

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. Cabbage, 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

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

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