

**NOTICE UNDER REGULATION 16 OF THE JUSTIFICATION OF
PRACTICES INVOLVING IONISING RADIATION REGULATIONS 2004.**

To:
Nuclear Industry Association
Carlton House
22a St James's Square
London
SW1Y 4JH

On 4 June 2008, the Nuclear Industry Association ("the applicant") submitted an application to the Secretary of State for BERR for the Justification of certain types of New Nuclear Power Stations under the Justification of Practices Involving Ionising Radiation Regulations 2004 (the "Justification Regulations").

The Secretary of State for DECC, in exercise of his powers as the Justifying Authority under Regulation 16 of the Justification Regulations, hereby requires the Nuclear Industry Association to submit, within 28 days of today's date, the information requested in Annex A to this notice.

The information should be sent to the Justification Assessment Centre at justification@BERR.gsi.gov.uk.

Failure to comply with this notice, or provision of false or misleading information may amount to an offence as specified in Regulation 24 of the Justification Regulations, punishable by fines or imprisonment.

The recipient shall, within 14 days of the receipt of this notice, inform the Justifying Authority of any grounds upon which they believe the Notice ought to be varied or withdrawn.

Peter McDonald
For and on behalf of the
Justifying Authority.

30 October 2008

Volume 1

Chapter 1 – Proposed practice

1. In **para 1.7** the applicant states that the proposed practice includes designs that were classed as evolutionary in accordance with the IAEA-TECDOC-936, in April 1997. The applicant is asked to confirm whether it is their intention that only those designs requiring engineering and confirmatory testing at that time are included in the proposed practice and, if this is the case, provide evidence that the designs included in the application were deemed to be evolutionary in April 1997.
2. In **Table 1.1** the applicant is asked to provide further clarification of what is meant by “designs within practice commercially available in UK”. (i.e. At what point does the applicant consider that a design becomes commercially available in the UK?)
3. The applicant is asked to provide a further explanation of the contents of **Table 1.3**, including what is meant by “material scale of change” and why there would be a change of position if enrichment and fabrication were to take place solely in the UK.

Chapter 2 – Security of Supply

4. **Para 2.18** notes that the volume requirements for fuel are low in comparison to the global supply. The applicant is asked to provide further information to support this assertion including, where applicable, references to supporting sources and further quantification.

Chapter 4 – Potential for Radiological Health Detriments

5. The applicant is asked to provide further information in support of their assertion in **Chapter 4** that the radiological health detriment associated with the class or type of practice is small, in particular information on the relevance of doses and on levels of risk.
6. **Para 4.64** refers to a “large body of evidence” supporting the assertion that IAEA’S Type B test requirements cover all situations that can be realistically envisaged in the transport of spent fuel. The applicant is asked to provide a representative sample of the supporting evidence, including references.
7. The applicant is asked to provide further information and quantification on dose levels experienced by workers involved specifically in the decommissioning of reactors.

Chapter 5 – Radioactive Waste & Decommissioning

8. **Para 5.42** notes that the amount of spent fuel created by a station would depend on design and burn-up rate. The applicant is asked to provide further information on the relationship between fuel usage, burn-up rate and waste produced for the practice and the four example designs.

Chapter 6 – Environmental Impacts

9. Throughout **Chapter 6** the application makes the assertion that environmental detriment of the designs within the practice would be no greater than “other forms of generation”; however, there is a lack of information on the scale of those detriments relating to the proposed practice. The applicant is asked to provide further detail on the environmental detriments, including:
 - **6.5** – Further information on the environmental impact of plant construction and decommissioning for the practice.
 - **6.6** – Information on the scale of conventional waste produced by the practice.
 - Information on the scale of the environmental impact on water quality, with particular regard to thermal increase (Para **6.22**) and marine life (Para **6.28**)
10. The applicant is asked to provide information on the environmental impact of water abstracted for use other than in cooling.
11. The applicant is asked to confirm whether the Control of Major Accident Hazards Regulations 1999 would apply to the chemicals mentioned in **para 6.31**.
12. **The table after para 6.35** sets out figures on land area usage and efficiency for other types of generation. To make these comparisons meaningful, the applicant is asked, where possible, to provide information for nuclear generation in similar terms.

Chapter 8 – Other Considerations

13. The applicant is asked to provide further information on security of supply and export control issues of heavy water, required for the ACR-1000 reactor.
14. The applicant is asked to provide further information on the “controls and measures” noted in **para 8.14** to address additional risks from the implications of climate change.

Volume 2

Annex 6

15. The applicant is asked to set out why it considers that for key parameters relevant to Justification each of the four example designs would fall within the class or type of practice defined in Volume 1.

Other

16. The applicant is invited to provide the Justifying Authority with any further information or evidence that they feel would be relevant to their application.