



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 07-058, Supplement 2

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

Subject: **Response to Portion of NRC Request for Additional Information Letter Number 67 Related to ESBWR Design Certification Application – Inservice Testing of Pumps and Valves – RAI Number 3.9-161 S01**

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) originally transmitted via the Reference 1 letter and supplemented by an NRC request for clarification in Reference 2. The GEH response to RAI Number 3.9-161 S01 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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References:

1. MFN 06-378, Letter from U.S. Nuclear Regulatory Commission to Mr. David H. Hinds, Manager, ESBWR, General Electric Company, *Request For Additional Information Letter No. 67 Related To ESBWR Design Certification Application*, dated October 10, 2006
2. E-Mail from Chandu Patel, U.S. Nuclear Regulatory Commission, to John Leatherman, GE, dated May 7, 2007 (ADAMS Accession Numbers ML071620006 and ML071620013)

Enclosure:

1. Response to Portion of NRC Request for Additional Information Letter Number 67 Related to ESBWR Design Certification Application – Inservice Testing of Pumps and Valves – RAI Number 3.9-161 S01

cc: AE Cabbage USNRC (with enclosure)
DH Hinds GEH/Wilmington (with enclosure)
GB Stramback GEH/San Jose (with enclosure)
RE Brown GEH/Wilmington (with enclosure)
eDRF 0000-0079-5553

Enclosure 1

MFN 07-058, Supplement 2

**Response to Portion of NRC Request for
Additional Information Letter No. 67
Related to ESBWR Design Certification Application
Inservice Testing of Pumps and Valves
RAI Number 3.9-161 S01**

For historical purposes, the original text of RAI 3.9-161 and the GEH response is included, except for any attachments or DCD mark-ups.

NRC RAI 3.9-161

Section 3.9.6 -functional design and qualification test for POVs Describe the method for functional design and qualification for each power operated valve (POV) with safety-functions used in the ESBWR.

GE Response

Section 3.9.6, "In-Service Testing of Pumps and Valves," does not address design function qualification testing of active valves. The design function of each active safety-related valve is described under the corresponding system discussion within the DCD Tier 2 documentation. The qualification testing of active valves to demonstrate the capability to complete safety-related design functions under conditions imposed by dynamic and/or seismic loads is addressed in Subsections 3.9.2 and 3.9.3, especially 3.9.3.5.

DCD Impact

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

NRC RAI 3.9-161 S01

RAI 3.9-161 S01 Comment on response to RAI 3.9-161 from MFN 07-058:

Address the program for ensuring the functional capability of power-operated valves.

GEH Response

Testing for ensuring the functional capability of the installed power-operated valves is outlined as part of the DCD description of overall valve in-service test program plan contained in DCD Tier 2, Revision 4, Subsection 3.9.6. This subsection of the DCD was substantially revised compared to the DCD Revision 3 version to incorporate additional detail and lessons learned from operating experience.

DCD Impact

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