Fund Assets. The FDP may also make provision for the return of surplus assets to the Operator from time to time. Further details of what the Secretary of State would expect in this regard are set out in Part 2c of this Guidance.

7(d) Insolvency remoteness

- 1.27. The FDP must put in place arrangements and establish a relationship between the Operator and the Fund such that the risk to Fund Assets and any payments due to the Fund under the terms of the FDP is remote in the event of the insolvency of the Operator or any Associated Company. Further details of what the Secretary of State would expect in this regard are set out in Part 2c of this Guidance.

Other considerations

Fleet Approach

- 1.28. It is possible that an Operator may wish to develop a number of sites and that key elements of the FAP and security provided for in the FAP (as part of the FDP) for each site will be closely related. Where, in such circumstances, the Operator can demonstrate that such an arrangement is advantageous to meeting the Objective at the time when the Secretary of State approves the first of what he expects to be a series of FDPs from the Operator, then the Secretary of State in making decisions on any subsequent FDPs will have regard to the FDPs already approved. The Operator would be expected to set out the self sufficiency of the first FDP should other sites and related FDPs not subsequently arise.
- 1.29. Subject to the subsequent FDP(s) meeting the Objective at the time the decision on the subsequent FDP(s) is made, the Secretary of State would expect to approve subsequent FDPs on terms consistent with the first approved FDP from that Operator, provided that the basis on which the first FDP was approved has not changed.

Modification of an FDP

- 1.30. In determining whether (and if so, on what terms) to propose a Modification to the FDP, the Secretary of State will have regard to the matters set out in this Guidance; in particular whether the Modification is a necessary, appropriate or proportionate means to ensure that the Objective is met and the Guiding Factors are complied with.
- 1.31. Section 46 of the Energy Act (as amended by section 106 of the Energy Act 2011³) enables the Secretary of State to agree to exercise or not to exercise his power to propose modifications to the FDP in a particular manner or within a particular period.
- 1.32. Where the Secretary of State enters into a Section 46 Agreement he will need to consider whether, as a whole, the FDP and the Section 46 Agreement include adequate provision for the Modification of the FDP in the event that

³ Section 106 (agreement about modifying decommissioning programme) of the Energy Act 2011 comes into force on 18 December 2011 in accordance with section 121(3)(j) of the Energy Act 2011.

the provision made by it for the Technical Matters (including the financing of the Designated Technical Matters) ceases to be prudent. The exact terms of the agreement will be specific to the Operator as it will take into account that particular Operator's proposed FDP.

- 1.33. In determining whether (and if so on what terms) to approve a Modification put forward by an Operator or other person with obligations under the FDP, the Secretary of State will have regard to the provisions of the FDP and any mechanisms within the FDP relating to its updating. In particular the FDP may contain suggested mechanisms relating to certain types of Modification which fall above any threshold set out in the Regulations. For example, where it can be predicted in advance that a Modification may be required by the Operator as a matter of course and appropriate mechanisms are set out in the FDP, the Secretary of State would expect to approve any such Modifications compliant with the mechanisms set out in the FDP, provided that the general principles in paragraph 1.30 above are complied with. Further details on Modifications to an FDP are set out in Part 2a of this Guidance.

Part 2: Guidance under section 54(5) of the Energy Act 2008

Part 2a: Guidance relating to the Funded Decommissioning Programme as a whole

Introduction

2a.1 To assist Operators in the development of an FDP, under section 54(5) of the Energy Act the Secretary of State may publish Guidance about the preparation, content, modification and implementation of an FDP. This section of the Guidance is applicable to the DWMP, which is covered in more detail in Part 2b of this Guidance, and the FAP, which is covered in Part 2c of this Guidance.

Publication of the FDP and reports

2a.2 The Secretary of State, mindful of the public interest in such arrangements, would expect an Operator to publish as much of its FDP as possible except for material of a sensitive nature. An Operator should, therefore, set out in the FDP proposals regarding publication, clearly identifying those issues that are commercially confidential or may have security sensitivities. The Operator would be expected to publish and make available on the Operator's web site such material on or shortly after approval of the FDP by the Secretary of State. The decision by the Secretary of State will also be published.

2a.3 The Secretary of State also expects Annual Reports and Quinquennial Reports to be published by the Operator taking into account, as appropriate, commercial confidentiality and security considerations. The Operator should set out in the FDP proposals regarding publication of these reports. The Secretary of State expects that other relevant documents will also be made public where possible, and appropriate. It should be noted that the entire FDP and documents related to it will be subject to the Freedom of Information Act 2000 should requests for information be made in relation to them.

2a.4 To assist with assuring that the arrangements are transparent, the Secretary of State would expect the Operator to publish a non-technical summary of the arrangements alongside the FDP.

Record keeping

- 2a.5 The Operator should demonstrate to the Secretary of State that, as part of its record keeping processes, it will maintain an accurate record of the design of the nuclear island(s) and any other aspect of the site which gives rise to liabilities to be included in the DWMP. Such records should be kept up-to-date, taking into account plant modifications and other relevant technical and operational changes. These processes may be based, where appropriate, on the record keeping processes undertaken to ensure compliance with site licence and environmental permitting obligations. However, where such processes do not adequately record changes to the waste inventory, or liabilities in respect of decommissioning and waste management, separate processes will be required.
- 2a.6 Such systems will assist the Operator in demonstrating that it has in place comprehensive, transparent and effective arrangements for monitoring and capturing operational and technical changes that may trigger changes to the DWMP.

Annual Report and Quinquennial Report

- 2a.7 The Operator must compile Annual Reports and Quinquennial Reports which are compliant with the Regulations made under the Act⁴.
- 2a.8 It is expected that the Operator will consult with the Fund when preparing the reports. However, the reports are to be submitted by the Operator who will be responsible for their contents. Reports should be addressed to both the Secretary of State and the Fund. The Regulations require as part of the Annual Reports and Quinquennial Reports the provision of a Verification Report on certain matters. This Verification Report should also contain an acknowledgement, to the satisfaction of the Secretary of State, that the Secretary of State can rely on the Verification Report.

⁴ The Nuclear Decommissioning and Waste Handling (Finance and Fees) Regulations 2011 (the Regulations).

Annual Report

- 2a.9 The purpose of the Annual Report is to set out and summarise any changes over the reporting period to the cost estimates set out in the DWMP for the Designated Technical Matters and any changes to the security provided to meet those costs. In relation to the latter, the Secretary of State would expect to be provided with details of changes to the security (which includes details of changes to the performance of the Fund) over the course of the reporting period covered by the particular Annual Report.
- 2a.10 Where the Annual Report contains changes to the cost estimates as set out in the DWMP, the Operator must include within it a Verification Report in respect of such changes. The Regulations contain a number of provisions regarding the preparation and content of a Verification Report.
- 2a.11 The changes to the cost estimates set out and summarised in the Annual Report may result in Modifications to the FDP for which, pursuant to the Regulations, the Secretary of State's approval is not required. In this case the Annual Report must also include notification of such Modifications, if such notification has not been made previously. In accordance with Section 51 of the Energy Act any Modification to an FDP cannot take effect earlier than when the notification is given.
- 2a.12 In the course of preparing the annual report, the Operator is expected to consult the Fund in relation to any changes to the security provided to meet the estimates of costs which are reported on and the adequacy and accuracy of the information provided in the report in this respect.
- 2a.13 An Annual Report is not required in the year that a Quinquennial Report is due.

Quinquennial Report

- 2a.14 The purpose of the Quinquennial Report, which is a detailed and comprehensive analysis, is to ensure that the FDP is up to date and the Objective continues to be met. For the DWMP this is to ensure that the plans for the decommissioning of the site and for the management and disposal of waste arisings continue to be realistic, clearly defined and achievable and that the corresponding cost estimates are robust (as set out in Part 1 of this Guidance). For the FAP, the purpose is to ensure that the arrangements in place continue to make prudent provision for the costs of decommissioning, waste management and waste disposal.

- 2a.15 The Operator is also required to provide a report on changes to the FDP over the reporting period. The report must provide details of changes to the Operator's plans for the decommissioning of the site and for the management and disposal of waste arisings. The report must contain changes to the cost estimates set out in the DWMP for the Designated Technical Matters. The report must also contain details of changes to the security provided to meet the cost estimates and this will include details of the performance of this security to date and any changes in future projections for this security.
- 2a.16 Where the Quinquennial Report contains changes to the cost estimates and any changes to security provided to meet those costs, the Operator must include within the Quinquennial Report a Verification Report in respect of those changes.
- 2a.17 The changes to the cost estimates or security set out and summarised in the Quinquennial Report may result in Modifications to the FDP for which, pursuant to the Regulations, the approval of the Secretary of State is not required. In this case the Quinquennial Report must also include notification of such Modifications, if such notification has not been made previously. In accordance with section 51 of the Energy Act, any Modification to an FDP cannot take effect earlier than when the notification is given.
- 2a.18 As a Quinquennial Report will require detailed analysis an Operator may decide that, following an appraisal of the reported changes, its FDP needs to be modified in a manner which requires the approval of the Secretary of State. In this case, an Operator may consider it appropriate to propose such a Modification alongside its submission of the Quinquennial Report.
- 2a.19 As with the Annual Report, when preparing the Quinquennial Report the Operator is expected to consult with the Fund. The Fund should in particular provide input in relation to the performance of the security to date and the anticipated ability of the security to meet the estimates of costs over the remaining period of the FDP.

Information

- 2a.20 The Secretary of State has powers to obtain in certain circumstances information from an Operator and other persons with obligations under an FDP under sections 52 and 53 of the Energy Act. The Secretary of State would also expect the Fund to have appropriate rights to request and receive information from the Operator; these rights and any associated obligations should be set out in the FDP.

Notification

2a.21 The Secretary of State would expect the FDP to provide appropriate procedures to ensure that the Operator and/or, as appropriate, the Fund report to the Secretary of State immediately on or prior to the occurrence, of any of the following events (whether or not they result in a breach of the FDP):

- Initiation or threat of insolvency proceedings against the Operator, an Associated Company with obligations under the FDP or the Fund;
- Change of control or ownership of the Operator or the Fund (if the ownership structure allows) (see section on “Change in ownership or control of the Operator or site” in this part of the Guidance);
- Change in the credit rating of the Operator, or any entity providing a guarantee or other credit support under the FDP; and
- Breach of law or breach of contractual arrangements by the Operator, an Associated Company with obligations under the FDP or the Fund which has or is likely to have a material adverse effect on the Operator or the Fund’s ability to make or receive contributions to the Fund (as appropriate); or any other matter which would reasonably be considered material to the Operator or the Fund’s ability to make or receive contributions to the Fund (as appropriate).

Verification

2a.22 Under the Regulations, the Secretary of State may rely on a Verification Report commissioned by the Operator. A Verification Report is an assessment of the costs estimates for the Designated Technical Matters and/or of any security provided to meet such costs. This assessment must be carried out by persons who are independent of the Operator and any other person with obligations under the FDP (the Verifier). Given the broad scope of a verification it is possible that more than one Verifier might be used. The Regulations set out when a Verification Report must be provided.

2a.23 The requirement for the Verifier to be independent of the Operator is necessary to ensure that the Verifier is able to be fully objective and not subject to any actual or perceived conflict of interest. It is acknowledged that there may be relatively few organisations that could be called upon to act as Verifiers and this constraint can be taken into account in the assessment of the independence of the Verifier. The Operator should set out in its FDP, and

in relation to each Verification Report, how the Verifier is judged to be independent.

2a.24 The Secretary of State will not be able to rely upon a Verification Report commissioned by the Operator unless he is satisfied that the Verifier:

- has the qualifications and experience to carry out the assessment;
- is independent of the Operator and any person with obligations under the FDP; and
- has made a relevant assurance in respect of the assessment made in the Verification Report.

2a.25 A relevant assurance must summarise the Verification Report and also refer to the standards in accordance with which the verification has been carried out.

2a.26 It is anticipated that these standards will be set out in the terms of engagement of the Verifier by the Operator, and that when reaching an opinion for the purposes of preparing a Verification Report it is expected that the Verifier will do so in the context of the definitions, assumptions and processes contained in the FDP itself.

2a.27 The Secretary of State appreciates that a Verifier will wish to limit its liability in respect of the Verification Report. In this regard the Verifier may wish to set out in the Verification Report such limitations or alternatively it may prefer to seek the Secretary of State's acknowledgement as to the limit on its liability before providing their report.

Proposals for remedial action

2a.28 The Operator has a duty under law to meet all the liabilities in respect of decommissioning, waste management and waste disposal that arise from the operation of a new nuclear power station. In addition to the criminal sanctions provided for in Chapter 1 of Part 3 of the Energy Act and in order to limit the prospect of dispute between the Operator and the Fund, the Secretary of State would encourage the Operator to set out in its FDP the steps that it will take to make good breaches of the FDP (where they are capable of remedy) and over what timescales, and what steps, if any, the Fund might also take in such circumstances.

- 2a.29 The obligation to contribute to the Fund Assets must be legally binding on the Operator and enforceable by the Fund. The FDP should specify the manner in which such an obligation can be enforced by the Fund. Failure to comply with an obligation imposed by an approved FDP is an offence under section 57 of the Energy Act. The FAP must set out the remedial steps to be taken if the Fund becomes, or is at risk of becoming, under-funded, including the additional obligations that would arise on the Operator and/or on Associated Companies, or other persons as specified in the FDP, and the powers of the Fund to take action against such entities (see section on “Insufficiency of the Fund” in Part 2c of this Guidance).
- 2a.30 The FDP should clearly set out how much notice will be required to be given by each party (and in what form), what action will be taken following a breach and the time frames within which any such action would be required to be taken.
- 2a.31 Notwithstanding the existence of measures outlined above, the Secretary of State will expect the Operator to promptly inform him of any breach and the proposed remedial action. If the proposals for remedial action are acceptable to the Secretary of State and are adhered to, the Secretary of State would take this into account when determining what, if any, enforcement action to take in relation to a breach.

Change in ownership or control of the Operator or site

- 2a.32 A change in ownership or control of the Operator or site may have certain consequences which the Operator will need to take account of. For example:
- Where a change of ownership of the Operator or site leads to a change in the identity of the site licensee. Under section 45 of the Energy Act an Operator cannot operate a nuclear power station site by virtue of its licence without an approved FDP, therefore an FDP must be submitted by the new Operator (and approved by the Secretary of State) prior to the new Operator taking ownership and control of the station.
 - Where a change of control of the Operator or site leads to an Associated Company of the Operator that has obligations under the FDP ceasing to be an Associated Company, the Secretary of State would expect to approve, approve subject to conditions or reject any related Modifications to the FDP prior to such a change of control occurring.

- Where the change of control means that a company which is an Associated Company of the Operator and which has no obligations under the FDP, ceases to be an Associated Company. In this case the Secretary of State would not normally expect the Operator to propose a Modification to the FDP unless, given the circumstances of the change of control, a Modification would be appropriate.

2a.33 Before approving any such Modifications to the FDP the Secretary of State will expect to be satisfied that the revised funding arrangements proposed will comply with the Objective. In making this assessment the Secretary of State will take into account the views of the Fund. The Secretary of State will not release any party from its obligations under the FDP if such release would endanger the ability of the FDP to meet the Objective. The Secretary of State will have regard to all relevant matters including:

- the views of the Fund on the proposed funding arrangements;
- the financial strength of the proposed new owner, or investors, or (where relevant) the group structure of the Operator as a whole following the change of ownership or control, and the support that the proposed new owner or investors will provide to the Operator to ensure that the Fund accumulates sufficient assets to meet the Operator's liabilities under the FDP;
- the current level of funding as compared with current estimates of the Operator's liabilities and plans for future funding levels; and
- evidence of failure by any of the parties to adhere to their obligations under the FDP, or any other FDP under which they have liabilities.

2a.34 Further information about the exercise of the power to modify in cases where a change of control or other relevant change occurs is set out in the section on "Modification of an FDP" in this Part of the Guidance.

2a.35 If the structure of the Fund allows for a change of ownership or control of the Fund entity, the FDP should set out the consequences of such a change. The FDP should detail the steps to be taken to inform the Secretary of State of such change of control on or prior to its occurrence, as appropriate, as well as any other steps to be taken to mitigate the effect of that change.

Modification of an FDP

Secretary of State's power to propose and approve modifications

- 2a.36 An Operator can propose Modifications to an approved FDP under section 48 of the Energy Act. All Modifications to an approved FDP (other than as set out in the Regulations) require prior approval by the Secretary of State. If an event occurs which requires a change to be made to an FDP, subject to any materiality threshold to be set out in Regulations, the Secretary of State will expect the Operator and/or the Fund to promptly inform him of that event, provide details of the effect on the Operator's liabilities of such an event and the financial consequences of such a change on the FDP, and propose for approval by the Secretary of State a Modification to the FDP to take account of that event in accordance with the procedure laid down in section 49 of the Energy Act. Section 50 of the Energy Act enables the Secretary of State to make Regulations disapplying section 49 (Procedure for modifying approved programme) in relation to Modifications which are of a description specified by the Regulations. The Secretary of State and, with the consent of the Operator, any other person with obligations under the FDP, may also propose Modifications to the FDP.
- 2a.37 Section 46 of the Energy Act has been amended to enable the Secretary of State to agree to use his power to propose modifications under section 48 of the Act in a particular manner or within a particular period (Section 46 Agreement). The Secretary of State may not enter in to or amend a Section 46 Agreement unless he is satisfied that the Section 46 Agreement includes adequate provision for the Modification of the FDP in the event that the provision made by it for the Technical Matters (including the financing of the Designated Technical Matters) ceases to be prudent.
- 2a.38 A Section 46 Agreement may include provision for determination by a third party in relation to a relevant matter specified in the Section 46 Agreement. The Secretary of State would expect any third party who did provide a determination to demonstrate: (i) independence from the Operator and the Government; (ii) impartiality in reaching a decision; and (iii) competence to make an informed decision.
- 2a.39 When entering into a Section 46 Agreement the Secretary of State must be satisfied that the FDP and the Section 46 Agreement as a whole secure prudent provision for the liabilities. Therefore any limitations on the Secretary of State's powers to propose Modifications to the FDP will be considered alongside the provisions of the FDP.

2a.40 In all cases, the Secretary of State must exercise his power to approve a Modification with the aim of securing that prudent provision is made for the Technical Matters (including the financing of the Designated Technical Matters).

Circumstances in which a Modification may be required

2a.41 Modifications may include changes to the DWMP, for example to account for technical or operational changes to the nuclear power station which have had an effect on the cost estimates for the Designated Technical Matters. Modifications may also include changes to the FAP, for example to reflect changes to the Investment Strategy to take account of changing expectations of investment returns.

2a.42 There are a range of other circumstances where the Secretary of State can envisage modifications to an FDP being required. Some of these circumstances are set out below although this does not constitute an exhaustive list.

- Where the Operator or another person with obligations under the FDP is in breach of obligations under the FDP the Secretary of State may propose a Modification. In many cases, however, it may be sufficient to ensure that the party in breach brings itself back into compliance with the FDP and remedies the consequences of the breach where that breach is remediable. The Energy Act gives the Secretary of State varied powers (such as the power to impose a direction under section 58) to ensure this outcome. It may also be appropriate to introduce conditions to the approval of the FDP. Section 57 of the Energy Act provides that a site operator's failure to comply with an obligation imposed under an approved FDP is a criminal offence.
- Where a change of control of the Operator, or a change of an Associated Company is proposed. Guidance about what is expected from an Operator if there is a change of control of the Operator is set out in the section on "Change in ownership or control of the Operator or site" in this Part of the Guidance.
- A proposal to vary the assumption in the FDP regarding the expected generating lifetime of the station. This would represent a Modification to the FDP for which the Secretary of State would expect the Operator to seek his approval, as the station generating lifetime assumption in the FDP is likely to have a significant bearing on the calculation of the

Target Value for the Fund and other important financial variables. In the event that the Modification relates to a proposed extension in the generating lifetime of the power station, the Secretary of State would not be deciding whether or not such a life extension could be permitted as this would be a matter for the Regulators to determine. Rather he would be deciding whether the impact of such a life extension had been properly reflected in the FDP and whether the FDP continues to make prudent provision for the financing of the Designated Technical Matters.

- The Secretary of State would expect there to be a Modification to the FAP where the Fund Assets have been underperforming for a significant period of time.
- Where the Operator wishes to follow a “fleet approach”. The Secretary of State would expect the Operator to seek his approval where there is a proposal to modify an existing FDP as a result of the development of further sites.

2a.43 It is possible to envisage other circumstances which give rise to reasonable doubts about the ability of the Operator or an Associated Company to discharge its obligations under the FDP. In such a case, the Secretary of State may consider whether to propose a Modification. For example:

- the credit rating of the Operator or of an Associated Company with obligations under the FDP or any entity providing a guarantee or credit support under the FDP may be downgraded and no appropriate alternative security is capable of being put in place or being put in place sufficiently promptly;
- there may be a significant and more than short lived reduction in the net asset value of the Operator or of an Associated Company with obligations under the FDP; or
- insolvency proceedings may be taken in respect of, or threatened against, the Operator or an Associated Company or other entity providing a guarantee or credit support.

Prohibition on use of a site without an approved FDP

2a.44 Under section 45 of the Energy Act a person who applies for a nuclear site licence to install or operate a nuclear power station must notify the Secretary of State of the application and prepare and submit an FDP for approval.

Further, where there is a change in Operator the new Operator must also submit an FDP.

- 2a.45 A nuclear site licence is required, under the Nuclear Installations Act 1965 (NIA), to use a site for the purposes of installing or operating any nuclear reactor not comprised in a means of transport. Accordingly, a nuclear site licence is required to install such a reactor for the purpose of producing atomic energy. It is an offence to install the reactor without the necessary licence being in place.
- 2a.46 Under section 47 of the Energy Act it is an offence for a person to use, or permit another person to use, a site by virtue of the nuclear site licence when there is no approved FDP in place. The purpose of section 47 of the Energy Act is to ensure that at the point when activities are undertaken for which a licence is legally required an approved FDP is in place. So, the prohibition in section 47 of the Energy Act covers any use of the site for a purpose for which a nuclear site licence is legally required.
- 2a.47 The Office for Nuclear Regulation (ONR)⁵ is responsible for issuing nuclear site licences. Prior to the ONR being established the Health and Safety Executive's (HSE) Nuclear Directorate was responsible for most aspects of nuclear regulation and as such provided Guidance⁶ in relation to the application of the NIA and the latest point by which a nuclear site licence must be granted for the installation of a new nuclear installation. In this respect current HSE Guidance is:

'...that a nuclear site licence must be granted to a developer by HSE before they may undertake construction work which could, if inadequately conceived or executed, affect nuclear safety when the plant is operating. Based on this, HSE defines the point beyond which a licence is required as the placement of the first structural concrete for buildings with nuclear safety significance. Consequently, it may be permissible for a developer to undertake excavation of building foundations and placement of the blinding layer before a nuclear site licence is granted.'

⁵ On 1 April 2011 the ONR was established as an agency of the HSE pending legislation to establish it as a statutory body.

⁶ <http://www.hse.gov.uk/newreactors/license.htm>

- 2a.48 Accordingly, under the NIA a licence is required to be in place by the point that the first structural concrete for buildings with nuclear safety significance is poured.
- 2a.49 Where a site licence has been issued but there is no approved FDP in place, an Operator will commit an offence under section 47 of the Energy Act only if it begins construction work on buildings with nuclear safety significance. This is because this is a use of the site which is considered to be by virtue of the licence.
- 2a.50 Use of a site, even after the issue of a licence, for a purpose for which a nuclear site licence is not required will not amount to an offence under section 47 of the Energy Act. This is because such “use of the site” would not, for the purposes of that section, be “by virtue of” the licence.
- 2a.51 It is worth noting that a nuclear site licence may be granted by ONR prior to the point at which it is considered essential to have a nuclear site licence. ONR may also attach various conditions to such licences which are intended to control activities which could impact on nuclear safety. These conditions could apply to activities carried out on or off the licensed site. This does not affect the Secretary of State’s view that it is only use of the site for which it is considered essential to have a nuclear site licence and which will amount to “use of the site by virtue of the licence” for the purposes of section 47 of the Energy Act.

Part 2b: Decommissioning and Waste Management Plan Guidance

Introduction to the DWMP Guidance

2b.1 This section contains Guidance for Operators and potential Operators of new nuclear power stations to assist them in drawing up a DWMP. The DWMP should set out and cost the steps involved in decommissioning the nuclear power station and managing and disposing of hazardous waste⁷.

Guiding Factors

2b.2 The DWMP should satisfy the Guiding Factors. The Guiding Factors likely to have most relevance to the DWMP are:

- Guiding Factor 2 (realistic, clearly defined and achievable plans). The DWMP should demonstrate that the Operator's plans for the decommissioning of the site and for the management and disposal of waste arisings are realistic, clearly defined and achievable, and are capable of being undertaken in a way which is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. Any technology or other gaps in the plans should be identified and plans to remedy such gaps in a timely fashion should also be set out.
- Guiding Factor 3 (robust cost estimates). The DWMP should contain effective mechanisms for ensuring that the cost estimates for the Designated Technical Matters are robust; are kept up to date; and are consistent with the state of knowledge and technology at the time of calculation. Major project risks must be identified and due account of risk and uncertainty taken.

⁷ 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 this Guidance.

Content of the DWMP

- 2b.3 Under the Energy Act, as one of a number of approvals to build a new nuclear power station, Operators will be required to submit an FDP to the Secretary of State for approval. The Energy Act requires such Operators to provide to the Secretary of State details of their plans for managing and disposing of all wastes.
- 2b.4 The DWMP is that part of the FDP that addresses those matters referred to in section 45(7)(a) and (b) of the Energy Act, namely details of the steps to be taken in relation to what are called the “Technical Matters” and estimates of the costs likely to be incurred in taking steps in relation to what are called the “Designated Technical Matters”.
- 2b.5 As set out in section 45(5) of the Energy Act, the Technical Matters, in relation to a site, are:
- (a) the treatment, storage, transportation and disposal of hazardous material (within the meaning of section 37 of the Energy Act 2004 (c. 20)) 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, and
 - (c) activities preparatory to the matters mentioned in paragraph (b);
- and for the purposes of paragraph (a) a nuclear installation is not to be regarded as being operated at a time when it is being decommissioned.
- 2b.6 The requirement that the Technical Matters be set out is intended to meet the overall Objective of the FDP that Operators make prudent provision for the full costs of decommissioning their installations; and their full share of safely and securely managing and disposing of their waste, and that in doing so the risk of recourse to public funds is remote at all times.
- 2b.7 Some of the Technical Matters are Designated Technical Matters. These are defined in the Energy Act as being the steps that need to be taken to decommission the installation and clean up the site (which includes the management and disposal of waste) after the nuclear power station has finally ceased generation (i.e. those steps specified in section 45(5)(b) of the Energy Act).

2b.8 The Energy Act also envisages that certain steps undertaken during the generating life of the station (i.e. certain of the steps covered by sections 45(5)(a) and (c) of the Energy Act) may also be specified as Designated Technical Matters by Order. The Government has stipulated by Order⁸ under the Energy Act that the following activities will also be Designated Technical Matters:

- construction and maintenance⁹ of interim stores for ILW and spent fuel that are not initially constructed as part of the installation; and
- any activity preparatory to the decommissioning of a relevant nuclear installation and the cleaning up of the site.

2b.9 The key difference between the Technical Matters and the Designated Technical Matters is that the costs of non-Designated Technical Matters are to be met by the Operator from operational expenditure, while the costs of Designated Technical Matters must be provided for in the independent Fund which the Operator will be expected to set up. Table 3 sets out a summary of principal cost streams and whether the cost will be met from operational expenditure or the independent Fund.

2b.10 The costs of non-Designated Technical Matters will not be subject to the terms of the FAP approved by the Secretary of State under the Energy Act. However, Operators must detail in their DWMP the steps to be taken in relation to the Technical Matters to the extent necessary to demonstrate that they have realistic, clearly defined and achievable plans. Payments for the cost of non-Designated Technical Matters will need to be made at the time expenses are incurred, that is during the generating life of the station, when the Operator should have access to sufficient monies to meet such costs without reference to the Fund. It is also anticipated that such costs are likely to be incurred at regular intervals so it is appropriate that these costs should be met from operational expenditure to avoid the unnecessary cost and burdens that would arise were monies to be paid into the Fund only to be

⁸ <http://www.legislation.gov.uk/ukdsi/2010/9780111502877/contents>

⁹ Maintenance costs are taken to mean those costs that are required to be incurred so that the integrity of the store remains such that it is able to safely and securely store the waste and spent fuel for the required period of time. It is not considered to include ongoing operational expenditure relating to the stores such as, for example, security and utilities.

withdrawn a relatively short period of time later (for example within the same financial year).

Structure of the DWMP

2b.11 This Guidance will assist Operators in understanding their obligations under the Energy Act, and what is required for an approvable DWMP. The Guidance is not intended to be unduly prescriptive but instead sets out the principles which the Secretary of State would expect to be satisfied in the Operator's DWMP.

2b.12 The Secretary of State would expect the DWMP to be divided into three principal phases, as outlined later in this part of the Guidance. In addition, there are a number of elements that an approvable DWMP would also be likely to include, namely:

- A clear timeline showing key milestones and giving scheduling assumptions in each of the three phases of the Base Case as defined below.
- 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, in a format consistent with Table 3 in this section of the Guidance.
- 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.

Level of detail in the DWMP

2b.13 Operators should provide sufficient detail in their DWMPs on both the Technical Matters and Designated Technical Matters to enable the Secretary of State to have confidence that they have realistic, clearly defined and achievable plans. The amount of information provided by the Operator on specific activities should be such that the Secretary of State is able to

determine that the Operator's cost estimates are robust and take due account of risk and uncertainty. The level of detail provided on an activity should be commensurate with the impact that the activity will have on the level of liabilities. Therefore, the Secretary of State would expect to see a greater level of detail on the Designated Technical Matters in order to have sufficient information to substantiate the Operator's cost estimates for these.

2b.14 For example the Secretary of State would want to understand an Operator's intended operating strategy, including the level and range of fuel "burn-up" that is anticipated, insofar as it may impact on, for instance, the predicted spent fuel inventory for the site and its relevant characteristics. This information will substantiate the Operator's assessment of the volume and characteristics of the spent fuel to be produced and will thus have a direct bearing on the costs of waste management and disposal. This information is necessary for the Secretary of State to have confidence that the Operator is making adequate financial provision to meet liabilities.

2b.15 On the other hand, the Secretary of State does not expect the DWMP to provide technical information relating to the day to day running of the station unless this information is material to the cost estimates of the Designated Technical Matters. The key consideration is the effect on liabilities at the end of generation and the manner in which these will be discharged. In establishing whether sufficient underpinning detail exists to substantiate cost estimates the Secretary of State would expect to rely on the independent verification of the Operator's DWMP, which will be required to address this question specifically.

The Base Case

Introduction to the Base Case

2b.16 This section sets out a number of assumptions 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".

2b.17 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. This will ensure that the Secretary of State, the NLFAB and the Fund have a benchmark against which to assess the estimates produced by the Operator.

- 2b.18 It is recognised that DWMPs for individual power stations will differ in detail from the Base Case as they will be based on a specific station design at a specified site run by a particular Operator. If, however, a DWMP broadly conforms to the assumptions underlying the Base Case, the Secretary of State would expect to approve it (or approve it with relatively minor modifications).
- 2b.19 Operators will be expected to have regard to the Base Case when developing the DWMP they will submit to the Secretary of State. 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. The Secretary of State will consider DWMPs based on alternatives to the Base Case on a case-by-case basis.

Relationship between the Base Case and regulatory requirements

- 2b.20 The Base Case is built on existing policy and regulatory requirements; although it also makes additional assumptions to ensure it represents a realistic and prudent means of estimating the costs of the Designated Technical Matters. Each Operator's FDP must ensure that it sets out plans for the management and disposal of all hazardous waste streams and that it includes all the elements for which Operators will need to make financial provision.
- 2b.21 The emphasis on ensuring that sufficient financial provision is made to cover the liabilities means that the Base Case may differ in some aspects from the assumptions and requirements of the safety, security and environmental regulators. This is because the Secretary of State and the regulators follow different regimes. However, the distinct purpose of this Guidance is to ensure that Operators make prudent financial provision to meet the costs of the Designated Technical Matters.
- 2b.22 Before a decision on approval is made, the Secretary of State will consult the regulators in relation to the plans submitted by Operators to ensure that they are consistent with regulatory expectations. Likewise, where a Modification to the DWMP is proposed that requires Secretary of State approval, the

Secretary of State will also consult the regulators. The regulators' views have been sought and taken into account in the development of the Base Case.

The Phases of the Base Case to be set out in the DWMP

2b.23 The Secretary of State would expect the DWMP setting out the Technical Matters and the costs of the Designated Technical Matters to be divided into three principal phases.

- Phase 1: Pre-generation – covers those activities relevant to decommissioning and clean up which must be undertaken before construction of a nuclear power station can begin and the period during which Operators will be required to obtain all the regulatory permissions required to begin generation.
- Phase 2: During the generating life of the power station – operation of the station, including any modifications or refurbishment required during the generating life and the management of operational wastes.
- Phase 3: After the end of generation – dismantling the station, management and disposal of remaining waste and clean-up of the site to a condition agreed with the regulators.

2b.24 To the extent practicable, Operators will be expected to follow this outline of phases in preparing their DWMPs.

Phase 1 – Pre-generation

2b.25 This phase of the Base Case covers those activities which must be undertaken before a nuclear power station can begin to generate electricity. The Operator will be expected to demonstrate that their DWMP is consistent with the submissions to the planning authorities (including the Infrastructure Planning Commission or its successor bodies) with regard to the application for planning permission or development consent and to the regulators, relating to the health, safety, security and environmental permits needed to begin generation.

2b.26 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.

Phase 2 – During the generating life of the power station

- 2b.27 The power station generating set out by the Operator in their DWMP determines the period of time over which funding will need to accrue to cover the predicted liabilities. The Base Case assumes that the Fund accrues from a single station operating for 40 years. However it is recognised that most current station designs, including those undergoing the UK Generic Design Assessment, have a design life of 60 years and it will be open to Operators to justify alternative station lifetimes. Whatever station life is proposed, in accordance with the Guidance provisions relating to the FAP, the Operator must ensure that its FDP is robust against the risk that the site has to be decommissioned earlier than expected.
- 2b.28 The Operator is responsible for ensuring that all the facilities required for any necessary handling, conditioning and storage of operational wastes are available as and when needed. The construction and maintenance costs of interim stores to ILW and spent fuel that are not initially constructed as part of the installation are a Designated Technical Matter. Therefore these activities should be identified and described in the DWMP and provision for these activities set out in the FAP.
- 2b.29 In the final years of the generating life of the power station, the Operator will be expected to prepare for the decommissioning of the power station through undertaking detailed pre-decommissioning planning (the main activity undertaken in preparation for decommissioning). Activities preparatory to decommissioning are a Designated Technical Matter for which the cost will need to be met by the Fund. Therefore these activities should also be identified in the DWMP and provision for these activities set out in the FAP.

Phase 3 – After the end of generation

- 2b.30 The Base Case assumes that decommissioning begins when the station is shut down and ceases generating nuclear electricity. Decommissioning ends when all station buildings and facilities have been removed and the site has been remediated in accordance with relevant legal and licensing requirements. A realistic clearly defined and achievable DWMP will require a clearly specified assumption regarding the end state that is intended to be achieved when the plan has been executed. The Base Case assumption is that the site is restored to a state similar to "Greenfield" or its state prior to

construction. The principal stages of the decommissioning process assumed in the Base Case are described in Table 1.

Table 1: Outline of principal stage of decommissioning

De-fuelling	De-fuelling reactor for the last time and transferring the resulting spent fuel to the fuel pond
Stage 1	Conditioning and packaging of potentially mobile wastes (e.g. spent resins) Transfer of conditioned wastes to interim storage to await final disposal
Stage 2	Demolition of non-essential non-radioactive facilities (e.g. administrative buildings that will not be needed to manage the decommissioning process) Transfer of spent fuel remaining in cooling pond to interim store
Stage 3	Dismantling of reactor and any other structures remaining on site and management and disposal of resulting waste Disposal of ILW and spent fuel from interim stores Remediation of site De-licensing

2b.31 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.

“Early Transfer” of title to and liability for an Operator’s ILW and spent fuel

- 2b.32 As set out in paragraph 2b.26, the Base Case assumption is that the ILW and spent fuel from new nuclear power stations will be disposed of in the GDF that the Government will construct to dispose of higher activity wastes. The terms on which the Government will agree to take title to and liability for an Operator’s ILW and spent fuel will be set out in a Waste Contract that is expected to be agreed between the Operator and the Secretary of State alongside the Operator’s FDP.
- 2b.33 The Waste Contract will include provisions for the setting of an Assumed Disposal Date, which will be the Government’s best estimate of the date on which disposal of the Operator’s waste will begin. The Assumed Disposal Date will determine the duration of interim storage of waste pending disposal for which the Operator will be required to make financial provision in their FDP.
- 2b.34 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”.
- 2b.35 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.
- 2b.36 After the Transfer Date the Government will be responsible for ensuring the future management of the waste. The Secretary of State will expect the Operator’s waste management plans for the period between the Transfer Date and the Assumed Disposal Date to be of the same standard as its plans for the period before the Transfer Date.

- 2b.37 The Lump Sum Payment would be a full and final payment for all remaining waste management costs (including the decommissioning of interim stores if necessary). 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.
- 2b.38 At present there is uncertainty over these waste management costs but this should reduce over time. By the Transfer Date it should be possible to estimate these costs with a much higher degree of confidence. Notwithstanding this, under this approach the Government would expect the Operator’s provision to be based on a conservative, evidence-based, estimate of the waste management costs and would expect the Lump Sum Payment to include a commensurate risk premium to compensate the taxpayer for taking on the risk of subsequent cost escalation.
- 2b.39 In the event that the Operator’s FDP assumes Early Transfer, the DWMP should clearly set out those steps expected to take place between the Transfer Date and the Assumed Disposal Date and the cost of those steps. The Operator’s plan should also contain an estimate of the Lump Sum Payment, including an allowance for a commensurate risk premium.

The Base Case – Working Assumptions List

2b.40 The complete set of assumptions underlying the Base Case is set out below in Table 2. However, the Base Case does not prescribe the contents of a DWMP, so there will be flexibility for Operators to suggest and make the case to the Secretary of State for alternative approaches if they choose to do so. If an Operator puts forward a DWMP that is not consistent with the Base Case, the onus will be on the Operator to justify its proposal. The Secretary of State will consider DWMPs based on alternatives to the Base Case on a case-by-case basis.

Table 2: Assumptions underlying the Base Case

Issue	Assumptions
Regulatory regime	The regulatory regime to be applied to waste management and decommissioning is that in force at the time the FDP is submitted.
	Definitions of waste categories will remain

	unchanged from those in current use.
	Dose limits for workers and the public will remain unchanged from those in current use in the UK (set out in the Ionising Radiation Regulations 1999 ¹⁰).
Definition of decommissioning and decommissioning costs	<p>For the purpose of the DWMP, decommissioning is defined to begin at the point that the station is shut down with no intention of further use for the purpose of generating electricity.</p> <p>For the purposes of the DWMP, decommissioning is defined to end when all station buildings and facilities have been removed and the site has been returned to an end state which has been agreed with the regulators and the planning authority.</p>
	Costs for decommissioning should be structured to ensure that the costs of management and infrastructure for the station under decommissioning are fully accounted for and separate from costs for other areas of the Operator's business.
	Demolition and disposal of waste management facilities are regarded as part of the decommissioning activity.
	Activities preparatory to decommissioning, such as pre-decommissioning planning, are a

¹⁰ These regulations can be found at <http://www.legislation.gov.uk/uksi/1999/3232/contents/made>

	Designated Technical Matter and the cost will need to be met from the Fund.
	All other costs associated with operating the site after the end of its generating life and until the end of the Operator's period of responsibility under the NIA are regarded as part of the decommissioning activity. These costs include, but are not necessarily limited to, those associated with maintaining the infrastructure necessary for the Operator to comply with the requirements of the nuclear site licence.
Decommissioning facilities	The Base Case assumes that the Operator's DWMP will ensure that all facilities on site are decommissioned in accordance with a structured plan, which is acceptable to the regulators and which should reduce the hazard presented by the site in a systematic manner.
	The Base Case assumes prompt decommissioning of the power station, with Operators obliged to provide safe and secure interim storage facilities. The storage facilities must ensure that the waste stored will be able to meet the GDF operator's conditions for acceptance at the date scheduled for its disposal.
Care and maintenance	The Base Case assumes prompt decommissioning of the power station with no care and maintenance period after the station has been shut down and before decommissioning takes place. It is open to Operators to propose a care and maintenance period in their DWMP submissions, but the inclusion must be agreeable to the regulators and approved by the Secretary of State as part

	of the Operator’s FDP ¹¹ .
Site end state	<p>The Base Case assumes that the final site end state will be such that all station buildings and facilities have been removed and the site returned to a state agreed with the regulators and the planning authority. The Base Case assumption is that the site is restored to a state similar to “Greenfield” or its state prior to construction.</p> <p>As with all Base Case assumptions the Operator can propose an alternative in the DWMP, which the Secretary of State will consider. In practice, the state to which the site is returned at the end of decommissioning will be influenced by its previous, and likely future, use. The intention of this Base Case assumption is not to prescribe the site end state but rather to provide a prudent assumption, for cost estimation purposes, of the end state that will have to be achieved at the conclusion of decommissioning in order to return the site to a state which would be agreeable to the regulators and the planning authority.</p>
Cost calculation	It is assumed that for an FDP submitted for approval the cost estimates will be calculated on a money of year basis (escalation and/or discounting terms will be applied post the initial cost assessment).

¹¹ A care and maintenance period allows the benefits associated with radioactive decay (lower volumes of ILW and reduced dose rates to decommissioning Operators) to be realised. Prompt decommissioning, however, means that the site can be fully remediated on a shorter timescale. The balance between these issues may be considered by Operators with reference to operational as well as design specific considerations.

Effect of station design on the Base Case	The Base Case for different station designs will be the same except where variations are necessary and justifiable.
Station generating lifetime	The Base Case assumes a single reactor operating for 40 years. However it is recognised that all current reactor designs undergoing Generic Design Assessment have been designed for an operational life of 60 years and it will be open to Operators to propose and justify alternative station lifetimes. Whatever station operating lifetime is proposed, the Operator must ensure that its FAP is robust against the risk that the station has to be decommissioned earlier than expected. It is also recognised that new nuclear power stations may have more than one reactor on a site.
Decommissioning techniques	<p>The Base Case assumes that decommissioning will be undertaken using equipment and techniques available at the time the FDP is submitted. While it is recognised that technical advances may well have a significant impact on the way in which new nuclear power stations are eventually decommissioned, Operators must be able to demonstrate that they have a workable plan for decommissioning and waste management using current technology before construction of their station begins.</p> <p>Furthermore, it is impossible to anticipate the impact of technological advance on overall cost, hence the Government's view is that this Base Case assumption is prudent and appropriate.</p>
Management and disposal of ILW	The Base Case assumes that ILW arising from operations and decommissioning will be stored in safe and secure interim storage facilities on the site of the power station, pending disposal in

the same geological disposal facilities to be used for the disposal of ILW from existing nuclear facilities.

As part of the technical steps in the DWMP the Secretary of State would expect the Operator to set out provision for safe and secure interim storage facilities that are technically capable of being maintained or replaced until the ILW contained within them can be disposed of.

The construction and maintenance of interim stores for ILW that are not initially constructed as part of the station are a Designated Technical Matter and the cost will need to be met from the Fund.

The Base Case assumes that ILW from operations and decommissioning will be disposed of in a GDF.

The Operator is responsible for transport of the waste to the GDF, although the transfer may be undertaken by a third party, acceptable to the UK regulators, under contract to the Operator.

Alongside the approval of an Operator's FDP, the Government will expect to enter into a contract with the Operator regarding the terms on which the Government will take title to and liability for the Operator's ILW.

The arrangements for conditioning and storage of ILW must be consistent with those currently acceptable to the UK regulators and must ensure that the waste will meet the GDF operator's conditions for acceptance at the date scheduled for its disposal.

	<p>Conditioning costs for ILW arising from decommissioning will be met from the Fund.</p> <p>Conditioning costs for decommissioning ILW will be met from the Fund.</p>
<p>Management and disposal of spent fuel</p>	<p>The Base Case assumes that new nuclear power stations will use uranium or uranium oxide fuel. It also assumes that there will be no reprocessing of the uranium fuel, and spent fuel will ultimately be disposed of.</p> <p>Spent fuel will be stored in cooling ponds for a period of time, followed by storage in safe and secure interim stores on the site of the power station until decommissioning has been completed and disposal facilities are available to accommodate it. It is recognised that fuel from the latter stages of the power station's life may have to remain in interim stores on site for some years after the station has ceased generation, because of the need to allow it to cool, before it can be transported and disposed of in a GDF.</p> <p>The Secretary of State would expect the FDP to contain an obligation on the Operator to cost interim storage facilities and to set aside funds for such facilities to be technically capable of being maintained or replaced until the spent fuel contained within them can be disposed of.</p> <p>The construction and maintenance of interim stores for spent fuel that are not initially constructed as part of the station are a Designated Technical Matter and the cost will need to be met from the Fund.</p> <p>The Base Case assumes that spent fuel will be</p>

	<p>disposed of in a GDF.</p> <p>The Operator is responsible for transport of the spent fuel to the GDF, although the transfer may be undertaken by a third party, acceptable to the UK regulators, under contract to the Operator.</p> <p>Alongside the approval of an Operator's FDP, the Government will expect to enter into a contract with the Operator regarding the terms on which the Government will take title to and liability for the Operator's spent fuel.</p> <p>The Base Case assumes that spent fuel will be encapsulated immediately prior to transfer to a GDF. In the absence of proposals for centralised packaging facilities, it is assumed that encapsulation of spent fuel is carried out on the originating site.</p>
<p>Management and disposal of low level waste (LLW)</p>	<p>The Base Case assumes that LLW arising during operation and decommissioning will be packaged on site by the Operator and dispatched to a disposal facility promptly after they have been generated. For the purposes of the Base Case, we assume that disposal will be at the LLW Repository operating in West Cumbria or a successor facility. Dependent on any nuclear new build programme (and any other nuclear sector developments), a successor disposal facility to the LLW</p>

Repository is likely to be required, predominantly for decommissioning wastes¹².

It is assumed that LLW will be disposed of in the UK, and that disposal facilities will be available when required, at a price to be agreed between the power station Operator and the operator of the disposal service. Operators will be required to meet the costs of managing and disposing of operational LLW. These costs will be met from operational revenues.

The costs of disposing of decommissioning LLW will be met from the Fund.

The Base Case assumes that Operators will be required to ensure that any facilities needed for packaging are available on site, although it is assumed that LLW will not be conditioned on site and that conditioning facilities will therefore not be needed.

The assumed arrangements for packaging must be consistent with those currently acceptable to the relevant UK regulators. The Operator is responsible for transport of the waste to the disposal facility, although the transfer may be undertaken by a third party, acceptable to the UK regulators, under contract to the Operator.

The Base Case assumes that title to the waste

¹² In August 2010 the Nuclear Decommissioning Authority published the UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry, see <http://www.nda.gov.uk>.

	<p>will pass to the disposal facility operator when an individual package has been transported to the facility and accepted by the facility operator as meeting the relevant criteria.</p>
<p>Management and disposal of non-radioactive hazardous Wastes</p>	<p>The Base Case assumes that non-radioactive hazardous wastes arising as a result of operations and decommissioning will be managed according to regulatory requirements and current practices and will be disposed of using established disposal routes.</p> <p>The costs of managing and disposing of non-radioactive hazardous waste from operations will be met from operational expenditure.</p> <p>The costs of managing and disposing of non-radioactive hazardous waste from decommissioning will be met from the Fund.</p>
<p>Waste minimisation</p>	<p>In line with regulatory requirements Operators will be expected to set out the steps they will take to ensure that waste volumes and the costs of waste management and decommissioning are limited throughout the station life; for example, by minimising the production of primary and secondary wastes¹³ consistent with the requirements and expectations of the nuclear regulators, and through careful segregation of waste arisings. Operators will be expected to have regard to the waste hierarchy¹⁴ in their DWMP and so avoid creation</p>

¹³ Secondary wastes are those wastes which are generated unavoidably as part of the waste management process itself.

¹⁴ A hierarchical approach to minimise the amounts of waste requiring disposal. The hierarchy consists of non-creation where practicable, minimisation of arisings where the creation of waste is unavoidable; recycling and reuse; and, only then, disposal.

	of waste where possible. Additionally new nuclear power stations are required to meet high environmental standards.
Waste conditioning	Waste will be conditioned in a manner and on a timescale which is consistent with current regulatory requirements.
Treatment of wastes arising as a result of station refurbishment	This will be managed in the same way as operational wastes and paid for from operational expenditure.

Classification of costs arising under the Base Case

Meeting the costs of decommissioning, waste management and waste disposal

2b.41 It will be important for Operators (and others) to have clarity on which costs the Secretary of State would expect to be paid for from the Fund and which may be regarded as operational costs, which would not be paid for from the Fund. Table 3 shows which decommissioning, waste management and waste disposal costs will be expected to be discharged from the Fund and which would be expected to be met from operational expenditure.

2b.42 Costs incurred during the generating life of the station are to be met from operational expenditure, except costs in relation to designated technical matters which will need to be met from the Operator's Fund.

Table 3: Summary of principal cost streams and how they will be met

Cost	How cost will be met	Included in the Waste Transfer Price?
Decommissioning the station. Includes but is not limited to the dismantling and	Independent Fund	No

demolition of all plant systems and civil structures		
LLW		
Packaging and disposal of LLW from operations, including transport	Operational Expenditure	N/A
Packaging and disposal of LLW from decommissioning, including transport	Independent Fund	No
ILW		
Conditioning and packaging of operational ILW	Operational Expenditure	N/A
Construction and maintenance of interim stores for ILW ¹⁵	Independent Fund	No
Conditioning and packaging of decommissioning ILW	Independent Fund	No
Transport of operational and decommissioning ILW for disposal	Independent Fund	No
Disposal of operational and decommissioning ILW	Independent Fund	Yes
Spent Fuel		
Operation of fuel ponds during the generating life of station	Operational Expenditure	N/A
Operation of fuel ponds after the	Independent Fund	No

¹⁵ In line with the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010, if the interim stores are built as part of the station construction, the cost of their construction will not be met from the Fund.

generating life of station		
Construction and maintenance of interim stores for spent fuel ¹⁶	Independent Fund	No
Transport of spent fuel for disposal	Independent Fund	No
Encapsulation of spent fuel for disposal	Independent Fund	No
Disposal of spent fuel	Independent Fund	Yes
Non-radioactive hazardous waste		
Management and disposal of non-radioactive hazardous waste from operations	Operational Expenditure	N/A
Management and disposal of non-radioactive hazardous waste from decommissioning	Independent Fund	No
Planning		
Decommissioning planning before start of generation	Operational Expenditure	N/A
Pre-closure decommissioning planning ¹⁷	Independent Fund	No
Any planning carried out during decommissioning	Independent Fund	No

¹⁶ In line with the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010, if the interim stores are built as part of the station construction, the cost of their construction will not be met from the Fund

¹⁷ In line with the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010.

Other Costs

<p>All other costs associated with operating the site until the end of its generating life. These costs include, but are not necessarily limited to, those associated with maintaining the infrastructure necessary for the Operator to comply with the requirements of the nuclear site licence¹⁸</p>	<p>Operational Expenditure</p>	<p>N/A</p>
<p>All other costs associated with operating the site after end of its generating life and until the site licence is surrendered. These costs include, but are not necessarily limited to, those associated with maintaining the infrastructure necessary for the Operator to be comply with the requirements of the nuclear site licence¹⁹</p>	<p>Independent Fund</p>	<p>No</p>

¹⁸ These costs are likely to include the costs of security for the site, site monitoring, ongoing maintenance at the site (other than maintenance of the interim stores for ILW and spent fuel) and liaison with the regulators.

¹⁹ These costs are likely to include the costs of security for the site, site monitoring, ongoing maintenance at the site (other than maintenance of the interim stores for ILW and spent fuel) and liaison with the regulators.

Part 2c: Funding Arrangements Plan Guidance

Content of the FAP

- 2c.1 This section contains guidance for Operators of new nuclear power stations to assist them in drawing up an FAP. The FAP is that part of the FDP which addresses those matters referred to in section 45(7)(c) of the Energy Act (namely the security to be provided in connection with the estimates of costs of the Designated Technical Matters). Together with the separate DWMP Guidance in Part 2b of this document, this Guidance provides information about the preparation and content of an FDP.
- 2c.2 The FAP should set out the Operator's detailed arrangements for one or more Funds to deliver sufficient assets to meet the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters. In doing so, the FAP should set out details for establishing, contributing to, maintaining, managing, administering, and winding up the Fund and for making disbursements from it, together with all or any other forms of additional security to address risks such as the insufficiency of the Fund.
- 2c.3 It is not intended that this Guidance be unduly prescriptive as to the legal structure and administrative arrangements for the Fund, nor does this Guidance set out the relative advantages and disadvantages of possible vehicles which may be capable of discharging the various functions of the Fund in achieving the Objective and meeting the Guiding Factors.
- 2c.4 It is for the Operator to decide how to structure its FAP. Whichever structure is used, the Operator should make clear how their proposal addresses the Objective and Guiding Factors in this Guidance.
- 2c.5 The FAP, as part of the FDP submitted to the Secretary of State for approval, should be supported by documents setting out detailed analyses and justification of information provided in respect of the matters covered by this Guidance. Information provided should include a statement of which new nuclear power station site the FDP corresponds to, a list of Associated Companies by reference to section 67 of the Energy Act, and an accompanying list of all the supporting documentation.
- 2c.6 To assist the Secretary of State and NLFAB an explanation should be provided alongside the FDP as to how any tax and accountancy analysis has driven the development of the Operator's proposed FDP.

2c.7 The remainder of this part of the Guidance provides further information to assist Operators in preparing and submitting the FAP component of the FDP for approval.

Creation of the Fund

2c.8 Further to the Objective set out in Part 1, the Secretary of State will expect that, prior to the moment when any reactor core of the nuclear power station to which the FDP relates is taken critical for the first time (First Criticality), the Operator will have created the Fund to accumulate, invest and manage payments received to meet the costs of the Designated Technical Matters.

2c.9 Prior to approval of an FDP the Fund entity is not expected to have been formally established and therefore will not be able to play a formal role or provide opinions in relation to the proposed FDP. However the Secretary of State would expect the Operator to begin identifying individuals who it expects subsequently to be appointed to manage to the Fund. This Guidance identifies a number of areas where the Secretary of State would wish to know the views of these individuals in relation to proposed FDP provisions.

2c.10 Between approval of an FDP and First Criticality at the power station the Fund will need to be capable of performing a limited set of its functions, for example in relation to annual and quinquennial reporting and Modifications to an approved FDP. The Operator may wish to propose some form of transitional arrangements to cover this period, for example that a reduced number of appointments to the Fund entity are made.

Structure of the Fund

2c.11 In order to gain approval for its FDP the Operator will be expected to propose a structure for the Fund which meets the Objective and which complies with the Guiding Factors.

2c.12 Any structure proposed must be demonstrably capable of receiving, retaining and accumulating sufficient funds to meet the plans as set out in the DWMP for the Designated Technical Matters.

2c.13 Any structure proposed must ensure at all times the independence of the Fund (as defined in Guiding Factor 7(a)) from the Operator and protection from claims by the Operator, other than where those claims are in accordance with the FDP.

- 2c.14 The Fund entity and the Fund Assets must also be protected from the Operator's creditors in the event of the Operator's insolvency or the insolvency of an Associated Company of the Operator, as required in Guiding Factor 7(d). Ensuring that the Fund is a legally separate entity from the Operator or from an Associated Company of the Operator and that the Fund does not owe any obligations directly to any creditors of the Operator would assist in meeting this Guiding Factor.
- 2c.15 The FAP must also provide that the prospects of the Fund becoming insolvent are remote.
- 2c.16 Establishing the Fund within the jurisdiction(s) to which the Energy Act applies would assist in meeting the principle in relation to insolvency remoteness of the Fund. Establishing the Fund elsewhere could reduce insolvency remoteness by making the Fund vulnerable to changes in local insolvency law as well as depriving the Fund of the protection conferred on it under section 56 of the Energy Act.
- 2c.17 An Operator may decide to create a single Fund, or establish separate Funds for (a) the Operator's decommissioning and waste management costs and (b) the Operator's waste disposal costs. In either case, there must be transparency, and separate accounting and reporting of the two sets of liabilities.
- 2c.18 A Fund may be set up for each new nuclear power station or for a fleet of stations where they are under the same ownership. Where a Fund is set up for a fleet of stations, separate and transparent accounting of the liabilities and the apportionment of assets for each site will be necessary. Any such arrangements would also have to meet the Objective and the Guiding Factors.

The Role of the Fund

- 2c.19 The Fund should be established with the primary purpose of ensuring that the Operator makes prudent provision for the financing of the Designated Technical Matters through discharging its functions in accordance with the relevant provisions in the FDP.
- 2c.20 The FAP should set out the respective roles and responsibilities of the Operator and the Fund and confer on those persons responsible for governance of the Fund powers and duties that are appropriate to the role. In particular, the FAP should set out the powers and duties of the relevant parties in relation to (but not limited to):

- setting and reviewing the schedule of contributions to be made by the Operator to the Fund;
- investing, accumulating and managing Fund Assets;
- reporting to the Operator and to the Secretary of State on the performance and likely sufficiency of the Fund, in accordance with the Regulations and also having regard to the Guidance (see “Annual Report and Quinquennial Report” section in Part 2a); and
- controlling Fund disbursements.

2c.21 The constitutional documents of the Fund should set out the powers, duties of and restrictions on the Fund. Any change to the constitutional documents of the Fund will constitute a Modification to the FDP requiring the Secretary of State’s approval.

2c.22 The Secretary of State will also expect to see the Fund’s activities ring-fenced from the Operator and its creditors and thereby insulated from liabilities and obligations owed to third parties by the Operator. The way in which the Fund’s operating expenses are to be dealt with should be set out in the FAP.

2c.23 Under its constitutional documents restrictions applicable to the Fund will be expected to include requirements to:

- ensure Fund Assets are only applied for the purposes set out in the FDP and not otherwise disposed of;
- limit the activities of the Fund to the implementation of the FDP arrangements;
- control change to the permitted purpose and activities of the Fund;
- maintain the Fund’s existence and its own legal identity, including to maintain the Fund’s own separate books, records, financial statements and accounts;
- not guarantee or otherwise be obliged for the debts of others;
- prohibit or restrict the Fund from borrowing money or issuing securities, or making loans or advances;
- not provide security over its assets other than to the Government as security for the FDP;

- avoid entering into agreements (including employment contracts) under which the Fund may become liable to third parties, without an indemnity from the Operator for liabilities arising out of such agreements; and
- ensure any relationships with others are on bona fide, arm's length terms.

2c.24 The Operator will be expected to calculate the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters. The Fund will be expected to satisfy itself at least as to whether:

- the estimated costs of the plans set out in the DWMP for the Designated Technical Matters have been appropriately verified; and
- the contributions, given the proposed Investment Strategy and likely investment returns, are likely to accumulate sufficient assets to meet the cost estimates.

Ownership of the Fund

2c.25 The ownership of the Fund must be independent of the Operator and its Associated Companies as set out in Guiding Factor 7. An element of Operator ownership of the Fund may be acceptable provided the Fund structure ensures consistency with the Objective and Guiding Factors set out in Part 1 to this Guidance.

2c.26 The FDP must put in place arrangements and establish a relationship between the Operator and the Fund such that the risk to Fund Assets and any payments due to the Fund under the terms of the FDP is remote in the event of the insolvency of the Operator, Associated Company and any entity (such as a trust) with ownership or membership interests in, or control of, the Fund.

Governance of the Fund

2c.27 The Secretary of State will need to be satisfied that suitable arrangements are in place for the governance of the Fund entity. This includes not only such arrangements for the Fund entity itself but also, where appropriate for other entities (such as a trust) with ownership or membership interests in, or control of, the Fund.

2c.28 The arrangements that the Secretary of State will expect to see included in the constitutional arrangements or structure of the Fund as regards to those responsible for the governance of the Fund will include:

- a properly constituted board or equivalent;
- a clear delineation of respective duties;
- appropriate restrictions on powers; and
- provisions to ensure that those with governance responsibilities for the Fund act with the appropriate level of skill and care in the performance of their functions.

- 2c.29 The governance arrangements will depend on the Fund structure adopted. Those responsible for the governance of the Fund should, however, be competent to perform that role, and the clear majority of them must be independent of the Operator. Governance of the Fund should also be independent of the Government. The Secretary of State would therefore not expect to have any role in the appointment process of those responsible for Fund governance beyond being satisfied that both the appointment criteria and the continuing obligations of those responsible for Fund governance (both of which Operators should include in the FAP) deliver the expected level of independence and competence.
- 2c.30 The Operator must not have either direct or indirect control of the Fund. The Secretary of State is therefore unlikely to be satisfied by funding arrangements which leave control of the Fund in the hands of the Operator or a majority of persons who are not independent of the Operator. If the Operator appoints non-independent persons to a governance role, then they must be in a minority.
- 2c.31 In all cases, those persons appointed to a governance role would be expected to confirm their competence and (with the exception of those appointed in a non-independent role) their independence before accepting that appointment, and should be subject to a requirement to maintain their independence for the duration of the appointment. If during the appointment a person can no longer demonstrate competence and independence, they should not continue in the role.
- 2c.32 Maintaining independence will include requiring those persons to avoid any situation (except in the case of non independent persons) in which that person has, or could have, a direct or indirect interest that materially conflicts, or may conflict, with their duties to the Fund. In the case of individuals, the Secretary of State would expect the individual to be independent of the Operator according to principles at least as stringent as those set out in Independence

Principles²⁰ of the UK Corporate Governance Code. The Secretary of State considers it appropriate for some of these individuals to be appointed in view of their expertise in nuclear energy. It is recognised that the number of suitable candidates may be limited and this constraint can be taken into account in the assessment of independence of those individuals. Without prejudice to the foregoing, and with the exception of those appointed to a non-independent role, neither an individual (together with his close relatives and family trusts) nor a corporate body (together with its associates) should hold (directly or indirectly) any investment in the Operator or any of its Associated Companies which gives rise, or could reasonably be perceived to give rise, to an actual or potential conflict of interest.

2c.33 Competence can also be demonstrated in a number of ways. Appointees should be demonstrably fit and proper persons with the necessary education, experience and skills to hold the position. In the case of the appointment of a corporate body to govern the Fund, the Secretary of State would expect that the Operator could demonstrate that the board of the corporate body has the requisite level of experience and resources (including individuals who demonstrate the same qualities described above) to manage the role.

2c.34 The arrangements under which the Fund is established should set out measures to ensure its longevity and continuity for the purpose for which it has been established including appropriate checks and balances as regards the succession of directors, members and trustees (as applicable) within the Fund structure. The following would assist in demonstrating independence:

- fixed term contracts which are renewable for a maximum number of terms;
- absence of control by the Operator over board member succession;
- staggered appointment terms; and
- provision for the removal of a director for a breach by it of the FDP or a breach of the independence requirements.

²⁰ The relevant principles are currently contained section B.1.1 of the UK Combined Code at <http://www.frc.org.uk>

Target Value for the Fund Assets and contributions to the Fund

Target Value for the Fund

- 2c.35 The FDP should specify a Target Value for the Fund. The Secretary of State would expect an Operator to set out in its FDP how it would make good any shortfall or risk of shortfall in the accumulated assets held by the Fund relative to the Target Value.
- 2c.36 For liabilities in respect of decommissioning and waste management, to minimise the risk that the funds accumulated are insufficient, the Fund Assets will be expected, based on prudent assumptions, to accumulate at least 100 per cent of the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters as and when those liabilities fall due.
- 2c.37 The Secretary of State will expect the Target Value for the Fund Assets to include a prudent risk-based contingency which the Fund would be expected to reassess periodically.
- 2c.38 The element of the Target Value intended to meet the costs of waste disposal will be based on the Waste Transfer Price and the agreed schedule according to which payments must be made.
- 2c.39 The Secretary of State will expect the first payment to be made to the Fund no later than First Criticality.
- 2c.40 The Operator should set out, by way of the FAP, its proposals to ensure that in reasonable time before the date on which the station is expected to permanently cease electricity generation, there are assets in the Fund which, having regard to the expected investment performance of the Fund, will be sufficient to meet the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters. These proposals should take into account the increased risk that at the end of the generating lifetime of the power station the Operator may not be able to make up any shortfall in the Fund in the absence of revenues from the power station.

Contributions to the Fund

- 2c.41 Payments to the Fund should be viewed as an essential matter during operation which must take priority over debt and/or other costs and any returns made to equity holders. Exceptions to this priority should be limited to defined classes of operational and safety and security expenditure, details of which should be set out in the FDP. Where other creditors of the Operator or any other entity making contributions to the Fund exist, intercreditor arrangements between the Fund, the Operator and other creditors of the Operator may be required.
- 2c.42 To satisfy the Secretary of State that the Operator will be capable of meeting the Objective, the FAP should set out the basis on which the level of and schedule for contributions which the Operator will make to the Fund will be determined, reviewed and, where necessary, revised. The Secretary of State will expect the Fund to set or approve the contribution schedule with reference to the approved Investment Strategy (see section on “Investment Strategy” in this Part of the Guidance).
- 2c.43 Operators will need to ensure that the FAP takes account of both direct or indirect taxes. That will include corporation tax, income tax and/or capital gains tax on income and gains of the Fund, and the incidence of VAT on the acquisition of goods and services for the purposes of, and otherwise funded by, the Fund. Operators will also wish to consider the tax consequences of contributions made to the Fund and any payment received from the Fund.
- 2c.44 The FAP may set out the circumstances in which contributions to the Fund may be revised downwards, or surplus assets withdrawn from the Fund (see section on “Payment and disbursement policy” in this part of the Guidance).
- 2c.45 The Secretary of State anticipates that the preparation, revision and approval of FDPs will be a multi-stage process in which Operators will have to satisfy him on a number of constituent parts of an FDP consecutively.
- 2c.46 The Secretary of State will also expect to be provided with the views of the person or persons expected to be responsible for the Fund on the arrangements set out in the FDP prior to approval of the FDP. Therefore, as set out in paragraph 2c9 of this Guidance, he will expect at least some of those persons responsible for managing the Fund to be identified or appointed before proposals on the Investment Strategy and contribution schedule are made.

Dispute Resolution

2c.47 The terms setting out the relationship between the Operator and the Fund should recognise that it will be for the Fund to set or approve the contribution schedule based upon the Investment Strategy put forward by the Operator and approved in the FAP. The Secretary of State recognises the possibility of disputes arising between the Operator and the Fund, particularly given the nature of the liabilities and costs involved and the length of time before those liabilities are expected to be discharged.

2c.48 The FAP should therefore include a dispute resolution procedure to facilitate the timely and cost-effective resolution of disputes between persons with obligations under the FDP in respect of those matters.

2c.49 Whatever form (or forms) of dispute resolution are chosen the FDP should make clear:

- whether the procedure and outcome is binding;
- the scope of the procedure (i.e. the disputes to which it relates if it does not relate to all disputes);
- the time scales within which relevant steps have to be taken by the parties; and
- the matters or factors to which an independent arbiter should have regard in coming to his determination in relation to the dispute.

2c.50 Any dispute resolution procedure under the FDP must not compromise the ability of the Secretary of State to take enforcement action in the event of a breach of the FDP.

Investment Strategy

2c.51 The Secretary of State will expect the FAP to set out an Investment Strategy in an appropriate degree of detail. The Investment Strategy should be designed to ensure that the assets which the Fund receives from the Operator will be appropriately invested to generate the sums necessary to meet the estimated costs of carrying out the plans as set out in the DWMP for the Designated Technical Matters.

2c.52 The Investment Strategy will be proposed by the Operator in consultation with the Fund and will be included in the FDP, by way of the FAP, for approval by the Secretary of State. The Secretary of State will expect to be provided with the views of the person or persons expected to be responsible for the Fund as part of his decision making process. As a minimum the Secretary of State will expect the Investment Strategy to include the Fund's:

- investment objectives;
- risk exposure limits and principles for the definition, measurement, mitigation and monitoring of risk;
- high-level asset allocation strategy for the lifecycle of the nuclear power station, for example to provide for a gradual reduction in investment risk as the end of the generating life of the station approaches;
- permitted and prohibited asset or class of asset types;
- decision-making authorities, processes and procedures regarding investment decisions;
- performance measurement criteria and benchmarks;
- policy on realising investments;
- policy on exercising rights (including voting rights) attached to investments;
- policy on the extent to which social, environmental or ethical considerations are taken into account in investment decisions;
- mandates to all advisers and managers and associated fee and liability structures; and
- reporting requirements.

2c.53 The FAP must set out how risks associated with the implementation of the Investment Strategy are to be managed, including with respect to the relative roles of the Operator and the Fund.

2c.54 In making or approving investment decisions, the FAP should require the Fund to act prudently having obtained appropriate professional advice and in accordance with the Investment Strategy. The Fund will be responsible for

ensuring that investments are made according to the approved Investment Strategy.

- 2c.55 The FAP should require the Fund to take account of the suitability of investments having regard to the nature and timing of the Operator's future liabilities.
- 2c.56 It will also be necessary for the Operator to explain the rationale for the proposed Investment Strategy and to justify the assumptions that have been made about future returns on investments made by the Fund.
- 2c.57 The Operator, in consultation with the Fund, should review the Investment Strategy on a regular basis to ensure the continued appropriateness of the investment arrangements. The FAP should detail responsibilities and processes for reviews of the Investment Strategy. Changes to the Investment Strategy will be a Modification to the FDP which will require approval by the Secretary of State under section 49 of the Energy Act.

Payment and disbursement policy

- 2c.58 The disbursements policy of the Fund must be consistent with the section on Guiding Factor 7(c) in Part 1 of this Guidance.
- 2c.59 Even with a contingency for risk and uncertainty built in, it is important that appropriate governance is exercised by the Fund in making disbursements of Fund Assets. The FAP should set out the disbursement policy for the Fund, including:
- the governance arrangements under which Fund Assets would be disbursed by the Fund in line with the approved FDP;
 - the persons to whom payment will be made; and
 - the mechanism for making and auditing payments.
- 2c.60 The FAP should address when and on what basis assets may be disbursed. Safeguards must be in place to ensure that assets are disbursed only in accordance with the FDP and that such payments are auditable and confirmed as appropriate.
- 2c.61 The FAP should set out the Fund's governance arrangements for overseeing the disbursement of Fund Assets. The Fund will be expected to review progress against the DWMP as set out in the FDP and, to the extent that a

shortfall in funding is anticipated, the Operator will be expected to repair the deficit. See the Protection against an Insufficient Fund section in this Part 2c.

- 2c.62 The Operator will be expected to demonstrate to the Fund that it has appropriate procedures in place for checking that Fund Assets disbursed by the Fund are being applied against allowable DWMP costs and that milestones for achieving the DWMP are being met.
- 2c.63 The obligation on Operators to provide annual reports will continue when assets are being disbursed against allowable DWMP costs. In such circumstances, changes recorded in the annual report must capture the differences between the payments from the Fund and the reduction in the Operator's liabilities, as these involve changes to the cost estimates and changes to the security provided to meet such costs. The annual report may also set out the difference between the actual costs paid and the budgeted costs. The annual report should be prepared in consultation with the Fund.
- 2c.64 In circumstances where an Operator's expenditure does not reduce the Operator's liabilities by the required amount, the Annual Report should set out how the Operator intends to mitigate this and it should propose, if appropriate, a Modification to the DWMP.
- 2c.65 Once all the Operator's liabilities relating to the Designated Technical Matters have been fully discharged and the Operator or any other person with obligations under the FDP have been released from their obligations in accordance with section 64 of the Energy Act, the Fund can be wound up in accordance with the section on "Winding up of the Fund" in this Part of the Guidance.
- 2c.66 The FAP may set out the circumstances in which contributions to the Fund may be revised downwards, or surplus assets withdrawn from the Fund where the actuarially assessed value of the Fund is significantly greater than its Target Value at that point in time. These circumstances may include where the Fund's growth has significantly outperformed expectations and/or the technical solutions available for decommissioning reduce the anticipated costs substantially. The FAP should set out the extent to which the Fund will be required to consider whether a reduction in the contribution rate or withdrawal of surplus assets would be prudent, and what financial or other conditions must be satisfied before the Fund is not required to do so. These circumstances and conditions (including the time period) over which a reduction or withdrawal is to be permitted should be clearly set out in the FAP.

2c.67 The FAP must be robust where there is a change in ownership or control of the Operator or site and, in particular, must set out safeguards to ensure that assets are not improperly disbursed by the Fund in this event.

Sufficiency of Fund

2c.68 The FDP, by way of the FAP, must set out the mechanisms it proposes to utilise and the Investment Strategy it intends to adopt to ensure that sufficient assets will be available in the Fund to meet in full and on their due date the costs of the Designated Technical Matters. This must include mechanisms to ensure Fund sufficiency in the event of an insolvency of the Operator or an Associated Company.

2c.69 The Secretary of State will expect mechanisms to be put in place to mitigate against the risk of the Fund Assets being insufficient, including for example, where the Fund Assets are:

- insufficient against the Target Value²¹ during the generating lifetime of the station;
- insufficient against the Target Value at the date the station reaches the end of its generating life; and/or
- inadequate to meet the Operator's liabilities during decommissioning and until all liabilities have been fully satisfied.

2c.70 Insufficiency at any time might arise because, for example:

- the power station has to be permanently closed and decommissioned early for technical reasons; or
- where there is a shortfall in the Fund as a result of either a re-assessment of the Operator's liabilities or a reduction in the value of the Fund Assets; or
- lower than anticipated investment returns are achieved so that contributions have been insufficient.

²¹ This would not preclude the FDP setting out specified period, approved by the Secretary of State, within which to restore the Fund Assets to the Target Value.

Protection against an insufficient Fund

- 2c.71 As noted above, under the Energy Act an Operator is responsible for all the liabilities in respect of decommissioning, waste management and waste disposal that arise from the operation of its nuclear power station. When approving an FDP the Secretary of State will need to be satisfied that the Operator is and will continue to be in a position to meet its obligations to make contributions under the Fund. This might entail the FDP containing some provisions regarding the scope of the Operator's activities.
- 2c.72 Under the provisions of the Energy Act, the Secretary of State may, under certain circumstances, seek to impose obligations on Associated Companies (such as a parent company), by proposing a Modification to the FDP. This could happen if, for example, the Operator fails to comply with its funding obligations under the FDP. Furthermore, under section 64 of the Energy Act the obligations on an Operator (or former Operator) under an FDP remain until the Secretary of State explicitly releases the Operator from its obligations, even if it no longer holds a site licence. Subject to the provisions of the Section 46 Agreement with the Operator, the Secretary of State would expect to use these powers with the aim of addressing the risk of insufficiency of the Fund.
- 2c.73 In addition, the Operator must satisfy the Secretary of State that effective and transparent arrangements are in place, no later than First Criticality, as part of the approved FDP to ensure that the Operator will meet its obligations to discharge its liabilities in full. In the FAP an Operator must set out how it will manage and mitigate the risk that there are insufficient funds. An Operator's proposals will be assessed by the Secretary of State on a case by case basis, by reference to the Objective and the Guiding Factors set out in Part 1 of this Guidance, to ensure that the risk of any recourse to public funds remains remote at all times.
- 2c.74 The Operator must make provision to manage and mitigate the risk of the Fund being insufficient (as set out in the section on "Sufficiency of Fund" in this part of the Guidance). Security against such risk could take the form of a material upfront endowment to the Fund (no later than First Criticality) together with a provision to front load contributions to the Fund during the early years of the power station's generating life. This may be an acceptable form of security against such risks where it is one amongst several elements of a proposal in this regard and provided it is structured on appropriate terms.

2c.75 Alternative forms of security, such as insurance or financial instruments (from an appropriate financial institution) or security over cash flows from the generation or charges over other assets may be acceptable to the Secretary of State to make up a shortfall in the assets held by a Fund, where it is one amongst several elements of a proposal.

2c.76 Parent company guarantees, on their own, are not expected to be an acceptable form of security as protection against an insufficient Fund. The Secretary of State might find a parent company guarantee acceptable where it was one amongst several elements of a proposal in this regard. It would be essential for the parent company to have an acceptable credit rating at the time the FDP was first approved. Arrangements must also be in place to monitor the credit worthiness of the parent company; and if the parent company's credit rating should fall to an unacceptable level, the Operator must immediately notify the Secretary of State and ensure supplemental arrangements, which are acceptable to the Secretary of State, are in place.

Winding up of the Fund

2c.77 An Operator will be required to set out in the FDP when and by what means the Fund will be wound up.

2c.78 The Secretary of State would expect the Fund to be wound up when:

- the Operator and all other persons with obligations under the FDP have been released from their obligations in accordance with section 64 of the Energy Act;
- all liabilities which it was established to satisfy have been fully paid and discharged and there is no risk of contingent liabilities arising, or alternative arrangements to meet those liabilities, which are acceptable to the regulators and the Secretary of State, have been put in place; and
- any surplus assets have been disbursed. It is expected that any surplus assets held by the Fund once decommissioning is complete and all liabilities in respect of the Designated Technical Matters have been discharged will be disbursed to the Operator or as otherwise set out in the FDP.
- where all the Operator's outstanding waste and decommissioning liabilities have been transferred to the Government under the Waste

Contract, with a full and final payment of the Waste Transfer Price and lump sum payment; or

- if the FDP arrangements are modified (as approved by the Secretary of State) so as to use a different Fund vehicle. For example, migration of the FDP structure from one form to another because of changes to insolvency law (such that the Objective in Part 1 of this Guidance is no longer met) which necessitates the winding up of the Fund and the creation of another.

Glossary

Annual Report – means a report compiled by an Operator on an annual basis as part of its record keeping processes as set out in section 2a of the Guidance.

Associated company – means an associated body corporate within the meaning of section 67 of the Energy Act 2008.

Assumed Disposal Date – means the Government's best estimate of the date on which disposal of the Operator's waste will begin. The Assumed Disposal Date will determine the duration of interim storage of waste pending disposal for which the Operator will be required to make financial provision.

Base Case – means the steps set out in Part 2b of this Guidance for waste management, disposal and decommissioning that the Government considers should be included in and costed as part of the FDP that Operators will need to submit to the Secretary of State for approval.

Conditioning – means any process used to prepare waste for long-term storage and/or disposal.

Decommissioning – means dismantling the station and remediating the site including waste management but not including waste disposal to a condition agreed with the regulators and the planning authority.

Decommissioning and Waste Management Plan (DWMP) – means the part of the FDP which sets out and costs the steps involved in decommissioning a nuclear power station and managing and disposing of hazardous waste and spent fuel in a way which the Secretary of State may approve as described further in paragraph 1.8 of this Guidance.

Designated technical matters – has the meaning given by section 45(6) of the Energy Act 2008 and the Order.

DWMP Guidance – means the Guidance set out at Part 2b of this document.

Early Transfer – means a situation where the Transfer Date (on which the Operator's responsibility for the waste transfers to Government) precedes the Assumed Disposal Date.

Encapsulation – means the packaging of spent fuel in a manner acceptable for disposal in a GDF.

Energy Act – means the Energy Act 2008.

First Criticality – means the date on which any reactor core of the nuclear power station is taken critical for the first time.

Fund – means a trust or other vehicle constituted for the purpose of accumulating, managing and investing monies obtained from the Operator for the purpose of the Objective and includes, as the context permits or requires, any person who is a member of, or is responsible for the governance and/or management of that entity.

Fund Assets – means financial assets held by the Fund for the purpose of the Objective.

Funded Decommissioning Programme (FDP) – means the programme that any Operator of a new nuclear power station will need to have approved by the Secretary of State pursuant to the Energy Act before construction begins and to comply with thereafter.

Funding Arrangements Plan (FAP) – means the part of the FDP which sets out the Operator's detailed plans for one or more Funds to deliver sufficient moneys to meet the costs of the designated technical matters identified in the Operator's DWMP, as described further in paragraph 1.9 of this Guidance.

Generating lifetime – means the period beginning with the date on which the power station first generates electricity for supply to the grid, and ending with the date on which the reactor is shut down with no intention of further use for the purpose of generating electricity.

Generic Design Assessment – means the generic assessment being undertaken by the Office for Nuclear Regulation and the Environment Agency of the suitability of new reactor designs for use in the UK.

Geological Disposal Facility (GDF) – means a long term management option involving the emplacement of radioactive waste in an engineered underground facility or repository, where the geology (rock structure) provides a barrier against the escape of radioactivity and there is no intention to retrieve the waste once the facility is closed.

Guidance – means the guidance set out in Parts 1, 2, 2a, 2b and 2c of this document.

Guiding Factors – means the factors set out in paragraph 1.7 of this Guidance, which the Secretary of State will consider when considering whether to approve, to

approve with conditions or whether to modify an FDP which has already been approved.

Hazardous waste – has the meaning given by section 37 of the Energy Act 2004.

Interim storage – has the meaning given to it in the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010.

Intermediate level waste (ILW) – has the meaning given to it in the Order.

Investment Strategy – means the investment strategy set out in the FAP as described in paragraphs 2c.51 to 2c.57 of this Guidance.

Low level waste (LLW) – means radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma activity.

Modification – Any change to an approved FDP.

Nuclear Liabilities Financing Assurance Board (NLFAB) – means the independent advisory body, and any successor body, who will provide impartial scrutiny and advice to the Secretary of State on the suitability of FDPs submitted by Operators of new nuclear power stations.

Nuclear Power Station – means a licensed site with one or more nuclear reactors being operated for the purposes of generating electricity.

Objective – means the Objective set out in paragraph 1.6 of Part 1 of this Guidance.

Operator – means the legal person who holds a licence under the Nuclear Installations Act 1965 in relation to the site to which the FDP relates, or who has applied for such a licence in relation to such a site.

Operator's liabilities – means those liabilities set out in Part 2b of this Guidance which the Fund is required to meet being the sum of the designated technical matters.

Order – means the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010.

Quinquennial Report - means a report compiled by an Operator on a five yearly basis as part of its record keeping processes, as set out in section 2a of the Guidance.

Radioactive waste – has the meaning given by the Environmental Permitting (England and Wales) Regulations 2010.

Regulations – means Nuclear Decommissioning and Waste Handling (Finance and Fees) Regulations 2011.

Section 46 Agreement – means an agreement entered into by the Secretary of State and an Operator of a new nuclear power station pursuant to Section 46 of the Energy Act (as amended by section 106 of the Energy Act 2011), under which the Secretary of State agrees to exercise, or not exercise, his power to propose Modifications under section 48 of the Energy Act in a particular manner or within a particular period.

Security – means that security provided under section 45(7) of the Energy Act to meet the costs of the designated technical matters, which this Guidance assumes will, at a minimum, constitute assets held in an independent fund and alternative forms of financial or other security may be considered in addition.

Spent fuel – has the meaning given to it in the Order.

Target Value – means the value or sum which the Fund is required to achieve under the terms of the approved FDP.

Technical Matters – as set out in section 45(5) of the Energy Act, the technical matters, in relation to a site, are

- (a) the treatment, storage, transportation and disposal of hazardous material (within the meaning of section 37 of the Energy Act 2004 (c. 20)) 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; and
- (c) activities preparatory to the matters mentioned in paragraph (b);

and for the purposes of paragraph (a) a nuclear installation is not to be regarded as being operated at a time when it is being decommissioned.

Transfer Date – means the date, or schedule of dates, upon which the Operator's responsibility for managing the waste pending disposal will transfer to the Government.

Uranium – means a heavy, naturally occurring and weakly radioactive element, commercially extracted from uranium ores. By nuclear fission (the nucleus splitting

into two or more nuclei and releasing energy) it is used as a fuel in nuclear reactors to generate heat.

Waste Contract – means a contract entered into between an Operator of a new nuclear power station and the Government regarding the terms on which the Government will take title to and liability for the Operator’s ILW and spent fuel. Section 66 of the Energy Act enables the Secretary of State to enter into such an agreement with an Operator.

Waste management – means:

- (a) treating, storing and transporting ILW and spent fuel pending disposal pursuant to the schedule agreed with the Government;
- (b) treating, storing, transporting and disposing of LLW;
- (c) treating, storing, transporting and disposing of non-radioactive hazardous waste; and
- (d) planning undertaken during the generating life of the station or subsequently which is necessary in order to carry out decommissioning.

Waste Transfer Price – the price paid by an Operator of a new nuclear power station in return for the Government taking title to and liability for their ILW and spent fuel, under the terms of a Waste Contract.

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