OPEN ITEMS 16.4.7

09/16/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 16.4.7 – Reactor Coolant System Technical Specifications Branch

[Open Item 16-146-1804/79] This question is related to RAI 16-146-1804/79.

The APWR GTS 3.4.12 contains operability requirements for the LTOP system. The APWR GTS 3.4.12 models similar requirements in the Westinghouse STS. As part of its review, the staff noted differences between the APWR GTS and the Westinghouse STS regarding the use of the RHR suction reliefs valves as means to prevent overpressure condition in the RCS pressure boundary at low RCS temperature (below 350 degree F). It is not clear in the bases discussion if the single failure criterion is being considered when TS requirements were formulated in this regard. In RAI 16-79, the applicant was asked to provide further clarifications on this staff's concern. In its response letter dated February 4, 2009, the applicant stated:

"The RHR Suction relief valves are considered passive components since these valves are a spring-loaded type. Therefore, there is no need to consider single active component failure."

The staff disagreed with the above stated position since the valve is changing its state from closed to open position when the lift setpoint is reached. A technical justification should be provided for not applying single failure criteria to the spring-loaded relief valve design. This is an open item (OI 16-146-1804/79).