REQUEST FOR ADDITIONAL INFORMATION 557-4415 REVISION 2

3/23/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 09.05.08 - Emergency Diesel Engine Combustion Air Intake and Exhaust System Application Section: 9.5.8

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

09.05.08-26

The applicant's response to RAI 09.05.08-24 regarding the GTG combustion air intake design requirement for particulate control states that, "...slightly larger matter than 10μm is acceptable. This value is intended to require that GTG is located in general atmospheric environment other than atmospheric pollution, dust-filled air, etc." This response also states that screens are installed at the inlet of the enclosure and inlet of gas turbine engine to prevent invasion of foreign objects. While the GTGs are located indoors in rooms that will be virtually free of dust-filled air and generally the outside air being drawn into the GT for combustion will be relatively dust-free, the GTGs must be capable of operating during high wind and tornado conditions that could generate a considerable amount of airborne dust and larger debris. The FSAR should describe the capability of the GTGs to continue to function during these conditions in accordance with GDC 2. The response should address the screen opening size with respect to the allowable particulate size ("slightly larger matter than 10μm" is non-specific but may be acceptable if the screen opening size is ≤10μm). In addition, the FSAR should describe how the GTGs will be protected against plugging of the installed screens by dust and larger debris that could prevent the GTGs from performing their safety function during these operating conditions.

Reference: MHI's Response to US-APWR DCD RAI No. 505-4030; MHI Ref: UAP-HF-10025; dated February 1, 2010; ML100350342.

[Q 26]