

## **GE Energy**

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## Subject: Modified Reactor Building/Fuel Building Truncated Models

As discussed during a NRC/BNL/GE telecon on November 21, 2006, Enclosures 1 through 3 provide GE's response to the two requested items below. The results of the reanalysis for modeling error corrections are also included in this transmittal. No impact on the NRC's confirmatory analysis is expected since the GE NASTRAN model is not used directly by BNL.

- 1) The NRC requested that plots of "modified truncated model" analysis results be included in report SER-ESB-038 at the following locations:
- RB/FB walls along column lines R1,R7/F1,F3, RA and RG
- RCCV wall
- RPV pedestal wall
- Basemat at the same 3 sections (A, B &C) shown in report SER-ESB-048

The plots are for the section forces and moments at the wall base and displacements at critical locations.

- Plots are provided for each of the following load cases separately:
- Dead load
- Pressure load
- Seismic load,3 individual cases (NS, EW and vertical)
- Hydrostatic load

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2) Provide clarification in Table 5-2 of report SER-ESB-038 item 6 where it says "Maximum Combination" and indicate that this combination is selected to produce maximum displacement in the basemat at corner FA-F3 as shown in Fig. 5-2 and described in Section 5.2 of the report.

If you have any questions about the information provided here, please let me know.

Sincerely,

David H. Hinds Manager, ESBWR

Bathy Sedney for

## References:

- 1. MFN 06-262 Letter from David H. Hinds to U.S. Nuclear Regulatory Commission, *Reactor Building/Fuel Building Truncated Finite Element Model Analysis Data*, August 7, 2006
- 2. MFN 06-262, Supplement 1 Letter from David H. Hinds to U.S. Nuclear Regulatory Commission, Reactor Building/Fuel Building Finite Element Model Analysis Data Truncated and Full Models, August 21, 2006
- 3. MFN 06-262, Supplement 2 Letter from David H. Hinds to U.S. Nuclear Regulatory Commission, *Final Reactor Building/Fuel Building Truncated Models*, November 8, 2006

## **Enclosures:**

- 1. MFN 06-262, Supp. 3 Shimizu Engineering Report SER-ESB-038, Rev. 4, "Modified RBFB Truncated FE Model Analysis Data," November 30, 2006
- 2. MFN 06-262, Supp. 3 Shimizu Engineering Report SER-ESB-048, Rev. 1, "Evaluation of Modeling Details for RBFB Stress and Seismic Analyses" November 30, 2006
- 3. MFN 06-262, Supp. 3 NASTRAN Analysis Input Data and NASTRAN Analysis Results (CD)

cc: AE Cubbage USNRC (with enclosures)
GB Stramback GE/San Jose (with enclosures)
eDRF 0000-0060-9753