

December 8, 2009

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 400 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION

Dear Mr. Head:

By letter dated August 24, 2005, GE Hitachi Nuclear Energy (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 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 is contained in the enclosure to this letter.

Pursuant to 10 CFR 2.390, we have determined that the four out of five of the enclosed RAIs contain sensitive unclassified non-safeguards information (SUNSI), security-related information. We have prepared a non-sensitive version of the RAI (Enclosure 1) that does not contain security-related information. The SUNSI is portion marked and indicated in brackets and underlined in Enclosure 2. We will delay placing this document in the public document room for a period of ten (10) working days from the date of this letter to provide you with the opportunity to comment on the security-related aspects only. If you believe that any additional information in the enclosure is security-related, please identify such information line by line and define the basis pursuant to the criteria of 10 CFR 2.390 before the public release date.

Document transmitted herewith contains sensitive unclassified information. When separated from enclosure 2, this document is "DECONTROLLED."

J. Head

-2-

If you have any questions or comments concerning this matter, you may contact me at 301-415-6590 or David.Misenhimer@nrc.gov or you may contact Amy Cubbage at (301) 415-2875 or Amy.Cubbage@nrc.gov.

Sincerely,

/RA/

David Misenhimer, 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: See next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-6590 or David.Misenhimer@nrc.gov or you may contact Amy Cubbage at (301) 415-2875 or Amy.Cubbage@nrc.gov.

Sincerely,

/RA/

David Misenhimer, 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: See next page

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(Revised 10/01/2009)

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Request for Additional Information (RAI)
ESBWR Design Control Document (DCD) Revision 6

RAI Number	Reviewer	Question Summary	Full Text
RAI 19.5-16	Caruso M	The staff's question is in regard to the protection provided for a key design feature needed to assure core cooling.	[[
RAI 19.5-17	Tegeler B	The staff's question is in regard to design features that prevent the spread of fire.	]]
RAI 19.5-18	Andrukat D	The staff's question is in regard to design features that prevent the spread of fire.	]]

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			Enclosure 1
RAI 19.5-19	Andrukat D	The staff's question is in regard to design features that prevent the spread of fire.	]]
RAI 19.5-20	Caruso M	The staff's question is in regard to the description of a key design feature needed to assure core cooling.	]] The description of the Isolation Condenser System (ICS) in Section 5.4.6 of the DCD indicates that the IC/PCCS water pools and equipment storage pool are needed in order for decay heat to be removed by the ICS; but, it does not identify these pools as actual components of the ICS. Please state whether or not these pools are being credited as key design features; and if so, please update the description of key design features in Section 19D of the revision 7 of the DCD.
RAI 19.5-21	Caruso M	The staff's question is in regard to the description of a key design feature	]]

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		needed to assure core cooling.	
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