

## TERMS OF REFERENCE AND METHOD OF WORKING EXPERT PANEL

Background

Mr F J Grimer is a Principal Scientific Officer at the Building Research Establishment. He believes research he has undertaken, alongside his other research over the past two decades, on a Hierarchical Mechanics of Failure applicable specifically to heterogeneous materials such as concrete may have important safety applications to the integrity and safety of concrete pressure vessels encasing nuclear reactors. The evidence he has produced in support of his belief was examined in 1987 by Dr Watson the then Director, BRE who had confidential advice from his senior managers and from three of the BRE Visitors Panel. The Director found against his evidence and, as a result, instructed Mr Grimer not to pursue this research in BRE time any further without explicit authority from his line management, and not to produce any 'BRE Note' (an internal record of research) without such authority.

Mr Grimer appealed against these instructions to the DOE Permanent Secretary, who confirmed Dr Watson's view. Mr Grimer then sought leave to appeal, on conscience grounds, to the Head of the Home Civil Service. Before proceeding with consideration of that appeal, Sir Terry Heiser has decided that formal advice from a distinguished Panel of Experts should be sought on the value of Mr Grimer's ideas to science and their implications for nuclear safety.

Terms of Reference

The Expert Panel is requested:

- (a) to assess Mr Grimer's theory of the Hierarchical Mechanics of Failure and its applicability to heterogeneous materials such as concrete;

- (b) to consider the relevance of this theory to systems failures in the nuclear power industry where these concern aspects of materials performance or engineering design:
- (c) to prepare and submit a report to the Director, BRE on (a) and (b) based on documents to be supplied to the Panel by its Secretary and any additional oral or written submission which Mr Grimer wishes to provide to the Panel.

Method of Working and timescale

- (i) During the course of the work of the Panel, Mr Grimer will:
  - (a) receive a copy of any papers that are to be submitted to the Panel by its Secretary
  - (b) be given an opportunity to submit any further papers to the Panel through its Secretary not later than one month from commencement of the Panel's work.
  - (c) be given an opportunity to make a presentation at a meeting of the Panel and to answer questions from the Panel members; if he wishes, Mr Grimer may be accompanied by a friend or colleague when meeting the Panel.
  - (d) receive a copy of the final report of the Panel.
- (ii) It is for the Panel to decide, in discussion with its Secretary, the time table for its meeting and other actions required to discharge its Terms of Reference and the provisions of (i) above.

The Panel's Report

The final report of the Expert Panel will be submitted to the Director, BRE in accordance with its Terms of Reference. It is not the intention of the Department of the Environment to publish the Panel's report but the Department would feel free to disclose the report or refer to its contents if necessary.