RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

03/29/2013

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:	**10/24/2011**

QUESTION NO. 03.07.02-118:

In Subsection 4.3.1.9 of MUAP 10001(R3), "Adjustment of Dynamic Properties of SC Modules," the second sentence states that "Stiffness and mass properties of elements modeling some of the SC walls of the CIS are adjusted in order to calibrate the dynamic response of the simplified dynamic FE model to match the actual response of the CIS as represented in the Detailed FE Model. The adjustments of the unit density and the elastic moduli of the shell elements are introduced to capture the actual distribution of mass and stiffness."

The applicant is requested to provide detailed technical information that shows how the stiffness and mass properties of elements modeling some of the SC walls of the CIS are adjusted. This information should identify which SC walls are adjusted and the technical basis supporting the selection of these walls.

This information is required by the staff in order to assess the effects of these parameters on the seismic response of the CIS and associated SSCs, and on the results of the SSI analyses.

ANSWER:

Technical Report MUAP-10001, Rev. 3, has been replaced by Technical Report MUAP-10006, Rev. 3.

The stiffness and mass properties of the dynamic finite element (FE) model are no longer adjusted to calibrate the dynamic response. The development of the dynamic FE model is described in Section 02.4.0 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.

Impact on Technical/Topical Report

There is no impact on the Technical/Topical Report.

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