

REQUEST FOR ADDITIONAL INFORMATION 537-4298 REVISION 2

3/2/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 09.05.01 - Fire Protection Program
Application Section: Tier 2 Section 9.5.1, Appendix A

QUESTIONS for Balance of Plant Branch 1 (AP1000/EPR Projects) (SBPA)

09.05.01-18

In a letter dated December 11, 2009 (MHI Ref: UAP-HF-09555, ML093500501) responding to US-APWR DCD RAI No. 468-3360, Revision 1, question no. 09.05.04-44, regarding automatic fire detection and suppression requirements in the Power Source Fuel Storage Vaults, the applicant response and proposed DCD revision indicated that a vapor and liquid detection system is to be used in-lieu of an automatic fire detection system in the Power Source Fuel Storage Vaults. The applicant should provide justifications for how the vapor and liquid detection system can perform as well as or better than a traditional automatic fire detection system in term of timeliness in detecting a potential fire in the storage vaults. The applicant should also reconcile the conflicting descriptions between FSAR Section 9A.3 and Table 9A-2 as provided in the proposed DCD revision (e.g., the automatic fire detection system is deleted in the description but is still identified in the fire hazard analysis summary sheet for these fire areas).

09.05.01-19

In a letter dated December 11, 2009 (MHI Ref: UAP-HF-09555, ML093500501) responding to US-APWR DCD RAI No. 468-3360, Revision 1, question no. 09.05.04-44, regarding the GTG Auxiliary Component Rooms, the applicant responded that combustible loading in the GTG Auxiliary Component Rooms is very low, and coupled with the existing fire detection and suppression features in these fire zones, the spread of fire is not possible. However, in FSAR Table 9A-2, it is noted that these fire zones have unprotected openings with spatial separation to mitigate fire spread with adjacent fire zones. Since there are unprotected openings and the applicant relied on spatial separation instead of employing a spill containment method, discuss the extent of spatial separation from other safety-related equipment and adjacent fire zones to demonstrate that the spread of fire due to an oil spill is not a concern.