
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1/31/2013

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

RAI NO.: NO. 810-5874 REVISION 3
SRP SECTION: 03.07.02 – Seismic System Analysis
APPLICATION SECTION: 3.7.2
DATE OF RAI ISSUE: 08/22/11

QUESTION NO. RAI 03.07.02-92:

In Subsection 3.7.2.3.6.1 of DCD (R3), “Mass Points and Associated Weights (W)”, the second paragraph (page 3.7-21) states, “Figure 3.7.2-5 depicts how the mass moments of inertia and weights associated with the lumped masses are computed.”

The information presented in Figure 3.7.2-5 is not clear to the staff. The Applicant is requested to provide clarifying descriptions for the four rectangular-shape insertions in this figure.

ANSWER:

This answer revises and replaces the previous MHI answer that was transmitted by letter UAP-HF-11402 (ML11332A148).

The seismic category I reactor building (R/B) complex, which includes the R/B, prestressed concrete containment vessel (PCCV), containment internal structure (CIS), east and west power source buildings (PS/Bs), auxiliary building (A/B), and essential service water pipe chase (ESWPC) have been structurally integrated and supported on a combined basemat and is dynamically analyzed with a finite element (FE) model using ACS SASSI. Descriptions of the analyses methodologies and the analyses results are presented in Technical Report MUAP-10006, Rev. 3.

Due to the change from a lumped mass stick model to a FE model, DCD Subsection 3.7.2.3.6.1 has been deleted. The information presented in Figure 3.7.2-5 of DCD Rev. 3 has been replaced with a figure showing a section view of the dynamic FE model of the R/B complex.

Impact on DCD

There is no impact on the COLA.

Impact on R-COLA

There is no impact on the COLA.

Impact on S-COLA

There is no impact on the 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.