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MFN 07-438

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Subject: **Response to Portion of NRC Request for Additional Information Letter No. 80 - Containment Peak Pressure Analysis - RAI Number 6.2-141**

Enclosure 1 contains GEH's 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,

/Kathy Sedney for

James C. Kinsey
Project Manager, ESBWR Licensing

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NRO

Reference:

1. MFN 06-419, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 80 Related to ESBWR Design Certification Application*, November 2, 2006

Enclosure:

1. MFN 07-438 - Response to Portion of NRC Request for Additional Information Letter No. 80 - Related to ESBWR Design Certification Application - Containment Peak Pressure Analysis - RAI Number 6.2-141

cc: AE Cubbage USNRC (with enclosures)
BE Brown GEH/Wilmington (with enclosures)
GB Stramback GEH/San Jose (with enclosures)
eDRF 0000-0071-3559

Enclosure 1

MFN 07-438

Response to Portion of NRC Request for

Additional Information Letter No. 80

Related to ESBWR Design Certification Application

Containment Peak Pressure Analysis

RAI Number 6.2-141

NRC RAI 6.2-141:

Of the four accidents analyzed (feedwater line break (FWLB), main steam line break (MSLB), gravity-driven cooling system (GDCS) line break, and bottom drain line break (BDLB)), DCD, Tier 2, Revision 1, Section 6.2.1.1.3 states that FWLB (with one safety relief valve (SRV) failure) was bounding. Therefore, the staff's previous RAIs were based on this conclusion. However, in response to NRC RAI 6.2-59, in Enclosure 1 to a letter, dated October 3, 2006, you stated that after correcting a code modeling error, MSLB accident became the bounding case. Please revisit your responses to the staff's previous RAIs on Section 6.2 (e.g., RAI 6.2-98) as a result of this change in the bounding case from FWLB to MSLB and make necessary changes.

GEH Response:

No further revisions of the responses to previous RAIs on DCD Tier 2, Section 6.2 (e.g., RAI 6.2-98) as a result of the RAI 6.2-59 response are necessary. The latest evaluation performed verifies that the main steam line break (MSLB) with one depressurization valve (DPV) failure and two Gravity Driven Cooling System (GDCS) vent paths available including bounding licensing conditions remains as the bounding case.

The results of these latest analyses performed for the four accident cases including MSLB, feedwater line break (FWLB), GDCS line break (GDCSLB) and bottom drain line break (BDLB) were incorporated in Section 6.2, DCD Tier 2, Revision 3. These results include MSLB and FWLB bounding input values. These analyses verify that the MSLB case resulted in the maximum drywell pressure. For further details see DCD Tier 2, Revision 3, Table 6.2-5. All of the RAI responses submitted prior to the response to RAI 6.2-59 are presented in DCD Revision 3.

Therefore, based on the above, no further revisions to previous RAIs on DCD Tier 2, Section 6.2 (e.g., RAI 6.2-98) as a result of the response to RAI 6.2-59 is necessary, since the most recent analyses verify the MSLB accident as the bounding case, and these analyses are documented in DCD Tier 2, Section 6.2, Revision 3.

DCD Impact:

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