REQUEST FOR ADDITIONAL INFORMATION 233-2115 REVISION 0

2/26/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 06.06 - Inservice Inspection and Testing of Class 2 and 3 Components
Application Section: Section 6.6.2

QUESTIONS for Component Integrity, Performance, and Testing Branch 1 (AP1000/EPR Projects) (CIB1)

06.06-2

US-APWR DCD, Section 6.6.2 states that the physical arrangement of ASME Code Class 2 and 3 components is designed to allow personnel and equipment access "to the extent practical" to perform the required inservice examinations specified by the ASME Code, Section XI and mandatory appendices. The DCD also states that removable hangers are provided, "as necessary and practical," to facilitate inservice inspection. In addition, Section 6.6.3 states, "To the maximum extent possible, sufficient radial clearances are provided around pipe or component welds requiring volumetric or surface examination for inservice inspection." However, the US-APWR DCD states that the piping arrangement allows for adequate separation of piping welds so that space is available to perform inservice inspection, and modules fabricated offsite are designed and engineered to provide access for inservice inspection and maintenance activities. The stafffinds that the phrases, "to the extent practical," "as necessary and practical," and "to the maximum extent possible," may not represent an essentially complete design and are inconsistent with a design that enables the performance of PSI/ISI examinations by eliminating impractical examinations due to design, geometry, or materials of construction. The regulations in 10 CFR 50.55a(g)(3)(i) and (3)(ii) require that for a boiling or pressurized water-cooled nuclear power facility whose construction permit under this part, or design certification, design approval, combined license, or manufacturing license under part 52 of this chapter, was issued on or after July 1, 1974, components (including supports) classified as Class 1, 2, and 3 must be designed and be provided with access to enable the performance of inservice examination and must meet the preservice examination requirements set forth in the editions and addenda of Section XI of the ASME Code incorporated by reference. Please remove the statements "to the extent practical," "to the maximum extent possible," and "as necessary and practical," in discussing how the US-APWR design eliminates interferences due to design, geometry, or materials of construction in order to enable the performance of the PSI/ISI examinations required by the ASME Code, Section XI. If specific plant design conditions exist that result in ASME Code, Section XI ISI requirements to be impractical to perform, those specific conditions must be described in detail and the reasons should be provided to the staff justifying why the design, geometry, or materials of construction cannot be changed to accommodate such examination requirements.