

REQUEST FOR ADDITIONAL INFORMATION 642-4770 REVISION 2

10/4/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 09.04.01 - Control Room Area Ventilation System
Application Section: DCD Tier 2 section 9.4.1

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

09.04.01-24

The staff performed an audit of MNES calculations that support the design information contained in DCD section 9.4.1, reference **Accession No.: ML101370265**. The staff invoked the review requirements of SRP 9.4.1, Section IV.1.C which requires the NRC staff to review calculations in support of its conclusions that the equipment capacities are of adequate design.

During the staff's audit of MNES Calculation N0-EE23101 "US-APWR Standard Design - Main Control Room HVAC System (MCRVS) Calculations" the staff observed that the system configuration used to determine the most limiting design heat load, was not the configuration that yields the highest heat load for the system.

The staff identified this observation to the applicant at the time of discovery and during the audit's exit briefing. The applicant concurred with this observation and agreed to revise MNES Calculation N-EE23101 to derive a new design heat load value for the US-APWR plant. The applicant acknowledged the need to revise DCD Table 9.4.1-1 based on the value obtained from the revised MNES Calculation N-EE23101.

This RAI serves as a tracking tool to ensure these changes occur.

The staff notes that since Calculation N0-EE23101 serves as the bases of safety related parameters and values found in the DCD Section 9.4.1, the staff requests that the applicant include MNES Calculation N0-EE23101 "US-APWR Standard Design - Main Control Room HVAC System (MCRVS) Calculations" as a Reference in DCD subsection 9.4.8.

References:

Sections 9.4.1 and 9.4.5 Audit Plan, dated 5/18/2010, ML101370265.

MHI's Responses to US-APWR DCD RAI No. 64-735; MHI Ref: UAP-HF-08216; dated 10/6/2008; ML082830021.

MHI's Responses to US-APWR DCD RAI No. 356-2549; MHI Ref: UAP-HF-09386; dated 7/17/2009; ML092030375.