

May 25, 2010

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

SUBJECT:    ADVANCED FINAL SAFETY EVALUATION REPORT FOR CHAPTER 19  
              “PROBABILITY RISK ASSESSMENT AND SEVERE ACCIDENT EVALUATION”  
              REGARDING THE ECONOMIC SIMPLIFIED BOILING WATER REACTOR  
              (ESBWR) DESIGN CERTIFICATION REVIEW

Dear Mr. Head:

The U.S. Nuclear Regulatory Commission staff is preparing Final Safety Evaluation Reports (FSERs) for each chapter of the ESBWR design certification application submitted by GE-Hitachi Nuclear Energy on August 24, 2005.

The staff's FSER for Chapter 19 was recently provided to the Advisory Committee on Reactor Safeguards (ACRS) ESBWR Design-Centered Subcommittee to support the upcoming meeting scheduled to be held on June 22, 2010. The ACRS Full Committee meeting will be held at a future date.

The enclosed FSER is being provided to GEH for review of proprietary information and factual accuracy. Note that a public version of the FSER needs to be placed in the public document room prior to the ACRS Subcommittee meeting so the staff will need to either retract any proprietary information or determine if alternative non-proprietary language may be used. To support this schedule, please reply within a period of 10 working days from the date of this letter with your comments on the proprietary aspects of the FSER.

If you believe that any information in the enclosure is proprietary, please identify such information line by line and define the basis pursuant to the criteria of 10 CFR 2.390.

Sincerely,

**/RA/**

Amy Cabbage, Acting Chief  
ESBWR/ABWR Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-010

Enclosure:  
Final Safety Evaluation Report – Chapter 19

cc: See next page

May 25, 2010

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

SUBJECT: ADVANCED FINAL SAFETY EVALUATION REPORT FOR CHAPTER 19  
"PROBABILITY RISK ASSESSMENT AND SEVERE ACCIDENT EVALUATION"  
REGARDING THE ECONOMIC SIMPLIFIED BOILING WATER REACTOR  
(ESBWR) DESIGN CERTIFICATION REVIEW

Dear Mr. Head:

The U.S. Nuclear Regulatory Commission staff is preparing Final Safety Evaluation Reports (FSERs) for each chapter of the ESBWR design certification application submitted by GE-Hitachi Nuclear Energy on August 24, 2005.

The staff's FSER for Chapter 19 was recently provided to the Advisory Committee on Reactor Safeguards (ACRS) ESBWR Design-Centered Subcommittee to support the upcoming meeting scheduled to be held on June 22, 2010. The ACRS Full Committee meeting will be held at a future date.

The enclosed FSER is being provided to GEH for review of proprietary information and factual accuracy. Note that a public version of the FSER needs to be placed in the public document room prior to the ACRS Subcommittee meeting so the staff will need to either retract any proprietary information or determine if alternative non-proprietary language may be used. To support this schedule, please reply within a period of 10 working days from the date of this letter with your comments on the proprietary aspects of the FSER.

If you believe that any information in the enclosure is proprietary, please identify such information line by line and define the basis pursuant to the criteria of 10 CFR 2.390.

Sincerely,

*/RA/*

Amy Cabbage, Acting Chief  
ESBWR/ABWR Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-010

Enclosure:

Final Safety Evaluation Report – Chapter 5

cc: See next page

OFFICE	NGE1:PM	NGE1:BC (A)
NAME	DMisenhimer	ACabbage
DATE	05/20/2010	05/25/2010

**OFFICIAL RECORD COPY**

SUBJECT: ADVANCED FINAL SAFETY EVALUATION REPORT FOR  
CHAPTER 19 "PROBABILITY RISK ASSESSMENT AND SEVERE  
ACCIDENT EVALUATION" REGARDING THE ECONOMIC SIMPLIFIED  
BOILING WATER REACTOR (ESBWR) DESIGN CERTIFICATION  
REVIEW DATED MAY 25, 2010

Distribution:

Hard Copy:

NGE1 R/F  
ACubbage  
DMisenhimer

Email:

RidsNroDnrlNge1  
NGE 1/2 Group  
RidsAcrsAcnwMailCenter  
RidsOgcMailCenter  
ACubbage  
DMisenhimer

DC GEH - ESBWR Mailing List

(Revised 05/12/2010)

cc:

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

Mr. Tom Sliva  
7207 IBM Drive  
Charlotte, NC 28262

## DC GEH - ESBWR Mailing List

### Email

aec@nrc.gov (Amy Cubbage)  
APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
bevans@enercon.com (Bob Evans)  
bgattoni@roe.com (William (Bill) Gattoni))  
BrinkmCB@westinghouse.com (Charles Brinkman)  
cberger@energetics.com (Carl Berger)  
charles.bagnal@ge.com  
charles@blackburncarter.com (Charles Irvine)  
chris.maslak@ge.com (Chris Maslak)  
CumminWE@Westinghouse.com (Edward W. Cummins)  
cwaltman@roe.com (C. Waltman)  
Daniel.Chalk@nuclear.energy.gov (Daniel Chalk)  
david.hinds@ge.com (David Hinds)  
david.lewis@pillsburylaw.com (David Lewis)  
David.piepmeyer@ge.com (David Piepmeyer)  
donaldf.taylor@ge.com (Don Taylor)  
erg-xl@cox.net (Eddie R. Grant)  
gcesare@enercon.com (Guy Cesare)  
GEH-NRC@hse.gsi.gov.uk (Geoff Grint)  
GovePA@BV.com (Patrick Gove)  
gzinke@entergy.com (George Alan Zinke)  
hickste@earthlink.net (Thomas Hicks)  
hugh.upton@ge.com (Hugh Upton)  
james.beard@gene.ge.com (James Beard)  
jerald.head@ge.com (Jerald G. Head)  
Jerold.Marks@ge.com (Jerold Marks)  
jgutierrez@morganlewis.com (Jay M. Gutierrez)  
Jim.Kinsey@inl.gov (James Kinsey)  
jim.riccio@wdc.greenpeace.org (James Riccio)  
joel.Friday@ge.com (Joel Friday)  
John.O'Neill@pillsburylaw.com (John O'Neill)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
junichi\_uchiyama@mnes-us.com (Junichi Uchiyama)  
kimberly.milchuck@ge.com (Kimberly Milchuck)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
lee.dougherty@ge.com  
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)

## DC GEH - ESBWR Mailing List

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)  
Nuclaw@mindspring.com (Robert Temple)  
patriciaL.campbell@ge.com (Patricia L. Campbell)  
paul.gaukler@pillsburylaw.com (Paul Gaukler)  
Paul@beyondnuclear.org (Paul Gunter)  
peter.yandow@ge.com (Peter Yandow)  
pshastings@duke-energy.com (Peter Hastings)  
rick.kingston@ge.com (Rick Kingston)  
RJB@NEI.org (Russell Bell)  
Russell.Wells@Areva.com (Russell Wells)  
sabinski@suddenlink.net (Steve A. Bennett)  
sandra.sloan@areva.com (Sandra Sloan)  
sara.andersen@ge.com (Sara Anderson)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
stephan.moen@ge.com (Stephan Moen)  
steven.hucik@ge.com (Steven Hucik)  
strambgb@westinghouse.com (George Stramback)  
tdurkin@energetics.com (Tim Durkin)  
timothy1.enfinger@ge.com (Tim Enfinger)  
tom.miller@hq.doe.gov (Tom Miller)  
trsmith@winston.com (Tyson Smith)  
Vanessa.quinn@dhs.gov (Vanessa Quinn)  
Wanda.K.Marshall@dom.com (Wanda K. Marshall)  
wayne.marquino@ge.com (Wayne Marquino)  
whorin@winston.com (W. Horin)