
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 (03.07.02-02):

In section 3.7.2.2 of the DCD it is stated that the results obtained from the seismic analysis of the coupled model are reconciled, as necessary, with those results obtained from the current seismic analysis. Provide clarification to this statement and provide details of the various seismic analysis (e.g., current) being referenced.

ANSWER:

This answer revises and replaces the previous MHI answer that was transmitted by letter UAP-HF-09113 (ML090930727).

Reconciliation of “coupled” and “current” seismic analyses is no longer required and has been deleted from DCD Subsection 3.7.2.2. The seismic design basis modeling and analyses for the reactor building (R/B) complex are performed using ANSYS and SASSI finite element (FE) models. The reactor coolant loop (including reactor vessel, steam generators, pressurizer, reactor coolant pumps, and major piping) is modeled as a lumped mass stick model and is coupled with the structural FE analysis models to determine the overall dynamic response of the R/B complex, as described in Technical Report MUAP-10006, Rev. 3. Technical Report MUAP-10006, Rev. 3, Sections 02.3.1, 02.4.1, and 02.5.1 provide descriptions of the detailed and dynamic FE models.

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.