



GE Energy

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Project 717

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U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

**Subject: GE Response to Results of NRC Acceptance Review for ESBWR
Design Certification Application – Item 5 (TAC # MC8168)**

In the Reference 1 letter, the NRC indicated that additional information was required in certain areas of the ESBWR design certification application before the NRC could begin its review in those areas. Enclosures 1 and 2 contain additional information in the area of human factors engineering (item 5 in the Reference 1 letter). The following information is included:

- Enclosure 1 contains the Licensing Topical Report (LTR) NEDO-33217, *ESBWR Man-Machine Interface System and Human Factors Engineering Implementation Plan*, October 2005. This is the current version of this Implementation Plan.
- Enclosure 2 contains a restructured DCD Chapter 18, "Human Factors Engineering," which will be included in the issued Revision 01 of the DCD.

Chapter 18 has been restructured to specifically address NUREG 0711 (February 2004 revision) and details, with respect to the NUREG, have been added to both Enclosures. In addition, Appendix E has been deleted from Chapter 18.

Enclosures 1 and 2 are provided in full compliance with GE's Quality Assurance (QA) Program (NEDO-11209-04A, *GE Nuclear Energy Quality Assurance Program Description*, March 31, 1989), which is NRC approved.

Consistent with this QA program, Enclosures 1 and 2 are identified as "Conditional Release – pending closure of design verifications." While GE has completed review of the technical accuracy and completeness of all the enclosures' content, and believes that

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the documents are accurate, complete and ready for NRC review, some internal GE documentation remains to be closed. Accordingly, the conditional release status is identified on the documents until closure of the internal documentation, which is scheduled for the fourth quarter of 2005.

If you have any questions about the information provided here, please let me know.

Sincerely,



David H. Hinds
Manager, ESBWR

Reference:

1. MFN 05-103, Letter from U. S. Nuclear Regulatory Commission, to Steven A. Hucik, *Results of Acceptance Review for ESBWR Design Certification Application (TAC NO. MC8168)*, September 23, 2005

Enclosures:

1. NEDO-33217, *ESBWR Man-Machine Interface System and Human Factors Engineering Implementation Plan*, October 2005
2. MFN 05-112, Restructured 26A6642BX, Revision 0, October 2005

cc: WD Beckner USNRC (w/o enclosures)
AE Cubbage USNRC (with enclosures)
LA Dudes USNRC (w/o enclosures)
GB Stramback GE/San Jose (with enclosures)
eDRF 0000-0046-9771
eDRF 0000-0046-8904

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Enclosure 1

ENCLOSURE 1

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Licensing Topical Report

**NEDO-33217, “ESBWR Man-Machine Interface System
and Human Factors Engineering Implementation Plan”,
October 2005**

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Enclosure 2

ENCLOSURE 2

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Restructured 26A6642BX, Revision 0, October 2005