



HITACHI

GE Hitachi Nuclear Energy

James C. Kinsey
Vice President, ESBWR Licensing

PO Box 780 M/C A-55
Wilmington, NC 28402-0780
USA

T 910 675 5057
F 910 362 5057
jim.kinsey@ge.com

MFN 07-590

Docket No. 52-010

November 6, 2007

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

**Subject: Response to Portion of NRC Request for Additional Information
Letter No. 90 Related to ESBWR Design Certification Application
– Safety Analyses – RAI Number 15.4-18S01**

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) response to the U.S. Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) sent by NRC letter dated January 29, 2007. GEH's response to RAI Number 15.4-18S01 is addressed in Enclosure 1.

If you have any questions or require additional information, please contact me.

Sincerely,

James C. Kinsey
Vice President, ESBWR Licensing

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NR0

Reference:

1. MFN 07-084, Letter from U.S. Nuclear Regulatory Commission to David H. Hinds, GEH, *Request For Additional Information Letter No. 90 Related To ESBWR Design Certification Application*, dated January 29, 2007.

Enclosure:

1. Response to Portion of NRC Request for Additional Information Letter No. 90 Related to ESBWR Design Certification Application ESBWR – Safety Analyses – RAI Number 15.4-18S01

cc: AE Cabbage USNRC (with enclosure)
GB Stramback GEH/San Jose (with enclosure)
RE Brown GEH/Wilmington (with enclosure)
eDRF 0000-0066-4387

Enclosure 1

MFN 07-590

**Response to Portion of NRC Request for
Additional Information Letter No. 90
Related to ESBWR Design Certification Application**

Safety Analyses

RAI Number 15.4-18 S01

NRC RAI 15.4-18 S01:

Reference: RAI 15.3-25 in NRC letter dated October 11, 2006 GE response in MFN 07-198 dated April 12, 2007

(1) Provide revised or new accident model diagram shown in Enclosure 2 of the response, complete with all fission product transport and release pathways.

GE Response:

The accident model diagram with fission product transport and release pathways has been revised and is presented as Figure 4.14 in Licensing Topical Report (LTR) NEDE-33279 Revision 1, "ESBWR Containment Fission Product Removal Evaluation Model." The subject LTR was transmitted on August 30, 2007 via GEH Letter MFN 06-205 Supplement 2.

DCD Impact:

No DCD or LTR changes will be made in response to this RAI.