HITACHI

GE Hitachi Nuclear Energy

Richard E. Kingston
Vice President, ESBWR Licensing
Regulatory Affairs

P.O. Box 780 M/C A-55
Wilmington, NC 28402 USA

T 910.819.6192
F 910.362.6192
rick.kingston@ge.com

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Docket 52-010

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

Subject: **Submittal of Preliminary ESBWR Design Control Document, Revision 6, Chapter 8, - Electric Power**

GE Hitachi Nuclear Energy ("GEH") submitted to the U.S. Nuclear Regulatory Commission ("NRC") a design certification application for the ESBWR in a letter dated August 24, 2005 (reference 1), which included Revision 0 of the Design Control Document ("DCD"). The NRC accepted the application, with certain revisions, in a letter dated December 1, 2005 (reference 2). As part of the ongoing NRC review, GEH has responded to NRC requests for additional information ("RAIs") and has submitted revisions to the DCD through Revision 5, which was submitted June 1, 2008. GEH is currently preparing Revision 6 of the DCD to incorporate RAI responses that are intended to address remaining NRC open items and to establish the basis for the NRC Final Safety Evaluation for the design certification. The NRC issued a review schedule in a letter dated February 18, 2009 (reference 3).

In recent interactions between GEH and the NRC regarding incorporation of RAI responses into the DCD, GEH and the NRC discussed submittal of essentially completed chapters (and the associated change lists) of the DCD in advance of Revision 6 in order to facilitate NRC staff actions in preparing the advanced Final Safety Evaluation Report review by the Advisory Committee for Reactor Safeguards ("ACRS").

In this regard, GEH has determined that the attached chapter is essentially complete in that there are no remaining outstanding RAI responses, and the content of the chapter has been verified through the ESBWR technical team and has been reflected in marked-up pages previously submitted to the NRC in RAI responses. The chapter is not expected to undergo significant changes before issuance of Revision 6, except that GEH plans to perform an integrated quality review of the entire DCD prior to submittal. The integrated review may result in changes for (1) correction of administrative, formatting, or conversion issues; (2) consistency; (3) ensuring internal references

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remain appropriate; and (4) other items that improve the quality of the document. In order to reflect the status of the enclosed chapter and to ensure that NRC technical reviewers can differentiate between this version and the final Revision 6, GEH has marked the document as "Preliminary Revision 6."

Although GEH does not expect to identify technical concerns, if the review identifies any issues that would change the intent of any of the content in the DCD, GEH will discuss with the NRC the resolution of such issues in advance of submitting Revision 6. Changes to the DCD that result from this quality review will be reflected in updated change lists [and will be flagged as resulting from the quality review].

If you have any questions, please contact me.

Sincerely,

Richard E. Kingston

Richard E. Kingston
Vice President, ESBWR Licensing

References:

1. MFN 05-084, General Electric Company Application for Final Design Approval and Design Certification of ESBWR Standard Plant Design, dated August 24, 2005.

2. Letter from U.S. Nuclear Regulatory Commission to Steve Hucik, *Acceptance of the General Electric Company Application for Final Design Approval and Standard Design Certification for the Economic Simplified Boiling Water Reactor (ESBWR) Design,* Dated December 1, 2005

3. MFN 09-144, Letter from U.S. Nuclear Regulatory Commission to Robert E. Brown, *Economic Simplified Water Reactor (ESBWR) Design Certification Schedule Update*, dated February 18, 2009

Enclosure:

1. CD – Enclosure – Preliminary ESBWR Design Control Document, Revision 6, Chapter 8, Electric Power

cc: AE Cubbage USNRC (with enclosure)
JG Head GEH/Wilmington (w/o enclosure)
DH Hinds (GEH/Wilmington (w/o enclosure)
DRF Section 0000-0102-1603

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CD Enclosure 1

Preliminary ESBWR Design Control Document, Revision 6

Chapter 8, Electric Power