
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 03.07.02-134:

In Figure 5.3.3.1.3-2 of MUAP-10001R3), "R/B ARS Results – Comparison at Exterior Wall Location B Roof Level, Y-direction," (Page 5-111) the ARS corresponding to the seismic model has a lower value (difference as large as 66%) than that of the detailed model in the frequency range of 12Hz to 30Hz.

The staff concluded that this discrepancy indicates that the seismic model lacks the vibration modes in the frequency range from 12Hz to 30Hz. The applicant is requested to address the vibration modes in the frequency range from 12Hz to 30Hz in the seismic model and discuss what actions are planned to improve the accuracy of the seismic model to ensure the design of SSCs is based on adequate seismic response in that frequency range.

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Technical Report MUAP-10001, Rev. 3, is superseded by Technical Report MUAP-10006, Rev. 3.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.