

REQUEST FOR ADDITIONAL INFORMATION 253-2063 REVISION 0

3/3/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 05.02.01.02 - Applicable Code Cases

Application Section: 5.2.1.2

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

05.02.01.02-1

USAPWR DCD Tier 2, Section 5.2.1.2, "Compliance with Applicable Code Cases," states that applicable ASME Code Cases for reactor coolant pressure boundary (RCPB) Class 1 components are listed in Table 5.2.1-2, "ASME Code Cases." USAPWR DCD Tier 2, Section 5.2.1.2 states that any Code Case conditionally approved in Regulatory Guide 1.84 for Class 1 components meets the conditions established in the regulatory guide. Table 5.2.1-2 lists ASME Code Case N-71-18, "Additional Material for Subsection NF, Class 1, 2, 3 and MC Supports Fabricated by Welding, Section III Division 1," for use in the design of supports for specific nuclear power plant components. The NRC staff requests that Mitsubishi specify in the USAPWR DCD the components that will be fabricated using Code Case N-71-18 and the materials specifications and grades that will be used.

05.02.01.02-2

USAPWR DCD Tier 2, Section 5.2.1.2 states that ASME Code Cases for Class 2 and 3 piping are covered in Section 3.12, "Piping Design Review." USAPWR DCD Tier 2, Subsection 3.12.2.2, "American Society of Mechanical Engineers Code Cases," states that ASME Code Cases N-122-2, N-318-5, N-391-2, N-392-3, and N-319-3 are applicable for the design of the piping system and the piping supports for the USAPWR. These code cases are listed as acceptable in RG 1.84. USAPWR DCD Tier 2, Section 5.2.1.2 states that other ASME Codes Cases may be used in the USAPWR Design Certification if they are either conditionally or unconditionally approved in RG 1.84. As stated in the NRC safety evaluation report (NUREG-1793) for the AP1000 Design Certification, the only acceptable ASME Code Cases that may be used for the design of ASME Code Class 1, 2, and 3 piping systems in the certified design plant are those either conditionally or unconditionally approved in RG 1.84, and that are in effect at the time of the Design Certification, or determined to be conditionally acceptable in the NRC safety evaluation report on the Design Certification application. A COL applicant may submit, with its COL application, future ASME Code Cases that are endorsed in RG 1.84 at the time of the application, provided that they do not alter the staff's safety findings on the certified design. In addition, the COL applicant should specify those ASME Code Cases to be used at the plant referencing the certified design, which are in effect at the time of the COL application that are applicable to RG 1.147, "Inservice Inspection Code Case Acceptability - ASME Section XI, Division 1," and RG 1.192, "Operation and

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Maintenance Code Case Acceptability - ASME OM Code.” The NRC staff requests that Mitsubishi clarify the need for the COL applicant to identify ASME Code Cases to be used at the plant referencing the USAPWR design certification in the COL application.

05.02.01.02-3

USAPWR DCD Tier 2, Section 5.2.1.2 states that the COL applicant addresses ASME Code Cases that are approved in RG 1.147 and RG 1.192. USAPWR DCD Tier 2, Section 5.2.6, “Combined License Information,” lists COL information items COL 5.2(1), (2), and (3) that specify that the COL applicant addresses ASME Code Cases approved in RGs 1.84, 1.147, and 1.192, respectively. The NRC staff requests that Mitsubishi specify in the USAPWR DCD the ASME *Boiler and Pressure Vessel Code*, Section III and Section XI Code Cases, and ASME *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code) Code Cases currently planned to be applied as part of the USAPWR design.