

June 5, 2008

Mr. Robert E. Brown
Senior Vice President, Regulatory Affairs
GE Hitachi Nuclear Energy
3901 Castle Hayne Road MC A-50
Wilmington, NC 28401

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 212 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION

Dear Mr. Brown:

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 (RAI) is contained in the enclosure to this letter.

If you have any questions or comments concerning this matter, you may contact me at 301-415-8484 or Tom.Tai@nrc.gov or you may contact Amy Cabbage at 301-415-2875 or Amy.Cabbage@nrc.gov.

Sincerely,

/RA/

Tom M. Tai, Senior 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

June 5, 2008

Mr. Robert E. Brown
Senior Vice President, Regulatory Affairs
GE Hitachi Nuclear Energy
3901 Castle Hayne Road MC A-50
Wilmington, NC 28401

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 212 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION

Dear Mr. Brown:

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 (RAI) is contained in the enclosure to this letter.

If you have any questions or comments concerning this matter, you may contact me at 301-415-8484 or Tom.Tai@nrc.gov or you may contact Amy Cubbage at 301-415-2875 or Amy.Cubbage@nrc.gov.

Sincerely,

/RA/

Tom M. Tai, Senior 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

Distribution: See next page

ADAMS ACCESSION NO. **ML**081510048

OFFICE	PM:NGE1	LPM:NGE1
NAME	TTai	ACubbage
DATE	06/05/08	06/05/08

OFFICIAL RECORD COPY

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 212 RELATED TO
ESBWR DESIGN CERTIFICATION APPLICATION DATED JUNE 5, 2008

Distribution:
PUBLIC

Hard Copy
NGE1 R/F
TTai, NRO
ACubbage, NRO

E-Mail:
RidsNroDnrlNge1
RidsNroDnrlNge2
RidsAcrsAcnwMailCenter
RidsOgcMailCenter
RidsNroDsraSbcv
RidsNroDeCib2
RidsNroDserRsac
Dvir A, NRO
Wagage H, NRO
Snodderly M, NRO

**Requests for Additional Information (RAIs)
ESBWR Design Control Document (DCD), Revision 4**

RAI Number	Reviewer	Question Summary	Full Text
RAI 6.4-20	Forrest E	CRHA as alternate TSC	<p>In the GEH response to RAI 13.3-5 S02, it was stated in item 3 that “if at any time the director of the TSC facility considers it to be uninhabitable due to loss of communications or other reason, the TSC plant management function will be transferred to the Main Control Room.” This could put additional loads on the MCR during a critical time such as the first 72 hours when offsite power may not be available.</p> <p>A. Please revise DCD Section 6.4 to describe the capability of the MCR to accommodate the transfer of the TSC plant management function from the TSC, if the TSC becomes uninhabitable.</p> <p>B. Please state in the DCD the number of people that would be added to the MCR. Has the presence of these people been accounted for in the passive cooling analysis? Currently this analysis only considers 5 people in the cooling load analysis although 21 people are considered for the supply air adequacy determination.</p> <p>C. Please state that the degree of lighting in the MCR is adequate to support the TSC plant management functions. Currently, the passive cooling analysis states that the lighting heat load is 200 watts. Please explain the adequacy of this lighting for reading drawings, emergency operation procedures, and conferencing on the status of the plant response and actions that could be taken.</p> <p>D. Please identify any other impact on the MCR due to the TSC plant management function. Would increased access and egress impact the assumed unfiltered air in leakage used in the design basis analyses? Has space been identified for this function to be set up and implemented? Are there sufficient materials (plant records, drawings, procedures, etc.) and communication capabilities established in the MCR for this purpose?</p>

DC GE - ESBWR Mailing List

(Revised 05/27/2008)

cc:

Ms. Michele Boyd
Legislative Director
Energy Program
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. Ray Ganthner
Senior Vice President
AREVA, NP, Inc. 3315
Old Forest Road
P.O. Box 10935
Lynchburg, VA 24506-0935

DC GE - ESBWR Mailing List

Email

aec@nrc.gov (Amy Cabbage)
APH@NEI.org (Adrian Heymer)
art.alford@ge.com (Art Alford)
awc@nei.org (Anne W. Cottingham)
bennettS2@bv.com (Steve A. Bennett)
bevans@enercon.com (Bob Evans)
bob.brown@ge.com (Robert E. Brown)
BrinkmCB@westinghouse.com (Charles Brinkman)
cberger@energetics.com (Carl Berger)
chris.maslak@ge.com (Chris Maslak)
CumminWE@Westinghouse.com (Edward W. Cummins)
cwaltman@roe.com (C. Waltman)
dan1.williamson@ge.com (Dan Williamson)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
David.piepmeyer@ge.com (David Piepmeyer)
dennis.chin@ge.com (Dennis Chin)
dlochbaum@UCSUSA.org (David Lochbaum)
don.lewis@ge.com (Don Lewis)
erg-xl@cox.net (Eddie R. Grant)
Eugene_Grecheck@dom.com (Eugene S. Grecheck)
frankq@hursttech.com (Frank Quinn)
Frostie.white@ge.com (Frostie White)
gcesare@enercon.com (Guy Cesare)
GEH-NRC@hse.gsi.gov.uk (Geoff Grint)
george.honma@ge.com (George Honma)
george.stramback@gene.ge.com (George Stramback)
george.wadkins@ge.com (George Wadkins)
GovePA@BV.com (Patrick Gove)
greshaja@westinghouse.com (James Gresham)
gzinke@entergy.com (George Alan Zinke)
hickste@earthlink.net (Thomas Hicks)
james.beard@gene.ge.com (James Beard)
jeff.waal@ge.com (Jeff Waal)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.kinsey@ge.com (James Kinsey)
jim.riccio@wdc.greenpeace.org (James Riccio)
jim.rogers@ge.com (Jim Rogers)
JJNesrsta@cpsenergy.com (James J. Nesrsta)
joel.Friday@ge.com (Joel Friday)
John.O'Neill@pillsburylaw.com (John O'Neill)
john.sorensen@ge.com (John Sorensen)
Joseph_Hegner@dom.com (Joseph Hegner)
junichi_uchiyama@mnes-us.com (Junichi Uchiyama)

DC GE - ESBWR Mailing List

kathy.sedney@ge.com (Kathy Sedney)
kathy.warnock@ge.com (Kathy Warnock)
kenneth.ainger@exeloncorp.com (Kenneth Ainger)
kimberly.milchuck@ge.com (Kimberly Milchuck)
KSutton@morganlewis.com (Kathryn M. Sutton)
kurt.schaefer@ge.com (Kurt Schaefer)
kwaugh@impact-net.org (Kenneth O. Waugh)
laura.bello@ge.com (Laura Bello)
lou.lanese@ge.com (Lou Lanese)
Marc.Brooks@dhs.gov (Marc Brooks)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
Marvin.Smith@dom.com (Marvin L. Smith)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
media@nei.org (Scott Peterson)
mike_moran@fpl.com (Mike Moran)
MSF@nei.org (Marvin Fertel)
mwetterhahn@winston.com (M. Wetterhahn)
nirsnet@nirs.org (Michael Mariotte)
PAC2@nrc.gov (Peter Cochran)
pareez.golub@ge.com (Pareez Golub)
Pat.Woodfin@ge.com (Pat Woodfin)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
peter.jordan@ge.com (Peter Jordan)
phinnen@entergy.com (Paul Hinnenkamp)
pshastings@duke-energy.com (Peter Hastings)
randy.newton@ge.com (Randy Newton)
RJB@NEI.org (Russell Bell)
RKTemple@cpsenergy.com (R.K. Temple)
roberta.swain@ge.com (Roberta Swain)
Russell.Wells@Areva.com (Russell Wells)
sandra.sloan@areva.com (Sandra Sloan)
SauerB@BV.com (Robert C. Sauer)
sfrantz@morganlewis.com (Stephen P. Frantz)
sharon.lyons@ge.com (Sharon Lyons)
steven.hucik@ge.com (Steven Hucik)
steven.stark@ge.com (Steven Stark)
tdurkin@energetics.com (Tim Durkin)
tom.miller@hq.doe.gov (Tom Miller)
trsmith@winston.com (Tyson Smith)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
VictorB@bv.com (Bill Victor)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)

DC GE - ESBWR Mailing List

waraksre@westinghouse.com (Rosemarie E. Waraks)
wayne.cutright@ge.com (Wayne Cutright)
wayne.marquino@ge.com (Wayne Marquino)
whorin@winston.com (W. Horin)