

June 13, 2006

Mr. David Hinds, Manager, ESBWR
General Electric Company
P.O. Box 780, M/C L60
Wilmington, NC 28402-0780

SUBJECT: ESBWR DESIGN CERTIFICATION STATUS

Dear Mr. Hinds:

By letter dated August 24, 2005, General Electric Company (GE) submitted an application for final design approval and standard design certification of the economic simplified boiling water reactor (ESBWR) standard plant design. By letter dated December 1, 2005, the Nuclear Regulatory Commission (NRC) staff informed GE that the application, as revised and supplemented, was sufficiently complete to allow the staff to proceed with its detailed technical review, and established a schedule for issuance of the safety evaluation report (SER) with open items. This schedule was based on commitments made by GE regarding submission of supporting information, including topical reports and Revision 1 of the design control document (DCD), as documented in letters dated November 22 and 30, 2006, respectively. This schedule was also based on receipt of timely and complete responses to staff requests for additional information (RAIs).

The enclosed table provides the status of GE's submittal of topical reports and DCD Revision 1. While the majority of these documents have now been submitted, several were received late, and some have not yet been received. Also, timeliness of RAI responses, as discussed in our January 5, 2006, letter, continues to be an issue. These delays and any future delays may affect the completion date for the SER with open items and may impact the number and scope of open items identified.

We appreciate your attention to these matters as they will help us to complete the ESBWR design certification review in a timely and efficient manner.

D. Hinds

-2-

If you have any questions or comments concerning this matter, please contact me at (301) 415-2875 or aec@nrc.gov.

Sincerely,

/RA/

Amy E. Cubbage, Acting Branch Chief
ESBWR/ABWR Projects Branch
Division of New Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 52-010

Enclosure: As stated

cc: See next page

D. Hinds

-2-

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ESBWR

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Status of GE Submittals for ESBWR Design Certification

| Topical Report Number and Title | GE Commitment | Submittal date | Notes |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------------------------------------|
| Thermal Hydraulic codes | | | |
| NEDE-33083P, Supplement 2, TRACG Application for ESBWR Anticipated Transient Without Scram | 01/13/06 | 1/13/06 | |
| NEDE-32176P, Revision 3, TRACG Model Description | 01/6/06 | 04/20/06 | LATE |
| Instrumentation and Control | | | |
| NEDE-33232P, Revision 1, Safety System Logic and Control Reactor Trip and Isolation Function (SSLC/RTIF) System Performance Specification | 12/12/05 | 12/15/05 | |
| NEDE-33233P, Safety System Logic and Control Reactor Trip and Isolation Function (SSLC/RTIF) Hardware and Software Specification | 12/12/05 | 12/15/05 | |
| NEDO-33234, Revision 1, Reactor Trip and Isolation Function Digital Trip Module Function Software Design Specification | 12/12/05 | 12/15/05 | |
| NEDO-33226, ESBWR I&C Software Management Plan | 04/07/06 | 03/27/06 | |
| NEDO-33227, ESBWR I&C Software Configuration Management Plan | 04/07/06 | 03/27/06 | |
| NEDO-33229, ESBWR I&C Software Development Plan | 04/07/06 | 03/27/06 | |
| NEDO-33245, ESBWR I&C Software Quality Assurance Plan | 04/28/06 | 01/18/06 | |
| NEDO-33230, ESBWR I&C Software Safety Plan | 04/28/06 | 01/31/06 | |
| NEDO-33228, ESBWR I&C Software Verification and Validation Plan | 04/07/06 | 01/18/06 | |
| NEDO-33246, ESBWR I&C Software Integration Plan | 04/28/06 | 01/31/06 | |
| NEDO-33247, ESBWR I&C Installation Plan | 05/05/06 | 01/31/06 | |
| NEDO-33248, ESBWR I&C Operations and Maintenance Plan | 05/05/06 | 04/19/06 | Maintenance & operations plans were combined |

Enclosure

| | | | |
|----------------------------------------------------------------------------------------------------------|----------|----------|---------|
| NEDO-33249, ESBWR I&C Software Training Plan | 05/05/06 | 04/09/06 | |
| NEDO-33251, ESBWR I&C Defense in Depth and Diversity Evaluation report | 05/12/06 | | OVERDUE |
| Human Factors Engineering | | | |
| NEDO-33217, Rev, 1, ESBWR Man-Machine Interface System and Human Factors Engineering Implementation Plan | 01/06/06 | 01/06/06 | |
| NEDO-33262, Operating Experience Review (Human Factors) Implementation Plan | 01/31/06 | 01/31/06 | |
| NEDO-33219, System Functional Requirements Analysis Implementation Plan | 01/31/06 | 01/31/06 | |
| NEDO-33220, ESBWR Allocation of Functions Implementation Plan | 01/31/06 | 01/31/06 | |
| NEDO-33221, ESBWR Task Analysis | 01/31/06 | 01/31/06 | |
| NEDO-33266, ESBWR Human Factors Engineering Staffing and Qualifications Plan | 02/28/06 | 03/09/06 | LATE |
| NEDO-33267, ESBWR Human Factors Engineering Human Reliability Analysis Implementation Plan | 02/28/06 | 03/10/06 | LATE |
| NEDO-33268, ESBWR Human Factors Engineering Human-System Interface Design Plan | 02/28/06 | 03/31/06 | LATE |
| NEDO-33xxx, Design Implementation Plan | 03/31/06 | | OVERDUE |
| NEDO-33xxx, Procedures Development Plan | 03/31/06 | | OVERDUE |
| NEDO-33xxx, Training Development Plan | 03/31/06 | | OVERDUE |
| NEDO-33xxx, Human Factors Engineering Verification and Validation Plan | 03/31/06 | | OVERDUE |
| NEDO-33xxx, Human Performance Monitoring Plan | 03/31/06 | | OVERDUE |
| Fuel, Critical Heat Flux Correlation and Control Rods | | | |

| | | | |
|-----------------------------------------------------------------------------------------------|----------|----------|-----------------------------------|
| NEDE-33236P, GE14 Fuel Assembly Mechanical Design Report | 11/21/05 | 11/21/05 | |
| NEDE-33241P, GE14 Fuel Rod Thermal-Mechanical Design Report | 11/21/05 | 11/21/05 | Revision 1 submitted on 01/13/06 |
| NEDE-33238P, GE14 Pressure Drop Characteristics | 12/12/05 | 12/12/05 | |
| NEDE-33242P, GE14 for ESBWR Fuel Rod Thermal Mechanical Design Report | 01/23/06 | 01/23/06 | |
| NEDE-33240P, GE14E Fuel Assembly Mechanical Design Report | 02/06/06 | 01/31/06 | |
| NEDE-33239P, GE14 for ESBWR Nuclear Design Report | 02/20/06 | 02/16/06 | |
| NEDE-33237P, GE14 for ESBWR - Critical Power Correlation, Uncertainty, and OLMCPR Development | 03/06/06 | 03/02/06 | |
| NEDE-33243P, ESBWR Marathon Control Rod Nuclear Design Report | 04/24/06 | 05/23/06 | LATE |
| NEDE-33244P, ESBWR Marathon Control Rod Mechanical Design Report | 04/24/06 | | OVERDUE |
| Fission Product Removal | | | |
| NEDE-33XXXP, Fission Product Removal Evaluation Model | 04/28/06 | | OVERDUE |
| Flow Induced Vibration | | | |
| NEDE-33259P, ESBWR Reactor Internals Flow Induced Vibration Program, Part I | 01/13/06 | 01/13/06 | |
| NEDE-33XXXP, ESBWR Reactor Internals Flow Induced Vibration Program, Part 2 | TBD* | | *Schedule commitment not provided |
| Containment Load | | | |
| NEDE-33261P, ESBWR Containment Load Definition | 04/28/06 | 05/18/06 | LATE |

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|-----------------------------------------------------------|----------|----------|---------------------------------------------------------------------|
| PRA Report Revision 1 | | | |
| NEDO-33201, ESBWR PRA Report, Chapters 1, 11, and 17 - 20 | 01/06/06 | | OVERDUE By letter dated 1/16/06, GE revised commitment to 3/3/06 |
| NEDO-33201, ESBWR PRA Report, Chapters 2 - 6 | 01/06/06 | 02/08/06 | LATE By letter dated 1/16/06, GE revised commitment to 2/3/06 |
| NEDO-33201, ESBWR PRA Report, Chapter 7 | 01/06/06 | 02/15/06 | LATE By letter dated 1/16/06, GE revised commitment to 2/3/06 |
| NEDO-33201, ESBWR PRA Report , Chapters 8 - 10 | 01/06/06 | 04/20/06 | LATE By letter dated 1/16/06, GE revised commitment to 3/3/06 |
| NEDO-33201, ESBWR PRA Report , Chapters 12 & 13 | 01/06/06 | 6/8/06 | LATE By letter dated 1/16/06, GE revised commitment to 3/3/06 |
| NEDO-33201, ESBWR PRA Report , Chapter 14 | 01/06/06 | 6/13/06 | LATE By letter dated 1/16/06, GE revised commitment to 3/3/06 |
| NEDO-33201, ESBWR PRA Report , Chapters 15 & 16 | 01/06/06 | | OVERDUE By letter dated 1/16/06, GE revised commitment to 3/3/06 |
| NEDO-33201, ESBWR PRA Report , Chapter 21 | 01/06/06 | 12/29/06 | |
| ESBWR Design Control Document (DCD), Revision 1 | | | |
| DCD Tier 1 | 02/28/06 | 3/13/06 | LATE |
| DCD Tier 2 Chapters 1-15, 17 & 18 | 01/31/06 | 02/05/06 | LATE |
| DCD Tier 2 Chapter 16 (Tech Specs) | 02/28/06 | 03/20/06 | LATE |
| DCD Tier 2 Chapter 19 (PRA/Severe Accidents) | 01/31/06 | | OVERDUE |