RESPONSE TO THE CONSULTATION DOCUMENT ON A FIXED UNIT PRICE METHODOLOGY AND UPDATED COST ESTIMATES

Introduction

Horizon Nuclear Power

1. Horizon Nuclear Power (HNP) welcomes the opportunity to respond to the Government's consultation on a Fixed Unit Price Methodology and Updated Cost Estimates (the "FUP Consultation").

2. HNP is a joint venture between E.ON UK and RWE npower. We aim to develop and construct around 6GW of new nuclear power station capacity in the UK and have already acquired interests in land at Oldbury in Gloucestershire and Wylfa on Anglesey in Wales. We have also concluded grid connection agreements for both sites.

Executive Summary

3. The progress being made in relation to issues surrounding nuclear waste and decommissioning through the publication of this Fixed Unit Price (FUP) Consultation and the consultation on the Financing of Nuclear Decommissioning and Waste Handling Regulations is an important step in enabling potential new nuclear operators to continue working on the development of their projects. Although we agree with the approach proposed to be taken in relation to many of the matters raised in the FUP Consultation, the main areas with which we take issue relate to: the FUP deferral period (Q1); aspects of the methodology for determining the FUP (Q3); contributions to the fixed costs of a Geological Disposal Facility (Q4); and the pricing units for spent fuel disposal (Q5). These are summarised further below in this Executive Summary and in more detail in the main body of our response.

Availability of Information

4. In addition, we are concerned that only relatively limited information is available to potential operators at this stage and that, depending on the state of progress of any individual project, operators will only have had a limited opportunity to carry out verification of some of the issues raised in the FUP Consultation. A final investment decision to proceed with a new nuclear project is not likely to be taken however until a later stage when there is greater clarity in relation to the whole range of factors affecting new nuclear build, not just in relation to waste and decommissioning but also for example, in relation to the planning regime and process. As such, whilst we have commented on matters raised in this FUP Consultation on which we have specific views at this stage in the process, and as noted elsewhere in our responses, there are areas in which we believe insufficient information has been made available to interested parties to make fully informed comments. It will not be until all relevant matters have become clear that a new nuclear operator will be able to take a final investment decision to proceed with nuclear new build in the UK.

FUP Deferral

5. With regards the methodology to determine a Fixed Unit Price (FUP), we are broadly in agreement with the option to defer the setting of the FUP and the proposed maximum

deferral period. We believe, however, that deferral should be linked to significant progress in the Managing Radioactive Waste Safely (MRWS) programme in order to achieve maximum utility from the deferral option.

Title to Waste

6. We welcome the Government's decision to take title to and liability for an operator's waste at the time of decommissioning, but would propose that the timetable be subject to periodic reviews. We would also be grateful for further clarity as to whether or not it is the Government's intention that actual transfer of title and liability for an operator's waste be related to the actual decommissioning.

Cost Modelling Methodology

7. We welcome the concept of cost modelling to achieve certainty for nuclear operators and protection for the taxpayer, but are concerned that the proposed methodology might allow the Secretary of State arbitrarily to determine a FUP. Given the relatively limited information to which we have had access, we are concerned that we cannot meaningfully comment on the details of the cost modelling process itself. From what we have seen, however, we disagree with the probability level proposed to be applied in the methodology set out in the worked example. Furthermore, we would be grateful for confirmation from DECC that potential operators will be allowed to audit the cost model themselves.

Geological Disposal Facility

8. With regards the Geological Disposal Facility (GDF), we do not agree that new nuclear operators should be required to contribute to the total fixed costs of a GDF that is already required to dispose of legacy waste. Additionally, as fixed costs are largely unrelated to the volume of waste being disposed of, the contribution by new nuclear operators to the total fixed costs would have the effect of subsidising legacy operators and legacy wastes. Further, we ask for clarity of the principle that operators be allowed to terminate the fixed price disposal contract, should more cost-effective arrangements become available for spent fuel and waste disposal.

FUP Units

9. As to the units to be used for the Fixed Unit Price, we welcome the use of volumetric measure for intermediate level waste (ILW) but would suggest that £/tHM (heavy metal) would be a more appropriate unit for spent fuel pricing, which is line with practice elsewhere in the UK.

Updated Cost Estimates

10. With regards the updated cost estimates, we believe them to be broadly credible but based on the available information, the cost estimates are generic and we would propose that in order to validate the updated cost estimates properly, we will need to carry out more work based on our specific proposals.

Fixed Unit Price Methodology and Updated Cost Estimates

11. Our responses to the specific consultation questions appear below and follow the numerical order of the questions as they appear in the FUP Consultation document.

Consultation Questions on a Fixed Unit Price Methodology and Updated Cost Estimates

Chapter 3: The Methodology to determine a Fixed Unit Price

Q1: Do you agree or disagree that prospective operators of new nuclear power stations should be given the option to defer the setting of their Fixed Unit Price?

12. We welcome the option to defer the setting of the Fixed Unit Price (FUP), provided that the option to set the FUP at the time the FDP is first agreed also remains.

Q1: If so, do you agree that this deferral should be limited to 10 years after the nuclear power station has commenced operation? Do you have any comments on the way the Government proposes to determine an expected Fixed Unit Price as the basis for an operator's interim provision in the event that they choose to defer the setting of their Fixed Unit Price?

13. We note that the proposed maximum deferral period of 10 years has been derived so as to allow sufficient time for operators to make up any shortfall in their fund once the final FUP has been fixed. With a planned operational life of 40 years this implies that 30 years of operation, post-fixing, is considered adequate. Modern reactors are capable of a 60-year operational life and so applying the same approach of requiring 30 years post fixing, suggests a deferral period of 30 years rather than 10 years would be more appropriate.

14. Having said this, however, in order to give a meaningful FUP, we believe that the deferral should be linked to a substantive milestone in the progress of the Managing Radioactive Waste Safely (MRWS) programme. As is recognised in the consultation document, selection of the GDF is the most significant uncertainty in the estimation of waste disposal costs and not to have this linkage is likely to reduce the benefits of the deferral option. As mentioned above, we also recognise that there will be a concern that the operator should be able to fund any difference between the eFUP and the actual FUP during the operating life of the station and therefore propose that there should be a "long stop date" for this, as proposed above, of 30 years after the start of commercial operation.

Q1: Do you have any comments on the way the Government proposes to determine an expected Fixed Unit Price as the basis for an operator's interim provision in the event that they choose to defer the setting of their Fixed Unit Price?

15. We have no specific comments on the way the Government proposes to determine the eFUP.

Q2: Do you agree or disagree with the proposal that the Schedule for the Government to take title to and liability for an operator's waste should be set in relation to the predicted end of the decommissioning of the nuclear power station?

16. We agree that the Government should take title to and liability for an operator's waste at a time related to the end of decommissioning, rather than at a later date as was previously proposed. We believe that the timetable should be subject to periodic reviews and that actual transfer of title and liability should ultimately be related to the actual decommissioning date and should be grateful for clarification that this is the intention.

Q2: Do you have any comments on the way the Government proposes to recoup the additional costs it will incur in this case?

17. We have no specific comments on the way the Government proposes to recoup the additional costs.

Q3: Do you agree or disagree that the proposed methodology to determine a Fixed Unit Price strikes the right balance in protecting the taxpayer, by taking a prudent and conservative approach to cost estimation, while facilitating new nuclear build by providing certainty to operators? What are your reasons?

18. The methodology for setting a FUP involves two components (3.3.61):

    - A cost modelling process, taking into account the level of uncertainty around the estimation of those costs; and

    - Determination of the FUP by the Secretary of State (SoS) in which he would have regard to costs derived from the model.

    At this high level, we agree that a cost modelling process is essential, but we are concerned that the SoS can then arbitrarily determine a FUP. We are also concerned that we cannot meaningfully comment on the details of the cost modelling process itself: we have, for example, never had access to the NDA Parametric cost model and we are unable to assess or understand what level of uncertainty would be ascribed to costs calculated by the model, or the process which would be used to calculate such uncertainties. The cost estimates from the model used in the worked example are significantly higher than we believe our shareholders experience elsewhere in Europe.

19. We would also disagree with the proposed methodology as it is presented in the worked example. As a significant optimism bias is already applied to the calculation, we believe that the price should be calculated on a P50 level, representing on average a neutral position, rather than, as is currently indicated, a minimum P80 level.

20. Please would DECC confirm when potential operators will be given the opportunity to audit the model.

Q4: Do you agree or disagree with the proposed approach to determining an operator's contribution to the fixed costs of constructing a Geological Disposal Facility? What are your reasons?

21. We believe that new nuclear operators should not be required to contribute to the total fixed costs of a GDF that is already required to dispose of legacy waste. It is Government policy that a GDF will be built for legacy wastes and that the Government therefore has to incur these costs whether or not there are additional wastes arising from new nuclear build. Also, as is stated in the consultation document, fixed costs are

largely unrelated to the volumes of waste being emplaced so, to require new nuclear operators to contribute to the total fixed costs means that new nuclear will effectively be subsidising legacy operators and legacy wastes. However, to the extent that fixed costs are volume-related, new nuclear operators should bear a share.

22. Further, it was recognised in both the February 2008 and the current consultation that operators may terminate the fixed price disposal contract, should alternative arrangements become available. The proposal in relation to the fixed price contract must be such as to enable operators to have a real choice and ability to retain control of their plant operation, by being able to consider other available options for spent fuel and waste disposal.

Q5: Do you agree or disagree with the proposal that the units to be used for the Fixed Unit Price are pence per kWh for spent fuel and cubic metres of packaged volume for intermediate level waste? What are your reasons?

23. We agree that a volumetric measure for ILW seems the most sensible option as this incentivises waste minimisation.

24. However we would suggest that £/tHM (heavy metal) would be a more appropriate unit for spent fuel pricing. We believe this is consistent with practice elsewhere in the UK and has the advantage of creating an incentive to minimise the disposal volumes.

Chapter 5: Updated estimates of the costs for decommissioning, waste management and waste disposal

Q6: Do the updated cost estimates represent a credible range of estimates of the likely costs for decommissioning, waste management and waste disposal for a new nuclear power station?

25. We believe the cost estimates are credible, albeit extreme at the upper end of the range based on our shareholders' experience. However, given the limited information currently available they are clearly generic and we will need to carry out more work based on our specific assessments and proposals in order to validate them properly.