

MRP-169  
Staff's Comments on Industry's Draft Response on Two RAI Questions

Question 1—

It is not clear whether the industry used the bounding loads to perform the net section collapse analyses shown in Table 1 of the draft response. A bounding net section collapse analyses should be based on the maximum pipe loads for the weld analyzed for each applicable load combination (i.e., Normal operating condition, normal operating condition + OBE (operating basis earthquake), and normal operating condition + SSE (safe shutdown earthquake))

Demonstration Analysis

For demonstration purposes, the staff is interested in seeing bounding net section collapse analysis results (with minimum structural factors) for reactor vessel inlet and outlet nozzles, and reactor coolant pump suction and discharge nozzles. For each location, provide OWOL and OWOL1 results for each bounding load combination for a range of plants.

Plant-Specific Analysis

The staff intends to require that plant-specific OWOL designs include a demonstration for the OWOL1 condition that the calculated structural factors for the postulated circumferential flaw based on the plant-specific load combinations satisfy the following requirements:

Load Combinations	Required Structural Factor	
	Membrane Stress	Bending Stress
Normal Operation	2.7	2.3
Normal Operation + OBE	2.4	2.0
Normal Operation + SSE	1.6	1.4

Because of concerns raised by this RAI question, the staff does not support sample inspection (e.g., inspecting 25% of the population) of OWOLs. The staff finds the sample inspection scheme unacceptable at this time. At a minimum, each OWOL needs to be examined once every 10-year inspection interval.

Question 2—

The draft response to Question 2 is acceptable because the FSWOL and OWOL design is coupled with the required flaw evaluation discussed in the response to this question which is required by MRP-169.

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