RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1/31/2013

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.:	**NO. 854-6088 REVISION 3**
SRP SECTION:	**03.07.02 – Seismic System Analysis**
APPLICATION SECTION:	**3.7.2**
DATE OF RAI ISSUE:	**10/24/11**

QUESTION NO. RAI 03.07.02-163:

Section 4.2.5 in MUAP 11007 (R0) indicates that locations for comparison of ISRS will be selected, but does not identify the locations or the basis for their selection. The staff expects the applicant to select the locations based on their importance to the design. Therefore, the applicant is requested to identify locations that are significant for determining peak structural demands (moments and shears) and ISRS.

ANSWER:

MUAP-10006, Revision 3 presents the design basis soil-structure interaction (SSI) analysis and results for the US-APWR standard plant. Appendix 3-B of MUAP-10006, Rev. 3, provides in-structure response spectra (ISRS) for a selection of equipment and structural locations throughout the R/B complex. MUAP-11007, Revision 2 compares ISRS for saturated and unsaturated conditions at the same locations. Table 2-1 in MUAP-11007, Rev. 2 lists key components for determining ISRS, likewise Table 3-4 identifies structural locations for ISRS comparison. MUAP-11007, Rev 2, Section 3.2 presents the comparison of the SSI ground motion, Section 3.3 presents a comparison of the SSI response frequencies, Section 3.4 presents a comparison of ISRS (Appendix A includes figures comparing the ISRS from the unsaturated cases with the design basis ISRS for all the locations specified in Tables 2-1 and 3-4), and Section 3.5 presents a comparison of shear base forces.

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.