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Subject: Updated Integrated Plan and Schedule – ESBWR Design Certification Application

General Electric Company (GE) hereby provides an update to the integrated plan and schedule activities that support the NRC Staff's issuance of the Safety Evaluation Report for ESBWR design certification. On April 19, 2007, GE provided a schedule for addressing the remaining certification activities that were known at that time to support the ESBWR design certification (Reference 1). These activities were identified in four primary areas (i.e., Responses to NRC Requests for Additional Information, New or Revised Licensing Topical Reports, Probabilistic Risk Assessment, Revisions to the ESBWR Design Control Document).

On May 2, 2007, GE staff and other representatives of the ESBWR Design Centered Working Group (DCWG) met with the NRC Staff to discuss plans for the Combined Operating License (COL) applicants to prepare and submit COL applications. At that meeting, the applicants expressed their plans to submit the COL applications as early as November 2007. These COL application plans have recently been communicated to the NRC in response to Regulatory Issue Summary (RIS) 2007-08. To support these application schedules, and to assure close coordination between the content of the COL applications and the ESBWR Design Control Document (DCD), GE has updated the integrated plan and schedule for the issuance of future DCD revisions.

In our April 19, 2007 letter, GE stated that DCD, Revision 4 would be submitted in November 2007, and that the scope of the revision would include comprehensive technical content that provides the basis necessary for the NRC Staff to develop its conclusions in support of a Safety Evaluation Report. The scope of this activity focused on four primary areas:

Q068
D079

- Response to NRC Requests for Additional Information (RAIs)
- New or revised Licensing Topical Reports (LTRs)
- Probabilistic Risk Assessment (PRA)
- Revisions to the ESBWR Design Control Document (DCD)

However, based on the DCWG meeting, the scope of DCD Revision 4 has changed. The primary focus of DCD Revision 4 will be to provide a clear and consistent link between the DCD and the subsequent COL applications. Therefore, the scope of DCD Revision 4 will focus primarily on the following tasks:

- Consistency enhancements and updates of Tier 1, including Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) / Design Acceptance Criteria (DAC)
- Consistency reviews and additions/deletions of COL Action Items (e.g., resolution of RAI issues that addresses COL Action Items, elimination of certain COL items since design work has been completed, elimination of certain COL items since they are covered by ITAAC, etc.)
- Correction of known errors identified in DCD Revision 3

The NRC Staff agreed that the scope of the above changes planned in DCD Revision 4 should address the portions of the DCD that would have the most impact on the content of future COL applications and the subsequent acceptance review. The staff also generally acknowledged that this revised plan provided the best path forward for the parties involved (NRC, GE, and the COL applicants).

Based on our further assessment of the remaining activities that are required to address the above scope, GE has determined that DCD Revision 4 will be submitted on or before September 28, 2007, in advance of the associated COL applications.

GE will continue to address outstanding RAIs as discussed in Reference 2. Enclosure 1 to this letter provides an update to GE's plans and schedule for the submittal of LTRs and other technical data, including the schedule for the submittal of the PRA LTR (NEDO-33201, Revision 2). The information provided in Enclosure 1 is intended to continue to support the NRC Staff's timely review and resolution of outstanding items to support issuance of the Safety Evaluation Report for ESBWR design certification. Additionally, continued discussions/meetings will be scheduled with the NRC Staff to promote the prompt identification and resolution of open issues.

GE plans to submit DCD Revision 5 shortly after the COL application acceptance review is complete. We understand that the expected duration of this NRC acceptance review activity is 60 days. On this basis, and our current understanding of the COL applicants' RIS responses, GE plans to issue DCD Revision 5 on or before March 31, 2008. DCD Revision 5 will contain incorporation of completed RAI responses, updated descriptions of design information and modifications previously communicated to the NRC Staff as a part of the ongoing open issue closure process,

description of information provided in LTRs, and other updates to the DCD that are necessary for the NRC Staff to develop its conclusions in support of a Safety Evaluation Report for ESBWR design certification. GE does not expect that DCD Revision 5 will have a significant impact on the content of the COL applications.

GE remains committed to regular interactions with the NRC Staff toward prompt identification, resolution, and closure of NRC open issues associated with the ESBWR design certification. As noted in Reference 1, our schedule continues to target a final design certification rule by December, 2009. GE requests that the NRC staff evaluate the updated information contained in this transmittal, and identify key milestone dates associated with SER issuance, including a completion target date.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "James C. Kinsey". The signature is written in a cursive style with a large initial "J".

James C. Kinsey
Project Manager, ESBWR Licensing

References:

- 1) MFN 07-200, Letter from General Electric to U.S. Nuclear Regulatory Commission, Integrated Plan and Schedule – ESBWR Design Certification Application, April 19, 2007
- 2) MFN 07-143, Letter from General Electric to U.S. Nuclear Regulatory Commission, Summary Report – RAI Resolutions Incorporated in ESBWR Design Control Document, Revision 3, and RAI Response Schedule, March 12, 2007

Enclosure 1: Updated Submittal Schedule

cc: A.E. Cabbage USNRC (w/enclosure)
 G.B. Stramback GE/San Jose (w/enclosure)
 R.E. Brown GE/Wilmington (w/enclosure)

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ENCLOSURE 1

UPDATED SUBMITTAL SCHEDULE

Title	Number	Rev	Affected DGD Tier 2 Chapter	Abstract of LTR or Other GE Supporting Report	Scheduled NRC Submittal Date
ESBWR I&C Software Management Plan	NEDO-33226	1	7, 18	Incorporates Software Development Plan (NEDO-33229), Integration Plan (NEDO-33246), Installation Plan (NEDO-33247), Training Plan (NEDO-33249), Operations and Maintenance Plan (NEDO-33248)	06/27/07
ESBWR I&C Software Quality Assurance Plan	NEDO-33245	1	7, 18	Incorporates Software Configuration Plan (NEDO-33227), Verification and Validation (NEDO-33228) and Safety Plans (NEDO-33230)	06/27/07
ESBWR Man-Machine Interface System and Human Factors Engineering Implementation Plan	NEDO-33217	2	18	Man-machine interface engineering implementation plan.	06/27/07
GE14E for ESBWR Initial Core Nuclear Design Report	NEDC-33326P	0	4	Required to document initial core design	07/16/07
GE14 for ESBWR Nuclear Design Report	NEDE-33239P	3	4	Revision 3 captures response to RAI 21.6-88 that discusses bypass flow rate and voiding.	08/24/07
ESBWR Containment Fission Product Removal Evaluation Model	NEDE-33279P	2	15	Revision 2 incorporates responses to NRC RAI's	08/30/07
ESBWR Instrumentation & Control Defense In-Depth and Diversity Report	NEDO-33251	1	7	Describes the type of diversity that exists among the four echelons of defense-in-depth for the ESBWR and identifies dependencies among the echelons. Revision 1 will include QNX operating system discussion.	08/31/07
ESBWR Initial Core Transient Analyses	NEDC-33337P	0	15	Evaluation of limiting AOO, Infrequent Events and Special Events for initial core loading pattern.	09/28/07
TRACG Qualification	NEDE-32177	3	21	Qualification of TRACG04 engineering computer program	09/28/07
ESBWR Feedwater Temperature Operating Domain Transient and Accident Analysis	NEDC-33338P	0	4, 15, 21	Required to document new operating domain for FW temperature for Transient and Accident Analyses	09/28/07
Gamma Thermometer System for LPRM Calibration and Power Shape Monitoring	NEDE-33197P	1	7	The LTR describes a Gamma Thermometer (GT) System for LPRM calibration and power shape monitoring. Revision 1 will incorporate resolutions of NRC RAIs.	09/28/07

ESBWR SSLC/ESF Platform Application	Not assigned	0	7	Based on NRC meeting, April 25-26, 2007, application specific LTR needed for ESBWR design certification.	09/28/07
ESBWR PRA Report	NEDO-33201	2	19	Documents any changes in plant design, changes to bases or assumptions.	09/28/07
ESBWR Instrument Setpoint Methodology	Not assigned	0	6, 7, 16, 18	Provides supplemental information regarding GE Setpoint Methodology as a follow-up to the NRC meeting on May 10, 2007	10/30/07
Steam Dryer - Acoustic Load Definition	NEDE-33312P	0	3.9	Steam Dryer Acoustic Load Definition	10/31/07
Steam Dryer - Instrumentation and Power Ascension Monitoring	NEDE-33314P	0	3.9	Steam Dryer instrumentation and power ascension monitoring	10/31/07
Steam Dryer - Structural Evaluation	NEDE-33313P	0	3.9	Steam Dryer structural evaluation.	10/31/07
ESBWR Reactor Internals FIV	NEDE-33259	1	3	Reactor internals FIV.	12/31/07
Steam Dryer - Structural Evaluation	NEDE-33313P	1	3.9	Transmit the Code Design Report associated with the Steam Dryer structural evaluation.	2/28/08
ESBWR Cyber Security Program Plan	NEDE-33295P	0	7	Rev. 0 is intended to provide the attributes and requirements of the ESBWR cyber security program. This information is provided in accordance with DG-1145 section C.III.5 that requests detailed information for a DAC be provided as early as possible to avoid potential impacts on the COL plans and schedules.	04/26/08