



HITACHI

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MFN 08-908

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U.S. Nuclear Regulatory Commission
Document Control Desk
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**Subject: Response to Portion of NRC Request for Additional Information
Letter No. 243 – Related To Design Control Document (DCD)
Revision 5 – RAI Number 4.2-25 Supplement 1**

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 the Reference 1 NRC letter. GEH response to RAI Number 4.2-25 Supplement 1 is addressed in Enclosure 1.

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

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

DOB
NRO

Reference:

1. MFN 08-689 Letter from U.S. Nuclear Regulatory Commission to Robert E. Brown, GEH, Request For Additional Information Letter No. 243 Related To Design Control Document (DCD) Revision 5, dated September 4, 2008.

Enclosure:

1. MFN 08-908 – Response to Portion of NRC Request for Additional Information Letter No. 243 - Related To Design Control Document (DCD) Revision 5 – RAI Number 4.2-25 S01

cc: AE Cubbage	USNRC (with enclosure)
RE Brown	GEH/Wilmington (with enclosure)
DH Hinds	GEH/Wilmington (with enclosure)
eDRF	0000-0084-2503/R5

Enclosure 1

MFN 08-908

Response to Portion of NRC Request for

Additional Information Letter No. 243

Related to Design Control Document (DCD) Revision 5

RAI Number 4.2-25 S01

NRC RAI 4.2-25, Supplement 1

Supply capsule impact testing results

The response provided in Part (d) indicates that capsule impact testing was not yet performed by GEH and will instead be left for a future date. Provide an analysis demonstrating that testing of the ESBWR capsules is not necessary due to the bounding nature of the currently existing tests or perform ESBWR capsule tests and supply the results.

GEH Response

Mechanical testing of the ESBWR Marathon capsule, with impact energy applicable to the ESBWR design has been completed. The test successfully confirmed the integrity of the crimped capsule end cap connection under repeated scram loading. Therefore, the test results demonstrate that the ESBWR crimped capsule end cap connection is acceptable for ESBWR reactor service.

DCD Impact

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