
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1/31/2013

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 854-6088 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 03.07.02-160:

Section 4.2.1 in MUAP 11007 (R0) addresses the effects of water table elevation raised in RAI 660-5134 Question No. 03.07.02-60 and refers to the RAI response as the. "previous RAI evaluation." Section 4.2.1 in MUAP 11007 (R0) states that "In the updated evaluation presented in this report, the generic unsaturated soil profiles used in the previous RAI evaluation are revised in order to more realistically represent the porosity characteristics of typical soil materials represented by the generic profiles 270-200 and 560-100." However, porosity is not a property incorporated into the SSI or site response calculations and is not relevant in the context of this description of SSI. Therefore, the applicant is requested to explain the relevance of this statement or delete it from the report.

ANSWER:

Technical Report MUAP-11007, Rev. 0 has been updated and replaced with Technical Report MUAP-11007, Rev. 2.

The quoted statement, "In the updated evaluation presented in this report, the generic unsaturated soil profiles used in the previous RAI evaluation are revised in order to more realistically represent the porosity characteristics of typical soil materials represented by the generic profiles 270-200 and 560-100" has been deleted from Technical Report MUAP-11007, Rev. 2 because the soil porosity is not directly used as input for the soil-structure interaction (SSI) analyses or site response analyses. The basis for not including porosity is presented in Section 2.2 of Technical Report MUAP-11007. Although soil porosity characteristics are not directly considered in the SSI analyses, they are considered and used in the determination of soil unit weights as discussed in Subsection 2.4 of Technical Report MUAP-11007, 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. 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.