

**REQUEST FOR ADDITIONAL INFORMATION 573-4592 REVISION 2**

4/19/2010

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)

04.05.02-22

Alloy X-750 (ASME SB637 N07750) is specified in Table 4.5-2 of the DCD for clevis insert bolts and springs, and as an option for the guide tube support pins. The staff notes that the resistance of Alloy X-750 to stress corrosion cracking is dependent on processing and heat treatment requirements. The staff requests that the applicant discuss the processing and heat treatment requirements for Alloy X-750 clevis insert bolts and guide tube support pins that are specified in Table 4.5-2, and discuss the adequacy of this processing and heat treatment to minimize the possibility of stress corrosion cracking. Also, please discuss any operating history of Alloy X-750 in these applications that may provide evidence that this alloy is sufficiently resistant to stress corrosion cracking in these applications.