

GE Hitachi Nuclear Energy

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MFN 07-540

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. 101 - Containment Pressure Analyses -RAI Number 6.2-177

Enclosure 1 contains the GE Hitachi Nuclear Energy (GEH) response to the subject NRC RAI transmitted via the Reference 1 letter.

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

Sincerely,

Bathy sledney for

James C. Kinsey Vice President, ESBWR Licensing

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Reference:

1. MFN 07-357, Letter from U.S. Nuclear Regulatory Commission to Robert Brown, *Request for Additional Information Letter No. 101 Related to ESBWR Design Certification Application*, June 21, 2007

Enclosure:

- MFN 07-540 Response to Portion of NRC Request for Additional Information Letter No. 101 - Related to ESBWR Design Certification Application - Containment Pressure Analyses - RAI Number 6.2-177
- cc: AE Cubbage USNRC (with enclosures) GB Stramback GEH/San Jose (with enclosures) RE Brown GEH/Wilmington (with enclosures) eDRF 0000-0069-5943

Enclosure 1

MFN 07-540

Response to Portion of NRC Request for

Additional Information Letter No. 101

Related to ESBWR Design Certification Application

Containment Pressure Analyses

RAI Number 6.2-177

MFN 07-540 Enclosure 1

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NRC RAI 6.2-177:

DCD, Tier 2, Revision 3, Section 6.2.1.1.3.5 states that "[t]he peak drywell pressure for the bounding case is below the containment design pressure." Table 6.2-5 lists peak drywell pressure and peak wetwell pressure. However, the TRACG analysis results provided in the DCD shows no peak drywell or wetwell pressures for the limiting FWLB and MSLB design base accidents. Instead, the pressure continues to rise and reaches its maximum value for the duration of analysis at 72 hours as stated in RAI 6.2-140. See for example, Figures 6.2-13a1 and 6.2-14a1. Please correct this discrepancy.

GEH Response:

This discrepancy has been corrected in DCD Tier 2, Revision 4, as follows:

- 1. In the last sentence of the last paragraph in DCD Tier 2, Revision 4, Subsections 6.2.1.1.3.1, 6.2.1.1.3.2, 6.2.1.1.3.3, 6.2.1.1.3.4 and 6.2.1.1.3.5, the DCD Tier 2, Revision 3 term "calculated peak drywell pressure" was changed to "calculated maximum drywell pressure during the 72 hours following a LOCA".
- In DCD Tier 2, Revision 4, Table 6.2-5, first row, the DCD Tier 2, Revision 3 term "Peak DW Pressure" was changed to "Maximum DW Pressure*" and the term "Margin" was changed to "Margin**". In addition, two footnotes were added in DCD Tier 2, Revision 4, Table 6.2-5, as follows:
 - "* Maximum DW pressure calculated during the 72 hours following a LOCA", and
 - "** Minimum pressure margin calculated during the 72 hours following a LOCA"

DCD Impact:

The DCD changes described in the above response to this RAI were made in DCD Tier 2, Revision 4.

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