

REQUEST FOR ADDITIONAL INFORMATION 851-6065 REVISION 3

10/24/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 03.09.03 - ASME Code Class 1, 2, and 3 Components

Application Section: Section 3.9.3

QUESTIONS for Engineering Mechanics Branch 1 (AP1000/EPR Projects) (EMB1)

03.09.03-28

This RAI 6065 is a supplemental RAI to RAI 209, Question 03.09.03-8:

RAI 209, Question 03.09.03-8 addresses concerns that some ASME Class 2 and 3 components are exposed to high radiation or high thermal cycles and therefore the materials are susceptible to environmental fatigue. In response to RAI 209 Question 03.09.03-8, MHI stated that ASME Class 2 and 3 components are out of scope of the environmental fatigue evaluation based on the guidance in RG 1.207.

In DCD Tier 2 Section 3.9.3.1.5, MHI stated that "The environmental impact on fatigue of Class 2 and 3 components will follow guidelines established by the NRC at the time of actual analysis". Since this statement does not reflect the current RG 1.207 guidance that applies only to Class 1 components and there is no NRC guidance for environmental fatigue impact on Class 2 and 3 components, the statement should be modified to reflect the actual approach to be followed or deleted from the DCD.