

---

---

**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 03.07.02-77:**

In Subsection 4.3 of MUAP-10001 (R0), "Results of Dynamic FE Model SSI Analyses," the fifth paragraph (page 55) states, "Figure 4.3-1 shows that the maximum displacement relative to the free-field ground surface is 0.92 inches in the East-West direction."

The staff is not able to determine whether or not 0.92 inches includes the contribution from the SSE motions in the North –South (NS) and East –West (EW) directions including the displacement in NS direction caused by the SSE motion in the EW direction, and the displacement in EW direction caused by the SSE motion in the NS direction. The Applicant is requested to provide detailed information that shows how the various components of the horizontal seismic displacements are combined.

---

**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Technical Report MUAP-11001 has been superseded and the relevant information incorporated into Technical Report MUAP-10006, Rev. 3.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 (PCCV), 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 combined basemat to form the R/B complex.

Detailed information that shows how the various components of the horizontal seismic displacements are combined for the computation of maximum displacement is provided in Section 03.3.8 of MUAP-10006, Rev. 3.

**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.