Jeff Ciocco

From: Jeff Ciocco
Sent: Thursday, July 24, 2008 9:19 AM
To: us-apwr-rai@mhi.co.jp
Cc: Michelle Hart; Charles Cox; Jin Chung; Ruth Reyes; Larry Burkhart; Harrison Botwin
Subject: US-APWR Design Certification Application RAI No.37
Attachments: US-APWR DC RAI 37 RSAC 847.pdf

MHI,

Attached please find the subject request for additional information (RAI). This RAI was sent to you in draft form. The schedule we are establishing for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. Please submit your RAI response to the NRC Document Control Desk.

Thanks,

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REQUEST FOR ADDITIONAL INFORMATION NO. 37 REVISION 0

7/24/2008

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 06.05.03 - Fission Product Control Systems and Structures

Application Section: DCD 6.5.3

QUESTIONS

06.05.03-1

DCD 6.5.3.2 states that the US-APWR design does not use a secondary containment. However, in the design basis accident LOCA and REA analyses in DCD Chapter 15, credit is taken for collection and filtration in the penetration areas of 50% of the containment leakage. Although a secondary containment in the manner of a structure that completely surrounds the primary containment is not part of the US-APWR design, the NRC staff considers the LOCA and REA analyses are treating the penetration areas as a partial dual containment, given that the analyses credit fission product removal by filtration systems in those areas. Standard Review Plan (SRP) section 6.5.3, "Fission Product Control Systems and Structures," in addition to the primary and secondary containments also discusses other fission product control structures for collection and control of post-accident releases. The SRP acceptance criteria for secondary containments on page 6.5.3-5 states that partial dual containments should meet the same basic criteria as secondary containments in order for credit for fission product removal to be found acceptable by the NRC staff. Therefore, in DCD, Tier 2, section 6.5.3 discuss the penetration areas with reference to the discussion in SRP 6.5.3 on secondary containments, including the justification for 50% of the primary containment leakage to the penetration areas, post-accident isolation, ventilation systems design and operation and any technical specifications.