

**REQUEST FOR ADDITIONAL INFORMATION 787-5882 REVISION 3**

7/26/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 15.01.01 - 15.01.04 - Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief or Safety Valve  
Application Section: 15.01.01 - 15.01.04

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

15.01.01 - 15.01.04-7

The analysis of the inadvertent opening of a steam generator relief or safety valve in DCD 15.1.4 credits the low pressurizer pressure signal to actuate emergency core cooling and emergency feedwater (EFW) isolation, but the sequence of events does not include when the pumps start or when the EFW is isolated. In order for the staff to determine if the mitigating systems are actuated at setpoints with allowance for instrument inaccuracy as required per Item 3 of the SRP 15.1.1-15.1.4 Acceptance Criteria on parameters used in the analytical model, include the start of the pumps and time of EFW isolation in the sequence of events for this analysis.

15.01.01 - 15.01.04-8

DCD 15.1.2.2 states that an increase in feedwater flow event initiated at power will cause the reactor to stabilize at a new, higher, power level. This is inconsistent with the supporting analysis in DCD 15.1.2.3, which includes a reactor trip on high-high steam generator water level. Please explain this discrepancy.