

# REQUEST FOR ADDITIONAL INFORMATION 425-3264 REVISION 1

7/27/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 12.03-12.04 - Radiation Protection Design Features

Application Section: 9.4, 12.3

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

12.03-12.04-21

Supplemental RAI for USAPWR DC FSAR Sections 12.2.2 and 12.3.3

1. Justify the HVAC System SSC as Described in USAPWR DC FSAR Section 9.4 Applicable to 10 CFR 20.1406.

In DC FSAR Chapter 9, describe the design features provided to prevent or mitigate contamination of the environment from the below grade HVAC Systems, Structures or Components (SSC), and contamination of the environment resulting from pressure differentials in the ventilation system associated with normal or expected operation. If design features are not used, provide a description in DC FSAR Chapter 12 of procedures for operations to be used to prevent or mitigate contamination of the environment and provide the associated justification for not incorporating design features.

2. Justify the HVAC System Configuration as Described in USAPWR DC FSAR Section 9.4 Applicable to 10 CFR 20.1406.

In DC FSAR Chapter 9, describe the design features provided to prevent or mitigate contamination of the environment resulting from equipment configurations such as; 1) the placement of HVAC inlets to prevent contamination by flooding, 2) the provision of moisture or resin traps on tank and vents prior to connection the HVAC system duct, 3) design configuration of system components to minimize the potential for contamination transport resulting from switching ventilation modes, and 4) contamination due to filter element failure. If design features are not used, provide a description in DC FSAR Chapter 12 of procedures for operations to be used to prevent or mitigate contamination of the environment and provide the associated justification for not incorporating design features.