
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1/31/2013

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

RAI NO.: NO. 212-1950 REVISION 1
SRP SECTION: 03.07.02 – Seismic System Analysis
APPLICATION SECTION: 3.7.2
DATE OF RAI ISSUE: 02/25/09

QUESTION NO. RAI 03.07.02-01 (03.07.02-05):

It is stated in Section 3.7.2.8 of the DCD that the phenomenon of structure-to-structure interaction through the soil is neglected in the soil-structure interaction (SSI) analysis and instead the variations of the site properties considered by the four general subgrade conditions are deemed sufficient to address the uncertainties related to possible structure-to-structure interaction effects. Provide justification for this position other than the reference to ASCE 4-98. The staff has not reviewed and endorsed ASCE 4-98 for the SSI application. Currently this ASCE standard is under revision.

ANSWER:

This answer revises and replaces the previous MHI answer that was transmitted by Letter UAP-HF-09188 (ML091320443).

Structure-soil-structure interaction (SSSI) effects are included in the soil-structure interaction (SSI) analyses and design of the standard plant, and statements to the effect that structure-soil-structure interaction can be neglected have been removed from the DCD. The approach methodology for structure-soil-structure interaction is discussed in DCD Subsection 3.7.2.4. Further presentation of the SSSI methodology and analyses results can be found in Technical Report MUAP-10006, Rev. 3, Sections 03.3.0 and 03.4.0, respectively.

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.