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Annex A: Horizon Nuclear Power comments on DECC Consultation on Funded Decommissioning Programme Guidance

The following comments are subsequent to the publication of the Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations¹ (February 2008) and the Government Response to the Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations² (September 2008).

The points raised in this note do not necessarily reflect every point in the document where changes are required: it is assumed that DECC will make any necessary consequential amendments where specific points are detailed multiple times in the guidance.

General Points

- Content of the Government's response to the consultation needs to be fully reflected throughout the new guidance.
- There is significant repetition throughout the document which does not help to provide clarity, and in some cases introduces additional uncertainty. By way of an example, paragraph 4.2.5 (p50) states: "Operators will also be expected to seek the approval of the Secretary of State to modify their plan to reflect changes in the regulators' requirements, which affect the way they will carry out these activities", but this is then supplemented by paragraphs 4.2.11-4.2.13 (pp 51,52) under a section specifically titled "Relationship between the Base Case and regulatory requirements". Systematic simplification of the document would help to provide increased clarity for those relying on the guidance.
- Recognition is needed that the Base Case has not necessarily been strategically
 optimised to best meet national needs, nor those of new-build plants. The commercial
 development of nuclear power stations is likely to require a number of different
 approaches to be considered and eventually adopted.
- The Decommissioning and Waste Management Plan (DWMP) should contain the
 minimum of technical information to allow DECC / Nuclear Liabilities Financing Assurance
 Board (NLFAB) to ensure adequate accounting of costs, which will allow operators the
 flexibility to take day-to-day operational decisions without fear of breach of Funded
 Decommissioning Programmes (FDPs). Materiality threshold points will need reiterating
 and reflecting where appropriate to ensure it is taken into account.
- The degree of prudence needs to be realistic and to reflect the opportunities as well as the risks involved.
- Greater recognition is required of the implications of providing financial assurance on the scale implied over the timescales involved and of the need for realism in the practical means of delivering this.

¹ Now available at

Section 2

- Paragraph 2.3, bullet 2 (p13): the final sentence on this page is superfluous. The intention should be to meet the technical standards agreed with the regulators. There is no need to define or refine technical issues within the FDP sphere (change 1).
- We understand that it is no longer the intention to develop a Memorandum of Understanding (MoU) between DECC and the regulators, as was raised in paragraph 1.6 of the Government response to the consultation. In the absence of this document it is important that the guidance makes explicitly clear that technical issues are the domain of the regulators and will not be reassessed through the FDP process.
- Paragraph 2.5, bullet 3 (p14): the use of 'significant' here in relation to risk premium implies 'large' whereas we expect 'reasonableness' to also prevail whilst properly meeting taxpayers' interests. Excessive risk premia imply a subsidy to the UK legacy by new-build (change 2). Similarly in para 2.33 bullet 3 (p21).
- <u>Clarity on costs...</u> section (p15): we expect recognition of a deferred fixed price option and of no fixing at all (where all risk would remain with the operator). Contract proposals need to be understood.
- Government needs to own the responsibility for ensuring that LLW disposal facilities will be available to meet the needs of new-nuclear. Reference should be made to the new LLW strategy recently published by the NDA.³
- Clarity on when... (p16): Expected that government will assume title to all wastes at the latest by the conclusion of plant decommissioning (change 3).
- Attention needs to be given to providing disposal facilities at the time that waste becomes available i.e. revising the notional legacy-related plans for GDF.
- More explicit acceptance is required of station operational life assumptions being made through licensing / GDA process: the assumption of a 40 year life when the design and operating intention is 60 years serves to illustrate that conservatism should not be introduced piecemeal; prudence should be established more coherently. Indeed Energy White Paper (2006) modelling included a sensitivity of 60 year reactor life which could be reflected in new drafts, rather than strict adherence to 40 year (change 4).
- Clarity on what is included... (pp22-23): Table 3 introduces aspects of the Base Case which reflect legacy plans whereas we aspire to work to an improved approach, viz.
 - Removal of all wastes from site at the conclusion of decommissioning, at the latest about 15 years after the cessation of 60 years generation;
 - Delivery by this time of all ILW and spent fuel to GDF in containers/casks which will not require repackaging.
 - Central storage and encapsulation as an option that could best meet national needs and new-build plant.
- We accept that government has acknowledged that alternatives to its Base Case may be pursued but firm recognition of this is needed (i.e. not regarded as inferior); evident government support is also sought.

Section 3

Clarity is needed on responsibility for the review and verification of nuclear liabilities; at
present this is scattered with candidates being operator, fund management, NLFAB and
SoS. We favour it being the responsibility of operators (by analogy with financial reporting)
but we have doubts about third parties being able to offer indemnities of the required sums
over the timescales involved.

³ http://www.nda.gov.uk/news/llw-strategy.cfm

Although strictly relating to the Energy Act 2008 itself, some of the adverse corporate
financing implications of the unlimited powers of the Secretary of State in relation to FDP's
provided in the Act, combined with the unclear scope of section 56 of the Act, still need to
be resolved. We look forward to having sight of developments and contributing to the
discussion through the forthcoming Energy Security and Green Economy Bill, and are
willing to provide any assistance to the Department as may be required.

Section 4

- Recognition of where licence / regulatory approval will be sufficient and where additional information or repetition in FDP would not provide additional value (e.g. plans for all waste streams (paragraph 4.1.12, p47).
- Greater prominence to section 4.2.3 would be appreciated (p50, flexibility to allow operators to propose alternative ways). Also information is requested which could be commercially / market sensitive and which would depend on operational decisions to be taken in many years time, and therefore we do not believe should be included.
- We do not think that the <u>content</u> of the DWMP needs to cover phase 1 and 2 (as on pp 53-54) but recognise that these are phases in the life of a nuclear plant where there will be development / approvals etc <u>of</u> the DWMP.
- Paragraph 4.2.24 (p58): The planned life of stores is currently required to be 100 years whereas information made available since February 2008 (alongside the NPS consultation) indicates that 100 years storage of irradiated fuel will be required, implying a total store life of 160 years (i.e. 100 years cooling plus 60 years of operation). As expressed elsewhere, we believe this can be significantly optimised.
- For the sake of clarity, much of the technical detail here is for the technical regulators e.g.
 record keeping, waste minimisation. We do not accept many of the assumptions even if
 the basis of the Base case were retained e.g. timescales of decommissioning phases,
 where experiences of dismantling and decommissioning projects operated by HNP parent
 companies and other projects have already shown better overall performance.
- Provision of too much information for no obvious benefit (e.g. paragraph 4.4.3) but could tie operator into practices that would require approval to modify.
- Particular confusion around paragraphs 4.4.2 and 4.4.3 (p70) over what information should be provided. E.g. "4.4.2 ... the Secretary of state does not consider it appropriate to impose a legal duty on operators ... to provide cost estimates, nor details of the financial security put in place", then followed by "4.4.3 ... the Secretary of State would expect operators to provide him with cost estimates for the management of wastes ... for information".
- Table 5 (p61) repetition of site-end state assumption change required as per **change 1**, page 66 use of "significant" change required as per **change 2**.

Section 5

- **Guiding principles** (paragraph 5.2.6, p85): it will be difficult (and undesirable) to have board members with no influence whatsoever (relevant to "independence of fund" 2nd paragraph 5.2.6, and also paragraphs 5.3.5, 5.4.4);
- The fund will not cover costs incurred as a result of a political (not technical) decision to shut plant;
- Accounting transparency between funds can be delivered without the need for separate fund investments, and therefore it's not clear what the benefit of explicitly separate funds for decommissioning and waste disposal are. Also a number of questions arise: what are the implications for a multi-plant fleet? must each plant have two separate funds, or could

decommissioning funds across the fleet be combined, and fleet-wide waste management funds be combined in a separate fund?

- <u>Target value for the Fund</u> (paragraph 5.5.2, p94): the fund would only be expected to accumulate 100% of inflation, risk and uncertainty adjusted value of decommissioning liabilities, otherwise there's a risk of piling risk premia on top of risk premia (**change 5**).
- In the context of independence of the funds, solutions currently under discussion between potential operators and HMRC, including the use of a limited company within the same tax group as the operator as the FundCo, should not be ruled out by the guidance, provided that independence and insolvency remoteness can be adequately established.
- The operator should be expected to propose a contribution schedule to fund, subject to challenge from the fund managers (paragraph 5.5.7, p95). Also, fund managers should be able to "report" the operator to the Secretary of State if the fund becomes exceptionally under-funded outside of reporting periods, but should not require "enforcement powers" over the Operator (paragraph 5.5.10, p95).
- Limitations on modifications to fund contributions (paragraph 5.5.11, p95) are too onerous
 and prescriptive without delivering significant benefit. There may also be operational or
 strategic decisions taken throughout the life of the plant that lead to significant reductions
 in cost estimates, and there should be allowance for money to return to the operator, with
 the approval of the fund, in these circumstances rather than only being able to reduce
 future contributions.
- There will be difficulties in appointing fund managers so far in advance of any funds being accrued (paragraph 5.5.13, p96) and ensure their retention until plant becomes operational and payments are made into the fund.
- Likelihood of under funding in any one year is high as fund balance will inevitably be dependent on stock market fluctuations: a requirement to propose and take remedial steps annually is too onerous (paragraph 5.8.6, p104).
- Protection against an insufficient fund (paragraph 5.10.2, p106): definition of events which will be considered as triggering events for the early closure of a plant needs further elaboration
- We would fully support the EC recommendation on decommissioning costs which states that where a site licensee has no influence on the financial management of an external decommissioning fund the value of the investments should be guaranteed by the state (Commission recommendation 2006/851/Euratom⁴, section 7 paragraph 17).
- New guidance should reflect outcomes of Government work on insurance issues, where it is available (paragraph 3.23 of Government response). In the absence of deliverables on this point, recognition should be made in the revised text.
- Secretary of State powers (section 5.13, p111) will need limiting as highlighted previously.

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⁴ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:330:0031:0035:EN:PDF

Annex B: summary of specific suggested textual changes

Change no.	Para.	Marked up change
1	2.3	To provide further clarification, the Government considers that full decommissioning costs are the costs of: • dismantling the nuclear power station at the end of its generating life • removing all station buildings and facilities and returning the site to a state agreed with the regulators and the planning authority and released from the control of the nuclear site licence. This is likely to be a state similar to "Greenfield", depending on the state of the site prior to construction of the station.
2	2.5	 To provide further clarification, the Government considers that an operator's full share of waste management costs is: the costs that are directly attributable to disposing of new build higher activity waste into a geological disposal facility; a contribution towards the fixed costs of constructing such a geological disposal facility; a significant reasonable risk premium over and above these costs to take account of uncertainties around the cost of constructing such a facility and the time when it will be able to accept new build waste; and the cost of managing that waste pending disposal (or pending transfer for disposal).
3	2.15	The Government will agree to take title to and liability for an operator's waste by the conclusion of plant decommissioning according to a schedule that will be agreed at the same time as the operator's Funded Decommissioning Programme is approved and alongside setting a fixed unit price for the waste disposal service.
4	2.20	The Base Case referred to at paragraph 4.1.9 assumes a 40 year generating life for new nuclear power stations. This is a sensible assumption and operators would be expected to take account of it in their Funded Decommissioning Programme, although it will be open to operators to suggest alternative station lifetimes which we would expect to be in line with reactor lifetimes proposed through the Generic Design Assessment process. If operators wish to modify their Programme during the generating period to extend the life of the station beyond that 40 year period the period initially agreed, then as well as needing the agreement of the regulators to the change and the approval of Secretary of State to modify their Programme, they will need to revisit the schedule to determine and have the Secretary of State approve when the Government will take title to and liability for the waste.
5	5.5.2	For decommissioning liabilities, to minimise the risk that the funds accumulated are insufficient, the Fund will be expected, based on robust assumptions, to accumulate at least 100 per cent of the inflation, risk and uncertainty adjusted value of the operator's predicted decommissioning liabilities