
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1/31/2013

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 852-6003 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 03.07.02-132:

In Subsection 5.4.9 of MUAP-10001(R3), "ACS SASSI Validation," the first paragraph (Page 5-241) states, "The comparison shows that the ACS SASSI model accurately represents the structural response of the validated Dynamic FE Model. Differences are observed from the figures for the analysis results using two different codes. They are acceptable based on acceptance criteria and justifications discussed in Section 4.3.3 of this report."

One of the acceptance criteria listed in Section 4.3.3 of MUAP-10001(R3) states, "The ARS results obtained for the ACS SASSI validation analyses shall be within 10% of those obtained from the time history analyses of the dynamic FE model." The staff noticed that the ARS comparison shown in Figure 5.4.5-9 (Page 5-250), the difference of the ARS at the peak about 27 Hz is more than 10%. The applicant is requested to provide numerical data for the ARS at that location to show that the result meets the acceptance criteria.

ANSWER:

Technical Report MUAP-10001, Rev. 3, is superseded by Technical Report MUAP-10006, Rev. 3. The reactor building (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) are now structurally integrated and supported on a combined basemat to form the R/B complex. Technical Report MUAP-10006, Rev. 3, presents the information relevant to the A/B as well as the other buildings that make up the R/B complex.

The validation of the model no longer uses the methodology or acceptance criteria that were stated in Technical Report MUAP-10001. The methodology and validation of the model is presented in Part 2 of 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. MHI to Verify

Impact on Technical/Topical Report

There is no impact on the Technical/Topical Report.

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