

REQUEST FOR ADDITIONAL INFORMATION 620-4886 REVISION 2

8/13/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 04.05.02 - Reactor Internal and Core Support Structure Materials

Application Section: 4.5.2

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

04.05.02-23

In Table 4.5-2 of the USAPWR DCD, cast austenitic stainless steel alloy SA-351 CF8 is proposed as an option for the guide funnel of the CRDM thermal sleeve. Staff requests that the applicant verify that, under the expected environmental conditions, the selected material will provide adequate fracture toughness over its design life (e.g., considering thermal aging due to exposure to reactor coolant operating temperatures).