
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

03/22/2013

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

RAI NO.: NO. 909-6315 REVISION 3
SRP SECTION: 03.07.02 - SEISMIC SYSTEM ANALYSIS
APPLICATION SECTION: 3.7.2
DATE OF RAI ISSUE: 03/05/2012

QUESTION NO. 03.07.02-207:

In its response to RAI No. 766-5819, Revision 0, Question No. 03.07.02-53, the Applicant stated that the spurious spikes have no significant impact on the response estimation in the SSI analyses by comparing the maximum relative displacement at Node 1473 in the Y-direction using interpolation options 0 and 1 for two subsurface profiles. The staff considers that the data shown in the response to be limited to only one case, and, therefore, are not sufficient to support the argument that the spurious spikes have no significant impact on all the response estimation in the SSI. Spurious spikes may be removed by increasing the number of selected frequencies in transfer function un-interpolated (TFU) or use a different interpolation option.

The Applicant is requested to either increase the number of selected frequencies in the TFU, or use a different interpolation option to remove the spurious spikes in computing the SSI responses.

ANSWER:

This answer revises and replaces the previous MHI answer that was transmitted by letter UAP-HF-12124, dated June 5, 2012 (ML12158A478).

The interpolated transfer functions were reviewed and the selected frequencies were modified and increased to eliminate or reduce the spurious spikes. The updated transfer function plots are provided in Subsections 3.1.4 and 4.3.2 of Technical Report MUAP-11002 Rev. 2.

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.