

REQUEST FOR ADDITIONAL INFORMATION 541-4346 REVISION 4

3/2/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 09.04.04 - Turbine Area Ventilation System

Application Section: DCD section 9.4.4

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

09.04.04-4

OPEN ITEM – New follow-up RAI

In the “Impact on DCD” section of the RAI No.67-715 Revision 0, Question No. 09.04.04-2, RAI 9.4.4-7 (MHI Ref: UAP-HF-08222, dated 10/6/08, ML082830020) the applicant committed to add the following to the DCD:

“Add a last sentence to the first paragraph in Subsection 9.4.4.2.2 as follows.

This HVAC system is powered from the alternate AC power source and operated during SBO and LOOP conditions.”

The last sentence (underlined) of the first paragraph in Subsection 9.4.4.2.2 “Electrical Equipment Areas HVAC System” of Revision 2 of the DCD reads:

“The electrical equipment areas HVAC system consists of two 100% non-Class 1E electrical room air handling units and non-Class 1E battery rooms common exhaust system. This HVAC system is powered from the alternate ac power source and operated during LOOP condition.”

The staff requests further information as to why the applicant failed to include the SBO condition in the amended passage. It is the staff’s understanding that power would be restored to the electrical equipment areas HVAC system via the AAC within one hour of the onset of SBO. Would this not be a requirement since the batteries would again be charging (i.e. generating H² gas) once the AAC is providing power to the system?

09.04.04-5

OPEN ITEM – NRC CONFIRMATORY – New follow-up RAI

In the “Impact on DCD” section of the RAI No.67-715 Revision 0, Question No. 09.04.04-2, RAI 9.4.4-9 (MHI Ref: UAP-HF-08222, dated 10/6/08, ML082830020) the applicant committed to make the following changes to the DCD:

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Revise DCD Appendix 9A, Section 9A.3.96 FA6-101 under "Smoke Control Features" as follows.

“The turbine building area ventilation system is manually actuated to purge the smoke. Supplementary smoke removal can be accomplished by the plant fire brigade using portable fans and ducting and standard fire fighting techniques. Except for isolated rooms, smoke accumulation is not expected to be a problem due to the tremendous internal volume of the building.”

Revision 2 of DCD subsection “9A.3.131 FA6-101 Turbine Building” for “Smoke Control Features”

“The T/B is provides with automatic opening smoke vents in the building roof. Supplementary smoke removal can be accomplished by the plant fire brigade using portable fans and ducting. Except for isolated rooms, smoke accumulation is not expected to be a problem due to the tremendous internal volume of the building.”

This is the same wording for this passage as contained in Revision 1 of the DCD (see 9A.3.96 FA6-101 Turbine Building). The staff requests that the DCD be amended to the committed to changes of RAI No.67-715 Revision 0, Question No. 09.04.04-2, RAI 9.4.4-9.