

---

---

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

---

---

1/31/2013

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

**RAI NO.:** NO. 660-5134 REVISION 2  
**SRP SECTION:** 03.07.02 – Seismic System Analysis  
**APPLICATION SECTION:** 3.7.2  
**DATE OF RAI ISSUE:** 11/15/10

---

**QUESTION NO. RAI 03.07.02-38 (03.07.02-65):**

This request for additional information (RAI) is necessary for the staff to determine if the application meets the requirements of 10 CFR Part 50, Appendix A, General Design Criteria 2; 10 CFR Part 50 Appendix S; and 10 CFR Part 100; as well as the guidance in NUREG-0800, 'Standard Review Plan for the Review of Safety Analysis for Nuclear Power Plants,' Chapter 3.7.2, "Seismic System Analysis."

MHI's Topical Report, MUAP-08005 (R0), documents the SSI results of a coupled RCLR/B-PCCV-CIS lumped mass stick model. That evaluation was based on four uniform soil conditions using a frequency-independent impedance function approach. In contrast, reports MUAP-10001 (R1) and MUAP-10006 (R0) document SASSI analyses of the R/B complex based on a different set of subgrade conditions. In order for the staff to understand and evaluate the basis of the seismic design of the R/B complex, the staff is requesting that the applicant state the role and relevance of MUAP-08005 (R0) in the context of MUAP-10001(R1) and MUAP-10006 (R0).

Is MUAP-08005 (R0) obsolete in light of MUAP-10001 and MUAP-10006? If the report is still relevant, identify specific portions and their relevance. Does MHI intend to revise MUAP-08005?

Similarly, the applicant should describe the role of MUAP-08002 in the context of MUAP-10001(R1) and MUAP-10006 (R0).

---

**ANSWER:**

This answer revises and replaces the previous MHI answer transmitted by letter UAP-HF-10355 (ML110040071).

Technical Reports MUAP-08002 and MUAP-08005 are superseded in entirety by the soil-structure interaction (SSI) methodology and results contained in Technical Report MUAP-10006, Rev. 3. Technical Reports MUAP-08005 and MUAP-08002 are no longer referenced by the DCD. Technical Report MUAP-10001 has been superseded and the relevant information on the SSI analysis methodology has been incorporated into Technical Report MUAP-10006, Rev. 3.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 a Technical/Topical Report**

There is no impact on a Technical/Topical Report.

---

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