

## REQUEST FOR ADDITIONAL INFORMATION 630-5044 REVISION 2

9/7/2010

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 10.04.06 - Condensate Cleanup System

Application Section: 10.4.6

QUESTIONS for Component Integrity, Performance, and Testing Branch 1 (AP1000/EPR Projects)  
(CIB1)

### 10.04.06-16

This is a follow-up question related to RAI 3461 and RAI 4368 to clarify apparent discrepancies between information in the DCD and responses to these RAIs.

In response to RAI 441-3461, Question 10.04.06-9 the applicant states that it will supply all missing limits. However, the table provided did not contain Action Level 3 values for Na, SO<sub>4</sub>, and feedwater O<sub>2</sub>; and Action Level 2 values for condensate O<sub>2</sub>. Also in that table, the applicant provided Action Level 2 limits for Cl and SO<sub>4</sub> that exceed EPRI Guidelines, but these limits are identical to values it has defended. However, the Action Level 3 limit for Cl is nearly an order-of-magnitude higher than the corresponding value in the EPRI Guidelines. The staff requests that the applicant provide an explanation or justification for this discrepancy because, combined with the definition of Action Level 3 proposed by the applicant, this would allow operation with greater than 2000 ppb Cl for up to 24 hours. Consequently, a US-APWR plant could also operate for up to 1 week with chloride between 100-2000 ppm given the definition of Action Level 2 and the proposed Cl action levels.

In response to RAI 543-4368, Question 10.04.06-13, the applicant declared that the EPRI Guidelines do not define Action Level 2 and 3 limits for dissolved O<sub>2</sub>. However, the EPRI guidelines do indeed specify Action Level 2 limits for both (Table 5-4 for feedwater, Table 5-6 for condensate). Please clarify this discrepancy.