EXPLANATORY MEMORANDUM TO

THE NUCLEAR DECOMMISSIONING AND WASTE HANDLING (DESIGNATED TECHNICAL MATTERS) ORDER 2010

2010 No. 2850

1. This explanatory memorandum has been prepared by the Department of Energy and Climate Change and is laid before Parliament by Command of Her Majesty.

2. Purpose of the Instrument

2.1 The purpose of this Order is to specify certain matters, in addition to those provided in the Energy Act 2008 ("the Act"), for which a person who submits a Funded Decommissioning Programme (FDP) must make financial provision in the FDP. Under the Act any person who intends to install a nuclear power station must submit a FDP to the Secretary of State for approval and this programme must set out the likely costs of decommissioning and cleaning up a site, and the financing arrangements made by that person for meeting those costs.

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

4. Legislative Context

4.1 Chapter 1 of Part 3 of the Energy Act 2008 deals with decommissioning and clean-up of nuclear sites and the requirement for nuclear operators who apply for a nuclear site licence to submit a FDP to the Secretary of State for approval. Section 47 of the Act makes it a criminal offence to use a site by virtue of the nuclear site licence without an approved FDP in place and section 57 makes it a criminal offence for an operator or any other person with obligations under a FDP to fail to comply with such an obligation.

4.2 Section 45(7) of the Act provides details of what a FDP must contain. This includes details of the steps to be taken in relation to the technical matters (matters concerned with dealing with nuclear waste during the operation of the station; decommissioning and clean up of the site; and steps in preparation for decommissioning); cost estimates for certain of those technical matters (known as "designated technical matters") and the financing arrangements for those designated technical matters.

4.3 Section 45(6) provides that in addition to decommissioning and clean up of a site, the designated technical matters are those technical matters specified by the Secretary of State by order. Under section 46(6)(a) the Secretary of State can specify as designated technical matters activities in relation to the treatment, storage, transportation and disposal of hazardous material during the operation of a nuclear installation on the site (Section 45(5)(a)) or the steps undertaken to prepare for decommissioning and clean-up of the site (Section 45(5)(c).

4.4 The Order specifies designated technical matters, in addition to those already stated in section 45(6)(b). The Order will be complemented by the Nuclear Decommissioning and Waste Handling (Finance and Fees) Regulations 2010, which will be laid once this Order comes into force. These Regulations will set out certain processes regarding FDPs. They will include provisions about the fees payable by operators in relation to FDPs; allow the Secretary of State to rely on verification of certain information by independent third parties; allow certain modifications to be made to the FDP without seeking the approval of the Secretary of State; and will require the operator to provide reports on an annual and five yearly basis.

5. Territorial Extent and Application

5.1 This Order applies to England, Wales and Northern Ireland.

6. European Convention on Human Rights

6.1 The Secretary of State for Energy and Climate Change has made the following statement regarding Human Rights:

In my view the provisions of the Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order 2010 are compatible with the Convention rights.

7. Policy background

7.1 The Order is being made to specify designated technical matters additional to those already in section 45(6)(b) of the Act, for which nuclear operators must provide detailed cost estimates and financial security. The Act only contains one category of designated technical matters, namely the decommissioning of a relevant nuclear installation and cleaning up the site, and provides that the Secretary of State specify by Order any other matters which are to be designated technical matters. The Order specifies that the construction and maintenance of interim stores used for storage of intermediate level waste and spent fuel; and the steps preparatory to the decommissioning of the nuclear installation and clean up of the site, are designated technical matters.

7.2 The Act together with the Order makes clear the matters for which nuclear operators must provide estimates of costs, as part of the FDP. Nuclear operators must set aside funds as part of the FDP to meet the costs of the designated technical matters to which the Act and the Order refer, in order that the burden of funding those matters should not fall on the state.

8. Consultation outcome

8.1 From March 2010 until June 2010 we ran a consultation on the matters to be specified as designated technical matters in the Order. The consultation was for a 12 week period and was open to members of the public, the nuclear industry, non-governmental organisations and any other organisation or body with an interest in the costs of nuclear decommissioning and the financing of those costs. .

8.2 Following the consultation the Government is not proposing any substantive changes to the draft on which the consultation took place. As a result of comments received in the consultation the Government is however, slightly changing the definition of interim stores to be absolutely clear that these relate to stores for intermediate level waste and spent fuel constructed during the operation of a nuclear installation on the site. The Government has also improved the drafting in a number of respects from the consultation draft.

9. Guidance

9.1 DECC is not issuing specific guidance in relation to this Order.

9.2 The Department will, however, be issuing statutory guidance in accordance with section 54 of the Act on the operation of the FDP regime as a whole. This guidance will be in relation to the contents of an FDP and the factors which will be considered when making a decision on whether to approve a FDP or make a modification to it. It will provide guidance in relation to the designated technical matters, including those specified in the Order, to assist operators in understanding the provision that needs to be made in relation to them in the FDP. The guidance will not be prescriptive but will instead set out key principles which the Secretary of State will expect to see satisfied in the FDP prepared by an operator. The guidance will give information about the way in which operators may satisfy those principles.

10. Impact

10.1 The impact on charities or voluntary bodies is likely to be none as projects will be taken forward by commercial operators. The impact on business is that all nuclear operators required to submit an FDP under the Act are affected by this Order.

10.2 The impact on the public sector is negligible as DECC will be the regulatory authority and will accommodate this area of work within the overall FDP approval process.

10.3 A Regulatory Impact Assessment is attached to this memorandum and will be published alongside the Explanatory Memorandum on the OPSI website.

11. Regulating small business

11.1 This legislation can potentially apply to small business. However, in practice it is not likely to, as operators of nuclear sites will most likely be very large companies with the extensive resources, in terms of finances and employees; both of which are needed to operate nuclear installations.

12. Monitoring & review

12.1 Operation of the Order in the context of the wider policy will be subject to ongoing internal review through the process of approving/considering operators' FDPs and may be amended accordingly.

13. Contact

13.1 Ailsha Dilmohamed at Department of Energy and Climate Change, Tel: 0300 068 5838 or email: Ailsha.Dilmohamed@decc.gsi.gov.uk can answer any queries regarding the instrument.

Title:	Impact Assessment (IA)
The Nuclear Decommissioning and Waste Handling (Designated Technical Matters) Order , the Nuclear Decommissioning and Waste Handling (Finance and Fees) Regulations 2010	**IA No:** DECC 0033
Lead department or agency: DECC	**Date:** 18/10/2010
Other departments or agencies:	**Stage:** Development/Options
	Source of intervention: **Domestic**
	Type of measure: Secondary legislation

Summary: Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

Under the Energy Act 2008 (the Act) the Secretary of State is under a duty to ensure that prudent provision is being made for a new nuclear operators' waste and decommissioning liabilities. Regulatory intervention is the best way to enable Secretary of State to carry out those functions.

Intervention is necessary to enable Secretary of State to have access to information to ensure that operators of new nuclear power stations meet the full costs of decommissioning and the full share of waste management costs; to reduce the burden of the onerous reporting regime in the Act and to create a more certain regulatory environment for operators.

What are the policy objectives and the intended effects?

The overall policy objective is to facilitate the construction and operation of new nuclear power stations, whilst ensuring that the operator of a new nuclear power station meets the full costs of decommissioning and their full share of the waste management costs.

What policy options have been considered? Please justify preferred option (further details in Evidence Base)

Options considered were: 1. "base case" i.e. introduce the minimum arrangements necessary to comply with the Energy Act 2008, but do not implement options 2 through to 3d, see below.
Option 2: Cost recovery for government approval and review costs funded decommissioning programmes (FDPs); 3rd party verification of FDPs; new "designated technical matters"; materiality threshold for prior approval of modifications to an FDP (set at 5% of present value of an FDP); reporting requirements (based on objective-based approach). Options 3a. As (2) above, but no cap on recovering costs associated with approval and review of FDP; 3b. As (2) above, but limit the scope of the order for new designated technical matters; 3c. As (2) above, but different materiality threshold; 3d. As (2) above, but reporting requirements based on prescriptive approach. 4. Co-regulation and informal agreement.

Option 3a provided the strongest protection for the taxpayer - it removes the uncertainty of excess costs falling to the taxpayer. It could also be argued that a cap represents a subsidy.

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will be reviewed (on ongoing basis)
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	Yes

SELECT SIGNATORY Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: Charles Hendry ..... Date: 13rd October 2010

Summary: Analysis and Evidence

Policy Option 3a

Description:

Price Base Year 2010	PV Base Year 2010	Time Period Years 60	Net Benefit (Present Value (PV)) (£m)		
			Low: £0.4m	**High:** -£0.1m	**Best Estimate: £0.1m**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	60	£0.032m	**£0.8m**
High	Optional		£0.198m	**£4.4m**
Best Estimate			£0.115m*	**£2.6m***

Description and scale of key monetised costs by 'main affected groups'

Removing the cap on fees could increase the total cost that an operator might pay for approval of its FDP but only if the total costs incurred by the Secretary of State were to exceed the maximum supplementary fees included in the consultation. The likelihood of costs exceeding the cap proposed in the consultation is considered to be within the bounds of uncertainty already covered in the original calculation of costs. (* denotes mean of the low-high range).

Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	40	£0.066m	**£1.2m**
High	Optional		£0.210m	**£4.3m**
Best Estimate			£0.138m*	**£2.7m***

Description and scale of key monetised benefits by 'main affected groups'

1. Benefits arise as a result of the exemption from onerous modification provisions in the Act and the avoidance of operators having to pay for a second verification report for the Secretary of State.
2. Reduced compliance costs to the operator - the decreased costs are within the bounds of uncertainty already covered in the Impact Assessment.
(*denotes mean of the low-high range)

Other key non-monetised benefits by 'main affected groups'

Increased transparency brought about by the reporting requirements and increased assurance in relation to costs.

Key assumptions/sensitivities/risks **Discount rate (%)**

1. Total costs are based on a 40 year generation period and 20 year decommissioning period and have been calculated on a per station basis.

2. For both costs and benefits, the changes are within the bounds of uncertainty already covered in the impact assessment. Therefore no changes were needed to the values in the impact assessment.

3. Discount rates used as per Green Book: 3.5% to year 30; 3.0% for year 30 onward.

Impact on admin burden (AB) (£m):			Impact on policy cost savings (£m):	In scope
New AB:	**AB savings:**	**Net:** £0.1m	**Policy cost savings:**	Yes/No

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England and Wales and NI		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			£ Nil		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:**	**Benefits:**	
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	**Micro** N/A	**< 20** N/A	**Small** N/A	**Medium** N/A	**Large** N/A
Are any of these organisations exempt?	No	No	No	No	No

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	No	16
Economic impacts		
Competition Competition Assessment Impact Test guidance	Yes	16
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	Yes	16
Wider environmental issues Wider Environmental Issues Impact Test guidance	Yes	16
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	16
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	Yes	16

[1] Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

References

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

No.	Legislation or publication
1	Consultation on Waste & Decommissioning Financing Regulations, March 2010 – URN 10D/574 http://www.decc.gov.uk/en/content/cms/consultations/nuc_dec_fin/nuc_dec_fin.aspx
2	Impact Assessment, March 2010 – URN 10D/576 http://www.decc.gov.uk/en/content/cms/consultations/nuc_dec_fin/nuc_dec_fin.aspx

Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

Annual profile of monetised costs and benefits* - (£m) constant prices

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9
Transition costs										
Annual recurring cost										
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits										

* For non-monetised benefits please see summary pages and main evidence base section

See accompanying spreadsheet.

Evidence Base (for summary sheets)

Policy background

1. The Energy Act 2008 (the Act) requires that operators of new nuclear power stations must have secure financing arrangements in place in order to meet the full costs of decommissioning and their full share of waste management costs. It requires the operator of a new nuclear power station to submit to the Secretary of State a funded decommissioning programme (FDP) for approval before construction of the new power station commences.

Statutory funded decommissioning programme guidance

2. To assist operators in understanding their obligations under the Energy Act 2008 the Government published draft guidance in February 2008 that sets out what is required for developing the FDP. The Government has taken a principle based approach to developing the guidance, the aim of which is to allow the operator to develop and comply with an FDP in the most cost effective manner.

3. However, in some areas provision needs to be made by way of legislation to impose obligations to ensure operators fulfil the duties imposed on them and also to give certainty to operators about the regime. The Act itself is only part of the regulatory regime for FDPs and it envisages regulations being made to compliment the structure already in the Act. It is therefore necessary to implement the regulations set out in Table 1. Relying only on guidance was considered as an option (along with the 'base case' option); however to enable the Government to implement an effective cost recovery scheme, which does not impose unnecessary burdens on business, regulations are required . Further, in some instances, for example setting out in regulations certain aspects of the modification procedure, there are distinct benefits. This is because the regulations enable the Secretary of State to disapply certain aspects of the Energy Act 2008 to the modification procedure, thus reducing some of the administrative burden on the operator (see Table 3).

4. This impact assessment sets out the proposals for the implementation of regulations which arise from the Energy Act 2008. The proposals for these measures are considered in more detail below.

Proposed Regulations

5. The regulations that the Government intends to make are:

Table 1: Proposed Regulations

	Purpose of regulation	Manner of implementation
1	Cost recovery – to enable DECC to recover costs associated with the approval and subsequent modification(s) reviews of the FDP.	Negative resolution
2	Third party verification of the FDP – to provide independent assurance of the FDP.	Negative resolution
3	Designated technical matters – the Act allows Secretary of State to make an Order designating which activities associated with the DWMP are designated technical matters.	Affirmative resolution
4	Modification to an approved FDP – setting a materiality threshold at or above which prior approval from the Secretary of State is required before an FDP can be modified by the operator or any other person	Negative resolution

	with obligations under the FDP.	
5	Reporting requirements – setting out the requirement for annual and quinquennial reporting to monitor the FDP.	Negative resolution
6	Defining the content of a Funded Decommissioning Programme	Negative resolution

Analysis of the 'base case' approach

6. A 'do nothing' option is not feasible because it would be inconsistent with the Government's policy of no subsidy to new nuclear (as set out in the Secretary of State's written statement to the House on the 18th of October 2010)[2] since the costs of scrutinising the operator's Funded Decommissioning Programme would fall to the taxpayer rather than to the operator. Therefore, some form of cost recovery is essential under the base case. This base case therefore assumes that the Government will seek to recover costs reasonably incurred by agreement with the operator.

7. Under this approach the regulation in Table 1 would not be implemented. The purpose of the reporting requirements is to ensure that the operator's waste disposal and decommissioning liability is monitored and assessed against the financing arrangements for these liabilities. Reports will be required on annual and quinquennial basis. Under the 'base case' option, the Secretary of State would have to submit a notice requiring information from the operator in order to satisfy himself that the operator is making prudent provision (the test in the Act) to meet the full costs of decommissioning and full share of waste management costs. Taking no action is likely to result in higher administrative costs as the requests for information are likely to arise on an adhoc basis.

8. It is Government policy that there will be no public subsidy for new nuclear power. As a result, under the 'base case' option, the full costs of verifying the information provided operators would have to be borne by the operators. This is because the Secretary of State has a duty to secure that prudent provision is made for the financing arrangements. This is also consistent with the objective of an FDP being to protect the taxpayer. In the absence of regulations, Government would therefore seek to recover any costs incurred for verification through a contractual agreement with the prospective operator.

9. Under the 'base case' option, the Government would also seek to recover from the prospective operator the costs associated with the consideration of an FDP for approval. The operator would also incur the costs associated with verifying the impact of any subsequent modification above the materiality threshold set by the regulations. Again, this would happen as a result of the duty placed on the Secretary of State by the Energy Act 2008 to secure that prudent provision is made for the financing arrangements which is consistent with the policy of no public subsidy.

10. The base case approach means that the operator would not be required to pay for the construction and maintenance of interim stores for spent fuel and intermediate level waste and decommissioning planning after generation of electricity has commenced, out of the Fund. Instead it could pay for these costs out of the operational expenditure. This could result in all or some of the costs for the construction and maintenance of the interim stores falling to the taxpayer in the event that the operator is unable to meet these costs from operational expenditure when they fall due. It could also mean that monies are not available to undertake the planning for decommissioning.

11. The effect of not setting a materiality threshold for the modification of a programme (ie the 'base case' approach) would be that the operator would have to seek approval for every modification that was made to the FDP. In considering the level of the threshold

[2] http://www.decc.gov.uk/en/content/cms/news/en_statement/en_statement.aspx

the key consideration was proportionality: identifying a threshold that balanced the need to ensure that prior approval was sought for those changes that were deemed to have a strategic effect on the liabilities against a need to ensure that the taxpayer is protected against the decommissioning and waste management costs. The Government considers that modifications to an FDP resulting in changes in estimated liabilities of this size are likely to be infrequent and the result of significant operational or technical changes. Such changes are considered to be of sufficient magnitude as to require prior approval by the Secretary of State. Most respondents to the consultation broadly agreed with the +/- 5% materiality threshold.

Intermediate options such as voluntary approaches or 'self regulation':

12. While co-regulation or informal agreements might reduce costs, there are certain benefits from these regulations which can, as a matter of law, only be delivered through the Regulations and the Order: it is not possible to enter into an agreement that would allow an operator to do something which is required in legislation and which can only be disapplied by way of regulations. Those benefits are:

    a. The exemption from S49 of the Energy Act 2008 (the Act) which, absent the Regulations, would require compliance with an onerous approvals procedure for all modifications to an Funded Decommissioning Programme (FDP) however small. We know from stakeholder discussions that they are concerned about this as the number of small modifications could amount to several hundred per year. The Regulations disapply S49 and requires operators instead to seek approval only for modifications which involve a change in liabilities of excess of 5% or more; this is likely to reduce the number of modifications requiring approval to a very small number, possibly nil outside of the normal quinquennial review process. This represents a very significant benefit to operators which has been costed.

    b. Secretary of State reliance on third-party verification. When submitting an FDP for approval the operator will also submit an assessment by an independent third-party verifier. The Regulations allow the Secretary of State to rely on the verification. Absent the Regulations, the Secretary of State could take note of the verification but would not be able to rely on it for the purposes of taking any decision. If the Secretary of State subsequently approves an FDP as prudent, he would be open to legal challenge on the basis that he had failed to take his own advice, which would create significant uncertainty for the operator. The only way to mitigate this legal uncertainty would be for the Secretary of State to procure his own verification which would duplicate the operator's verification and certainly be at the operator's expense.

    c. Setting out liabilities to be provided for in segregated funds. The Order sets out the aspects of their liabilities that must be provided for in segregated funds (which is a requirement of the Act). The Act sets out certain matters which must be provided for by operators in segregated funds. However, under the Act the liabilities which must be costed are those specified in the Act and those the Secretary of State specifies by Order. Without the Order the matters which operators must cost and

make provision for will be incomplete. This would clearly increase an operator's uncertainty over their legal obligations.

Preferred option

13. The preferred option provides a mechanism for ensuring that the Government can recover the costs associated with the consideration and verification of funded decommissioning programmes. The removal of the caps on fees provides additional protection for the taxpayer and ensures that the operator pays the full cost of the FDP assessment. The preferred option also serves to reduce the administrative burden on operators of new nuclear power stations by setting a materiality threshold for modifying an FDP. A further benefit of the regulations is that they clarify the modification process and reporting requirements.

14. A detailed analysis of the costs and benefits of the preferred option compared with the 'base option' option is set out below.

Analysis of preferred option

Cost recovery provisions

15. The Government's original proposal was that it would recover the costs of consideration/approval of an FDP up to a maximum set out in the Regulations. Any unused monies would have been reimbursed to the operator. The cost recovery provisions set out an initial fee (to be paid on submission of an FDP or commencement of some other process in relation to the FDP) and a supplementary fee up to the maximum cost.

The Initial Fee:

16. This fee ranges from £18,750 – £75,000 depending on the activity.

17. The initial fee is designed to meet some of the estimated costs of the initial advice that the Secretary of State is likely to take from the Nuclear Liabilities Financing Assurance Board (NLFAB). The fee of £75,000 is based on the total number of days that the Nuclear Liabilities Fund (NLF) met as stated in its annual report for Year End March 2009. Although the role and functions of the NLFAB are different from the NLF, for these purposes the Government believes that it is a suitable comparison.

18. The quinquennial review and approval of a modification to an FDP attract the same fee because these activities will require an in-depth review of the FDP and as such will be more complex. The annual report will be a less complex document so the charge is set at the lower rate.

The Supplementary fee

19. Although operators will be given the opportunity to clarify any issues associated with the approval of an FDP or its modification or review, given the highly technical nature of the FDP, further technical advice may be required, the costs of which may exceed the initial fee paid. As a result under the preferred option allowance has been made for a supplementary fee to be charged to the operator. Any supplementary fee will be charged to the operator on an ongoing basis as the costs are incurred.

Change to the original proposal: Removing the initial fee and the cap on supplementary fees:

20. Under the revised proposals there will no longer be a schedule of fees payable in relation to an FDP; nor will there be maximal fees chargeable to the operator. Instead, as fees were always intended to reflect the costs incurred by the Secretary of State in obtaining advice in relation to the matter being considered (such as a FDP) the department will bill the operator for costs incurred, giving the operator 30-days to pay. The Government will set out in guidance how it proposes to operate the fee charging arrangements. The arrangements are likely to be very similar to those operated by the Health and Safety Executive (HSE), a model with which operators will already be familiar.

21. The removal of the cap is to ensure that the operator meets the full cost of the assessment. Under the cap, it would have been possible for the costs incurred by the Secretary of State to be more than the maximal supplemental fee, in which case the additional costs would have fallen to the taxpayer. Given that the FDP is being assessed for the purposes of ensuring prudent provision (which is an obligation on the operator) it is appropriate for the operator to pay the full cost of the assessment . The assessment and subsequent approval will also allow the operator to derive the full economic benefit from the activity of generating electricity. It could have been argued that by having a cap that this provided for a subsidy in some cases. This was because costs incurred by the Secretary of State above the cap would not be recoverable from an operator but would be borne by the taxpayer.

Risks

22. There is clearly a possibility that the removal of the cap will lead to some operators incurring greater costs in respect of approval/consideration of their FDP. To offset this, however, removal of the cap places a much stronger incentive on the operator to submit a comprehensive, accurate and fully verified FDP so that the Secretary of State can be confident about the prudence of the FDP without seeking extensive third-party advice.

23. Recognising, however, that operators need to be confident: i) that Government is procuring advice on a cost effective basis; and, ii) that the costs are being reasonably incurred, the Government proposes the following measures. Firstly, the Government will set out in guidance how it will secure value for money, for example, by using OGC procurement processes. Secondly, the Government will commit in legislation that only costs which are reasonably incurred will be recoverable.

Independent verification of FDPs

24. The verification of FDPs is an important part of the assurance process. If this policy were not implemented there could be greater uncertainty associated with the operator's cost estimates which in turn may result in greater requests for information from the Government. Therefore, it is ultimately to the benefit of the operator to have aspects of their FDP verified.

25. Although it is possible that the verification of FDPs would still happen without the regulations as the Fund (which is headed by independent trustees/directors) are also likely to want to have the operator's cost estimates verified as a result of the proposed policy there will be greater certainty for the operator.

26. A key benefit of the regulations arises due to them enabling the Secretary of State to rely on the independent third-part verification provided alongside the submission of an FDP. Absent the regulations, the Secretary of State could take note of the verification but would have difficulty relying on it as one of the key bases for making a decision. If the Secretary of State subsequently approved an FDP as prudent he would be open to a legal challenge which would create significant uncertainty for the operator. The only way

to mitigate this legal uncertainty would be for the Secretary of State to procure his own verification which could potentially duplicate the operator's verification and certainly would be at the operator's expense. This avoided cost (assumed to occur on a quinquennial basis), gives rise to a best estimate benefit of £1.6m on a NPV basis which comprises 60% of the overall best estimate benefit set out in this IA of £2.7m on a NPV basis. As outlined, this policy also creates a non-monetised benefit in the certainty that it creates.

27. The benefits to operators from avoiding having to procure an independent verification of their FDP on a quinquennial basis are set out in tables 2 and 3. The benefits are assumed to start in 2016 and accrue over a further 40-year generation period from 2018. As a result, the calculations are based on nine years of benefits.

Table 2: Benefits resulting from regulations on annual verification - per station

	Low	High
Avoided quinquennial verification costs	£300,000	£500,000

Source: discussions with industry stakeholders, estimates based on British Energy published accounts.

Table 3: Discounted total benefits from regulations on verification - per station

	Low	High
Avoided quinquennial verification costs	£1,200,000	£2,100,000

Options considered

28. Base case - under the 'base case' option we have assumed that the verification of the FDP, modification of an FDP and of the reports could be in the region of £62,000 - £500,000 p/a because whilst there would be no regulatory requirement on the operator to have the FDP verified, the Government (and the Fund) would still want assurance that the estimates within the FDP were a prudent reflection of the size of the liabilities and the value of the fund at that point in time. Under the Energy Act 2008 the Secretary of State is under a duty to secure that prudent provision is made for the financing arrangements. The Government is clear that there will be no public subsidy for new nuclear power and as a result would seek to recover any costs incurred through a contractual agreement with the prospective operator.

29. Preferred option – to require the operator to ensure that the estimates are verified by an independent third party under the terms set out in the regulations and the final guidance. The preferred option implements a lighter touch regime as it leaves some discretion to the operator and verifier. This is a preferred option when compared to a prescription based regime which would seek to regulate every activity associated with the verification, leaving little room for discretion.

30. Under the preferred option the regulations will set out what is to be verified, when verification is to take place and the structure/content of the verification report.

Distribution of impact

31. Because it will enhance transparency and provide additional protection to the taxpayer by inserting another layer of assurance, verification will be an integral part of the FDP process. Furthermore, as a result of implementing the preferred option the operator will also benefit as verification is likely to result in fewer ad hoc requests for information from the Government.

The costs of verification will be borne by the operator. In the 'base case' option it is assumed that these costs would also be borne by the operator, however as outlined above, absent the regulations the Secretary of State would not be able to rely on the verification provided by the operator.

32. The NDA recovers the costs of administering the contract created as part of the Nuclear Liabilities Fund Agreement which amongst other things include the review of decommissioning plans and reports. These costs which include external contractor support and cover the existing BE fleet are estimated to be in the region of £500,00 p/a (although this is expected to change as BE move from planning into decommissioning as their stations progressively close).

Risks

33. If the regulations do not provide an adequate framework for the verification to take place there is a risk that the verification process will not deliver a satisfactory level of assurance and that as a result the liabilities are not adequately scrutinised. However to mitigate against this the Secretary of State has powers in the Energy Act 2008 to request information in relation to the FDP. So for example, if the Secretary of State is not satisfied with the verification of an FDP, the Secretary of State can request additional information in relation to that FDP. However as previously mentioned, ad hoc requests for information are likely to increase the administrative burden to the operator, so it is in the operator's interests to meet the requirements of the preferred option.

Designated technical matters

34. Designated technical matters are the steps that need to be taken to decommission the installation and clean up the site (which includes the management and disposal of waste) once the station has ceased generation for the final time. The operator will have to meet the costs of designated technical matters from the independent Fund.

35. As the policy stands the Fund only makes payments for activities that occur once the station has ceased generating for the final time. The effect of implementing the policy under the preferred option will be to require payments from the Fund for activities that occur during the generation life of the station.

Options considered

36. Base Case this is not a viable option as the Act states that the designated matters are those stated in the Act and those specified by Order. There is no option therefore other than to specify those additional matters which are designated technical matters. The effect of the 'base case' option would be that the designated technical matters would be incomplete and operators would not know the costs and provision they needed to make in the FDP.

37. Limiting the scope of the Order – the scope of the Order could be limited to include the construction of the stores only for example. However, this would mean that there is a risk that when the waste is transferred to the Government, some of which will probably need to remain in these stores for a period of time, that the taxpayer will have to meet the cost of improving the stores to a satisfactory condition if they have not been maintained by the operator. However, there could be no guarantee that those monies would be available and so the preferred option is to designate both the construction and maintenance of interim stores as designated technical matters.

Analysis of preferred option

38. Under the preferred option the Order makes the following activities designated technical matters:

    - the building and maintaining of interim stores (intermediate level waste and spent fuel);

    - the planning for decommissioning before the station cease operation for the final time.

39. As a result of this policy activities associated with the matters described above will have to be paid for from the Fund. This will ensure monies are available to pay for the activity at a point in the future. Not implementing the Order will mean that the regulatory structure for the FDP regime will be incomplete and operators will not know which matters they need to cost and make financial provision for in the FDP.

Costs/benefits

40. Given the objective of ensuring that monies are available to meet the liabilities as and when they fall due, the Government considers the construction and maintenance of interim stores for intermediate level waste and spent fuel and the costs of planning for decommissioning sufficiently significant (in terms of the potential for these financial and societal costs falling to the taxpayer) as to make them designated technical matters even though these costs will arise while the power station is operational.

41. This approach will result in additional costs to the operator as a result of drawing monies from the Fund during the operation of the station. However on an annual basis the Government believes these costs are relatively small compared to the running of the costs of a nuclear power station. As part of the consultation on the Order the Government asked what operators estimated the costs as a result of this policy might be. Prospective operators did not respond on the question of burden so Government concluded that the costs are small.

Materiality threshold

42. The purpose of introducing a materiality threshold is to help reduce the administrative burden on the operator and to ensure that material changes to the FDP are approved by the Secretary of State. The Act requires the operator to seek prior approval for every modification to the FDP.

Options considered

43. Base case – the effect of not implementing the preferred option would mean that the operator would have to seek approval for every modification that was made to the FDP and that the operator would still be required to report every modification.

44. Preferred option – set the materiality threshold at a +/-5% increase of the net present value (adjusted for inflation) of the then current estimate of the decommissioning and waste management liability. Under the preferred option the regulations also define the content of an FDP by clarifying that it must contain the estimates of the costs for the disposal of spent fuel and intermediate level waste and costs of decommissioning and waste management. The consultation sought views on this threshold.

45. Consider other materiality threshold - in considering the level of the threshold the key consideration lay in identifying a threshold that balanced the need to ensure that prior approval was sought for those changes that were deemed to have a strategic effect on the liabilities so that the taxpayer is protected against the decommissioning and waste

management costs, against reducing the burden on operators in relation to the modifications for which they must seek prior approval of.

Changes to the original proposal: removal of references to inflation and net present value; changes to the requirement to notify a modification in respect of the financial arrangements.

46. Under the original proposals the Regulations required the value of a material modification be calculated in net present value terms adjusted for inflation. This provisions is considered to be superfluous and open to interpretation. The value of a modification will need to be calculated on the same basis as the value of the total liability in effect at the time the modification is proposed. The method of calculation will be specified in the FDP and will be an inflation adjusted net present value calculation.

47. Operators will now need to notify modifications to the financing arrangements irrespective of whether the modification was caused by a change in the underlying cost estimates or not. This is to ensure that the operator cannot make changes to the financing arrangements within year and between quinquennial reviews without approval. This will result in some additional compliance costs.

Analysis of preferred option

48. The basis for identifying whether or not a change to the station will result in a modification to the FDP for which prior approval is required is to consider individually the effect of the change of the station on the decommissioning and waste management liability and the waste disposal liability. Where the change results in an increase equal to or greater than the materiality threshold prior approval from the Secretary of State will be required.

49. The Government's updated estimates of the costs of decommissioning, waste management and waste disposal (for a generic 1.35 GW PWR operating for 40 years) are:

- decommissioning and waste management costs in the range £800m – £1,800m (undiscounted); and

- waste disposal costs in the range £600m – £1,100m (undiscounted).

50. Therefore a materiality threshold of 5% equates to a change of £40m - £90m in decommissioning and waste management liabilities, and a change of £30m - £55m in waste disposal liabilities. The Government considers that modifications to an FDP resulting in changes in estimated liabilities of this size are likely to be infrequent and the result of significant operational or technical changes. Such changes are considered to be of sufficient magnitude as to require prior approval by the Secretary of State.

Costs/benefits

51. As a result of this policy there is a reduction in administrative costs because the operator only has to seek approval for modifications above a certain threshold The benefits to the operator are set out in tables 4 and 5. The benefits are assumed to start accruing from 2012 i.e. the year after the regulations come in to force and continue over a 40-year generation period starting in 2018. As a result, the estimates are based on benefits accruing over 46 years.

Table 4: Benefits resulting Regulations on annual modification - per station

	Low	High
Avoided annual modification costs	£0	£100,000

Source: external expert data

Table 5: Discounted total benefits from Regulations on annual modification - per station

	Low	High
Avoided modification costs	£0	£2,200,000

52. Under the 'base case' approach we have assumed that the costs to operators for reporting all modifications are in the range of £25k - £100k p/a. This estimate is based on the costs incurred by the NDA in paragraph 18.

53. Under the preferred option the operator would not need to seek prior approval for modification to an FDP except those which will result in a change (positive or negative) in the estimated liabilities of more than 5%. This will result in reduced administrative costs for operators. This benefit can only be delivered through the Regulations.

Risks

54. There is perhaps an increased risk that as a result of this policy the taxpayer is exposed to the decommissioning and waste disposal costs. To mitigate against this risk there are a number of checks and balances in place (such as independent third party verification, regular reports and powers to modify an FDP).

Reporting requirements

55. The purpose of the reporting requirements is to ensure that the operator's waste disposal and decommissioning liability is monitored and assessed against the size and performance of the fund. It enables the Secretary of State to be satisfied that the operator continues to be able to meet the full costs of decommissioning and the full share of the waste disposal costs. Reports will be required on an annual and quinquennial basis.

Options considered

56. Base case – under this option the Secretary of State would have to submit a notice requiring information from the operator in order to be satisfied that the operator is able to meet the full costs of decommissioning and full share of waste management costs. However under this ad hoc arrangement this option is likely to lead to regulatory uncertainty for the operator as information provision will not be routine and sporadic.

57. Prescriptive approach – under this approach the Government would set out in detail the content of each report.

58. Preferred option – objective based approach. Under this option the operator will be required to provide information that demonstrates that the objective of ensuring that the operator meets the full costs of decommissioning and full share of waste management cost continues to be met. This has benefits as it focuses on the overall objective rather than focussing only a 'check list' of criteria that have to be reported on.

Changes to the initial proposal: alternation to the verification requirements in respect of the annual report: alteration to periods in which annual and quinquennial reports have to be submitted; changes to the content requirements of the quinquennial report

59. In order to reduce compliance costs without negating the Secretary of State's ability to protect the taxpayer, certain aspects of the annual report will no longer need to be independently verified. The financial effects of the potentially large number of small modifications that take place over the year will no longer need to be verified. Also, given the volatility in financial markets, the regulations will not require changes to the financing arrangements detailed in the annual report to be verified.

60. In order to allow operators more time to compile the reports, and potentially align the date of the annual report (and potentially the quinquennial report also) with the operator's financial accounts (and so ensure that calculations only need to be done once, hence reducing compliance costs), operators will be allowed 3 months to compile and submit their annual report (up from two months) and will be given six months to compile and submit their quinquennial report (up from three months).

61. Finally, the stipulated content of the quinquennial report is to be adjusted to give greater emphasis to those aspects of the FDP of most concern to the Secretary of State. The reporting requirements on what are termed the technical matters will be reduced in that only changes to the technical changes need be reported on in the quiquennial report. While the quinquennial report needs to be verified any changes to the technical matters do not need to be verified. The quinquennial report is the principal review process for securing prudent provision to protect the taxpayer.

Analysis of preferred option

62. Under the preferred option the operator will need to report on changes to the FDP on an annual and five yearly basis and which will need to be submitted to the Secretary of State and published. The regulations set out the minimum reporting requirements but where the Secretary of State is not satisfied with the information that is provided, additional information can be requested.

63. The annual report will have to contain details of any changes to the estimates of costs of the designated technical matters, and of any changes to the provision made for the financing of the designated technical matters. In addition it may contain notification of any modifications below the materiality threshold. The proposed change will be on annual verification reporting in that the Government will lift the requirement that all the contents of the annual report be verified on an annual basis. Instead only the changes to the cost estimates for the designated technical matters need be verified. There will be reduced compliance costs on business from this change – the reports will not require verification to the same level as was the case in the initial proposal.

64. A greater level of verification of the quinquennial report on the other hand, remains essential. The report should provide details of any changes to the technical matters, to the cost estimates for the designated technical matters and any changes to the provision made for the financing of such costs.

65. A summary of the size and value of the Fund based on the annual reports for each of the previous five years and taking into account, for example, a change in investment policy or share price fluctuations affecting the value of the investments should also be provided in the report.

Costs

66. The costs of this policy are set out in tables 6 and 7 and comprise a combination of annual reports and quinquennial reports. Costs are based on a 40-year generation period which is assumed to start in 2018 and 20-year decommisionning period. In addition the annual reports are assumed to be required from 2012 i.e. the year after the regulations come in to force. Quinquennial reports are assumed to start in 2016, five years on from the regulations coming in to force. As a result there are 65 annual reports over the period 2012-2076. In addition, there would be approximately nine quinquennial reports over the operational period and six triennial reports over the decommissioning period (assuming that during decommissioning the quinquennial reports are replaced with triennial reports).

Table 6: Administrative costs associated with the reporting requirements resulting from the regulations – per station

	Low	High
Annual reporting costs	£18,750	£75,000
Quinquennial reporting costs	£75,000	£500,000

Source: estimates based on expert discussions

Table 7: Discounted total reporting costs – per station

	Low	High
Additional costs arising from reporting requirements	£800,000	£4,400,000

Summary of Costs and Benefits

67. The table below sets out the a best estimate net benefit (discounted) from the regulations of £100,000 over the assessment period.

Table 8: Summary of Costs / Benefits – Per station

	Direct Costs		Direct Benefits		Net Direct Cost / Benefit	
	Average Annual	Total Cost (Present Value)	Average Annual	Total Benefit (Present Value)	Average Net Annual Benefit	Total Net benefit (Present Value)
Low	£0.032m	£0.8m	£0.066m	£1.2m	£0.034m	£0.4m
High	£0.198m	£4.4m	£0.210m	£4.3m	£0.012m	-£0.1m
Best Estimate	**£0.115m**	**£2.6m**	**£0.138m**	**£2.7m**	**£0.023m**	**£0.1m**

Scaling of estimates of costs/benefits to provide new nuclear fleet estimates

68. The estimates contained in this Impact Assessment have been performed on a per station basis as this is the basis on which investors in new nuclear will conduct their investment appraisals. Undertaking the assessment in this way therefore allows those directly subject to these proposals to undertake a meaningful assessment.

69. It is however anticipated that industry will want to bring forward applications for new nuclear power stations and to date energy companies have announced that they intend to put forward proposals to develop 16 GW of new nuclear power generation capacity by the end of 2025. Assuming that a new nuclear power station has installed generating capacity of 1.6 GW (used as the basis for the estimates in the recent Mott MacDonald report on generation costs) the costs and benefits reported above could be increased by a factor of 7 to provide an indication of overall costs / benefits to industry. These estimates are reported in table 9 below.

Table 9: Summary of Societal costs/benefits for 16 GW capacity of new nuclear plant

	Direct Costs		**Direct Benefits**		**Net Direct Costs**	
	Average Annual	**Total Cost (Present Value)**	**Average Annual**	**Total Benefit (Present Value)**	**Average Annual Net Cost**	**Total Net Cost (Present Value)**
Low	£0.22m	£5.6m	£0.46m	£8.4m	£0.24m	£2.8m
High	£1.39m	£30.8m	£1.47m	£30.1m	£0.08m	-£0.7m
Best Estimate	**£0.8m**	**£18.2m**	**£0.97m**	**£18.9m**	**£0.17m (benefit)**	**£0.7m (benefit)**

Working assumption: 16GW distributed over 7 sites and 7 Funded Decommissioning Programmes.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

Basis of the review: [The basis of the review could be statutory (forming part of the legislation), it could be to review existing policy or there could be a political commitment to review]; Operation of the policy will be subject to ongoing review through the process of approving/considering operators' FDPs.
Review objective: [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?] Ongoing review will consider whether obligations under the regulations protect the taxpayer while at the same time do not place excessive burdens on nuclear operators.
Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach] Ongoing consideration of stakeholder views and operability of the regime from a legal and financial perspective.
Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured] Not applicable since FDP framework does not currently bind on any nuclear operators.
Success criteria: [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives] Operability of the regime and protection of the taxpayer.
Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review] Process of considering/approving and FDP, and annual reporting and quinquennial review will allow considerable engagement with operators.

Reasons for not planning a PIR: [If there is no plan to do a PIR please provide reasons here]
A review will be undertaken once once the regime is fully up and running and the first FDP agreed and sufficient experience of operating the regime has been gained by operators and Government.

Add annexes here.

Annex A – Specific Impact Tests

1. This proposal affects the regulatory processes in relation to investment in new nuclear power stations. All the companies likely to build new nuclear power stations will face the same legislation.

2. The draft Nuclear National Policy Statement, which sets out the Government's planning policy for the construction of new nuclear power stations, has been subject to an appraisal of sustainability. This has assessed the sustainability of nuclear power and identified the potential for positive effects in meeting the Government's climate change and security of supply objectives.

Carbon reduction

3. The Nuclear White paper sets out the Government's conclusions that nuclear power stations emit lower emissions than fossil-fuelled generation and is on a par with wind. As an illustration, it explained the impact emissions if our existing nuclear power stations were replaced by gas (8million tonnes of CO2) or coal (16 MtC). It concludes that new nuclear power stations could contribute significantly to meeting the Government's climate change objectives by displacing CO2.

Other Environment

4. The Nuclear National Policy Statement, which sets out the Government's planning policy for the construction of new nuclear power stations, has been subject to an appraisal of sustainability. This has assessed the sustainability of nuclear power and identified the potential for positive effects in meeting the Government's climate change and security of supply objectives.

Health

5. The Nuclear White Paper sets out the Government's conclusions that new nuclear power stations would pose very small risks to health and that the UK has an effective regulatory framework that ensures that those risks are minimised and sensibly managed. Furthermore the Government has published for consultation its proposed decision on Regulatory Justification which finds that the inherent systems in place for both the AP1000 and the EPR and compliance with the UK's robust regulatory regimes mean that the risk of radiological health detriment is very small.

Equality Impact Assessment

6. After initial screening as to the potential impact of this policy/regulation on race, disability and gender equality it has been decided that there will not be a major impact upon minority groups in terms of numbers affected or the seriousness of the likely impact, or both.

URN 10D/576 – Impact Assessment for the consultation on The Financing of Nuclear Decommissioning and Waste Handling Regulations