

January 22, 2008

Mr. Robert E. Brown
Senior Vice President, Regulatory Affairs
GE-Hitachi Nuclear Energy Americas, LLC
3901 Castle Hayne Road MC A-45
Wilmington, NC 28401

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 145 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION

Dear Mr. Brown:

By letter dated August 24, 2005, GE-Hitachi Nuclear Energy Americas, LLC (GEH) submitted an application for final design approval and standard design certification of the economic simplified boiling water reactor (ESBWR) standard plant design pursuant to 10 CFR Part 52. The Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed design.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

If you have any questions or comments concerning this matter, you may contact me at 301-415-3179 or ixb3@nrc.gov or you may contact Amy Cabbage at (301) 415-2875 or aec@nrc.gov.

Sincerely,
/RA/

Ilka Berrios, Project Manager
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-010

Enclosure:
Request for Additional Information

cc w/encl: See next page

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ADAMS ACCESSION NO. ML080180080 Template: NRO-002

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DATE	01/22/08	01/22/08	01/22/2008

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ESBWR DESIGN CERTIFICATION APPLICATION

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**Request for Additional Information (RAI)
ESBWR Design Control Document (DCD)**

RAI Number	Reviewer	Question Summary	Full Text
9.2-7 S02	C. Li	Compliance of GDC 44, 45, and 46 for the PSWS, RCCWS, and TCCWS	<p>In a conference call between NRC and GEH on January 16, 2008, GEH indicated that the PSWS and RCCWS meet GDC 44, 45, and 46 as shown in DCD Tier 2 Sections 9.2.1 and 9.2.2. The staff agreed. However, for consistency the staff asked GEH to revise DCD Table 1.9-9 to indicate that PSWS and RCCWS comply with the above GDC. GEH agreed to do so.</p> <p>The NRC staff asked GEH to clarify its response relating to the basis for the deletion of portions of the DCD Section 9.2.8.1 relating to TCCWS. GEH indicated during the conference call that GDC 44, 45, and 46 are not applicable to TCCWS because the system removes heat from the SSCs that are not safety-related or RTNSS. Please confirm and document the above statement.</p>
9.2-11 S03	C. Li	Water hammer mitigation procedures for the PSWS, RCCWS, and CWS	<p>The staff disagrees with the response provided by GEH.</p> <p>DCD Tier 2, Rev. 4, Section 13.5.2 states that the Implementation of the Plant Operating Procedures Development Plan shall establish "requirements that the procedures developed shall include, as necessary, the elements described in American National Standards Institute (ANSI)/American Nuclear Society (ANS)-3.2-1994;R1999, (Reference 13.5-2), as endorsed by Regulatory Guide 1.33 Rev. 2 (Reference 13.5-5)." And also states that "The following procedures shall be included in the scope of the Plant Operating Procedures Development Plan described above: System Procedures - Procedures as delineated in Section A3 of ANSI/ANS-3.2-1994;R1999 (Reference 13.5-2), as endorsed by Regulatory Guide 1.33 Rev. 2, shall be prepared as appropriate."</p> <p>As stated in the staff's RAI 9.2-11 Supp 2, the Appendix to RG 1.33 Rev. 2 lists refers to "typical <u>safety-related</u> activities" that should be covered by written procedures. PSWS and RCCWS are not safety-related in the ESBWR design. It is the staff's position that clarification is needed in the DCD to ensure that procedures for these systems and other RTNSS systems will be addressed by COL action items 13.5.4-A and 13.5.5-A.</p>

DC GE - ESBWR Mailing List

(Revised 01/16/08)

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