

October 21, 2009

Mr. Jerald G. Head
Senior Vice President, Regulatory Affairs
GE Hitachi Nuclear Energy
3901 Castle Hayne Road MC A-18
Wilmington, NC 28401

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 381 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION

Dear Mr. Head:

By letter dated August 24, 2005, GE Hitachi Nuclear Energy 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 U.S. 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 301-415-2375 or leslie.perkins@nrc.gov, or you may contact Amy Cubbage at 301-415-2875 or amy.cubbage@nrc.gov.

Sincerely,

/RA/

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

Docket No. 52-010

Enclosure:

1. Request for Additional Information

cc: See next page

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ESBWR/ABWR Projects Branch 1
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Distribution: See next page

ADAMS ACCESSION NO. ML092931384

NRO-002

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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO.381 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION DATED OCTOBER 21, 2009

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**Requests for Additional Information (RAIs)
ESBWR Design Control Document (DCD), Revision 6**

RAI Number	Reviewer	Question Summary	Full Text
14.3-455	Wheeler L	Missing Valve in Tier 1 figure 2.12.3-1	The staff noted in the review of Revision 6 of the Design Control Document (DCD), Tier 1, Figure 2.12.3-1, "Reactor Component Cooling Water System Functional Arrangement," the cross connect valve, on the suction side of the reactor component cooling water system (RCCWS) pumps, between train 'A' and train 'B' was omitted. This valve was shown on Revision 5 of the DCD functional arrangement. Consequently, the applicant needs to describe the basis for the removal of this valve and describe how train isolation is accomplished without this valve.
14.3-456	Ray N	Revise acceptance criteria to include reference to ASME Code Data Report N-1/N-1A	In ESBWR DCD, Rev. 6, Table 2.1.1-3, the Acceptance Criteria for Item 3.a3 states the following: ASME Code Data Report(s) (including N-5 Data reports, where applicable)(certified, when required by ASME Code) and inspection reports exist and conclude that the RPV and its components identified in Table 2.1.1-1 (shroud, shroud support, top guide, core plate, control rod guide tubes and fuel supports) as ASME Code Section III are fabricated, installed, and inspected in accordance with ASME Code Section III requirements. In a conference call with the applicant on October 13, 2009, the staff discussed ITAAC Table 2.1.1 for further clarification and consistency. Based on that conference call, the staff requests that this statement in the DCD be revised to replace ASME Code Data Report N-5 with ASME Code Data Report N-1/N-1A, which would be more appropriate for the reactor vessel and its appurtenances. The staff believes that this change will be in line with the ASME Code N-stamping process.

Enclosure

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(Revised 10/01/2009)

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