

**REQUEST FOR ADDITIONAL INFORMATION NO. 144-1738 REVISION 1**

1/9/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 12.02 - Radiation Sources  
Application Section: 12.02 - Radiation Sources

QUESTIONS for Health Physics Branch (CHPB)

12.02-12

10 CFR 20.1101(b), 1301 and 10 CFR 20.2203, requires licensees to control occupational and public radiation exposure. 10 CFR 20.1301 requires compliance with the provisions of 40 CFR 190. NUREG-0800 Chapter 11.4 "Solid Waste Management System", notes that 10 CFR 20.1301(e) requires that facilities licensed by the U.S. Nuclear Regulatory Commission comply with the provisions of 40 CFR Part 190. The guidance contained in Regulatory Guide 1.206 section C.I.12.2.1 notes that the applicant is to provide the models, parameters and bases used to calculate source magnitudes

**Question 1:**

The APWR DCD Section 12.2.1.1.10 notes that the Refueling Water Auxiliary Storage tank (RWAST) and the Primary Water Makeup Water Storage Tanks (PWMUST) concrete tank walls will provide shielding that results in surface dose rates of less than 0.25 mrem/h. Table 12.3-1 "Thicknesses of Concrete walls that enclose the major components" which list the thickness of the concrete shielding surrounding components containing radioactive material, does not mention the PWMST, the RWAST or the Boron Recycle Evaporator Feed Demineralizer.

In accordance with RG 1.206, please revise chapter 12 Table 12.3-1 to include the shielding information for the Refueling Water Auxiliary Storage Tank, the Primary Water Makeup Water Storage Tanks (PWMUST) and the Boron Recycle Evaporator Feed Demineralizer.