

---

## **RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

---

**1/31/2013**

**US-APWR Design Certification  
Mitsubishi Heavy Industries  
Docket No. 52-021**

**RAI NO.:** NO. 776-5851 REVISION 3  
**SRP SECTION:** 03.07.02 – Seismic Systems Analysis  
**APPLICATION SECTION:** 3.7.2  
**DATE OF RAI ISSUE:** 06/15/11

---

**QUESTION NO. RAI 03.07.02-73:**

Subsection 3.2 of MUAP-11001 (R0), states that “Table 3.2-1 summarizes the results of the modal analyses of the three different FE models for the dominant natural frequencies in horizontal N-S and E-W directions.”

Table 3.2-1 did not show the results of the modal analyses for the vertical direction excitation. Applicant is requested to provide in Table 3.2-1 the corresponding data for the vertical direction so that the staff can assess the accuracy of the model in the vertical direction.

---

**ANSWER:**

This answer revises and replaces the previous MHI answer that was transmitted by letter UAP-HF-11262 (ML11228A129).

Technical Report MUAP-11001 has been superseded and the relevant information incorporated into Technical Report MUAP-10006, Rev. 3. The reactor building (R/B), prestressed concrete containment vessel, containment internal structure, east and west power source buildings (PS/Bs), auxiliary building (A/B), and essential service water pipe chase (ESWPC) are now structurally integrated and supported on a common basemat to form the R/B complex. Technical Report MUAP-10006, Rev. 3, presents the information relevant to the added A/B and PS/Bs as well as the other buildings that make up the R/B complex.

Section 02.5.1.3.6.2 of Technical Report MUAP-10006, Rev. 3, presents the modal analysis results for the A/B portion of the R/B complex. Table 3.2-1 in MUAP-11001 is now Table 02.5.1.3.6.2-1 through Table 02.5.1.3.6.2-6 in Technical Report MUAP-10006, Rev 3. Tables 02.5.1.3.6.2-1 through 02.5.1.3.6.2-6 include the results for the vertical and the two horizontal directions of excitation.

**Impact on DCD**

There is no impact on the DCD.

**Impact on R-COLA**

There is no impact on the R-COLA.

**Impact on S-COLA**

There is no impact on the S-COLA.

**Impact on PRA**

There is no impact on the PRA.

**Impact on Technical/Topical Report**

There is no impact on a Technical/Topical Report.

---

This completes MHI's response to the NRC's question.