
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

07/08/2013

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 776-5851 REVISION 1
SRP SECTION: 03.07.02 – Seismic System Analysis
APPLICATION SECTION: 3.7.2
DATE OF RAI ISSUE: 06/15/2009

QUESTION NO. 03.07.02-83:

On Page A1 of Appendix A of the MUAP-11001 (R0) under Key Features, the second bullet states, "Program Checks Minimum Reinforcement in Accordance with Section 7.12 of ACI 349-01."

Requirements for minimum reinforcement are also specified in Section 14.3 of ACI 349-01. The Applicant is requested to confirm that the program also checks for minimum reinforcement requirements in Section 14.3 of ACI 349-01, and that the A/B design meets the ACI code requirements.

ANSWER:

This answer replaces the previous MHI answer that was transmitted by letter UAP-HF-11262 (ML11228A129).

Technical Report MUAP-11001 is superseded by Technical Report MUAP-10006, Rev. 3. MUAP-10006, Rev. 3 does not include detailed descriptions of the post-processing methods used to confirm reinforced concrete section adequacy. The Reactor Building (R/B), Prestressed Concrete Containment Vessel (PCCV), Containment Internal Structure (CIS), Power Source Buildings (PS/Bs) and Auxiliary Building (A/B) are now on a combined basemat and are identified as the R/B complex. The design checks performed for the A/B are limited to the common walls connecting the A/B to the R/B and the A/B to the west PS/B. 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 American Concrete Institute (ACI) 349 design code has changed from the 2001 to the 2006 edition. Checks for the minimum reinforcement requirements as described in Sections 7.12, 14.3, and 21.7 of the ACI 349-06 code have been considered in the design of the R/B complex. All analyzed walls meet the minimum requirements of ACI 349-06.

Impact on DCD

There is no impact on the DCD.

Impact on R-COLA

There is no impact on the R-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.