

REQUEST FOR ADDITIONAL INFORMATION 617-4843 REVISION 4

8/13/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 05.04.07 - Residual Heat Removal (RHR) System
Application Section: 5.4.7

QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)

05.04.07-13

The response to RAI 548-4331, question 05.04.07-12, regarding boron mixing under natural circulation conditions indicated that Section 14.2.12.2.3.9 will be updated to include additional information describing the natural circulation test. It is indicated in several places that RCS boron concentration will be determined at "multiple primary liquid sampling points." How many sampling points will be used in the test? Also, in Item D of updated Section 14.2.12.2.3.9 given in the response, the method by which acceptance is determined is not discussed and a numerical value is not given. Provide the evaluation method to be used to determine adequate boron mixing has been achieved as well as a numerical value that will be used to determine acceptance.

Reference: MHI's Responses to US-APWR DCD RAI No. 548-4331; MHI Ref: UAP-HF-10095; dated April 6, 2010; ML101020019.