

REQUEST FOR ADDITIONAL INFORMATION 814-5943 REVISION 3

8/23/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 09.04.04 - Turbine Area Ventilation System

Application Section: 9.4.4

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

09.04.04-8

This is a follow-up RAI to RAI No. 4690, Question No 09.04.04-6 (ML101660065) and follow-up RAI No. 5555, Question No. 09.04.04-7 (ML111010025) . In Question No. 09.04.04-6 the staff noted that General Design Criterion (GDC) 2, “Design Bases for Protection Against Natural Phenomena,” of Appendix A, “General Design Criteria for Nuclear Power Plants,” to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50), “Domestic Licensing of Production and Utilization Facilities” (Ref. 1), requires that “nuclear power plant structures, systems, and components (SSCs) important to safety must be designed to withstand the effects of earthquakes without loss of capability to perform their safety functions”. In their response to Question No. 09.04.04-7, the applicant acknowledged that there are “important to safety” components located within the Turbine Building and committed to amend DCD subsection 9.4.4.1.1 to address this issue.

As a note, there may be inconsistencies between chapter 3 and 10. For example, it is unclear from Chapter 10 which important to safety functions these components perform. Clarifying why these components are in Table 3D-2 may aid the staff in coming to a finding regarding GDC 2. The staff notes that DCD Revision 3 Table 3D-2 (pages 7 and 36) lists the nineteen “important to safety” components located within the Turbine Building and designates each as Seismic Category “NON”. Given this seismic classification, the staff can not conclude that these components will be designed to withstand the effects of earthquakes without loss of capability to perform their important to safety functions. The staff requests additional information about the design of these “important to safety components” that ensures that these components will withstand the effects of earthquakes without loss of capability to perform their important to safety functions. The staff requests that the applicant amend the applicable sections of the DCD to reflect these design attributes.