



**GE Nuclear Energy**

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Project 717

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U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Attention: Chief, Information Management Branch  
Program Management  
Policy Development and Analysis Staff

Reference: Letter S. Hucik, GE to S. Collins, NRC, Pre-application Review of ESBWR,  
dated April 18, 2002

Subject: **ESBWR Test and Analysis Program Description, NEDC-33079 and  
Supplement 1 - Document Transmittal for Pre-Application Review of  
ESBWR**

The CD accompanying this letter contains the GE non-proprietary report NEDC-33079, "ESBWR Test and Analysis Program Description", (TAPD) and Supplement 1 to NEDC-33079, "Discussion of PIRT Parameters". It is item number 2 in Enclosure 1. Supplement 1 also contains responses to NRC Requests for Additional Information (RAIs) related to the SBWR TAPD, dated July 11, 1996. This report is submitted in support of the pre-application review of the ESBWR (Reference).

GE is seeking NRC concurrence on the adequacy of the testing program for the ESBWR. The ESBWR TAPD, the test reports and the scaling report (Items 2, 7, 8, 9 and 10, Enclosure 1) provide the background information and bases for the NRC to address the issue of the adequacy of the testing program for the ESBWR. The ESBWR TAPD (Item 2, Enclosure 1) provides a road map for the technology program that includes PIRTs and defines the necessary test and analysis program. The SBWR and ESBWR Test Reports (Items 7, 8 and 9, Enclosure 1) provide the results of the test programs. The ESBWR Scaling Report (Item 10, Enclosure 1) provides the scaling bases for the tests. The NRC is requested to issue a single assessment on the adequacy of the ESBWR testing basis, based on the above referenced five items.

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GE is also seeking approval for the use of the TRACG code for the one-time application for Design Certification of the ESBWR. The ESBWR Test and Analysis Program Description (TAPD), NEDC-33079, (Item 2, Enclosure 1) defines the necessary qualification program for the ESBWR and will be used in conjunction with items in Enclosure 1, as background for the TRACG application. GE is seeking a single NRC SER for the application of TRACG to the ESBWR SSAR to be used for Design Certification.

If you have any questions about the information provided here, please contact Atam Rao at (408) 925-1885, or myself.

Sincerely,

  
J. Deacon

Enclosures

(1) List of Reports in Support of ESBWR Pre-application Review

cc: A. Cabbage USNRC (with enclosures and CD)  
J. Lyons USNRC (w/o enclosures)  
G.B. Stramback - GE (with enclosures and CD)