

ArevaEPRDCPEm Resource

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Sent: Wednesday, November 06, 2013 10:09 AM
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Subject: US EPR DC FINAL RAI 612, Chapter 3, Section: 03.09.06 - Functional Design Qualification and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints
Attachments: Final RAI 612 EMB_7238.docx

Attached please find subject request for additional information (RAI). A draft RAI was provided to you on October 23, 2013. On November 1, 2013, AREVA informed us that, the RAI is clear and does not contain proprietary information and that no further clarification is needed.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs,. For any RAIs that cannot be answered **within 30 days or December 6, 2013**, it is expected that a date for receipt of this information will be provided to the staff within the 30-day period so that the staff can assess how this information will impact the published schedule.

Thank you,

Mike

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Request for Additional Information 612

Issue Date: 11/06/2013

Application Title: U. S. EPR Standard Design Certification - Docket Number 52-020

Operating Company: AREVA NP Inc.

Docket No. 52-020

Review Section: 03.09.06 - Functional Design Qualification and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints

Application Section: 3.9.6

QUESTIONS

03.09.06-21

Describe the inservice testing provisions and their bases specified for the additional pumps included in Revision 5 to U.S. EPR FSAR Tier 2, Table 3.9.6-1, "Inservice Pump Testing Program Requirements." As part of this description, discuss the basis for the absence of vibration testing for positive displacement pumps.

03.09.06-22

Describe the valve inservice testing provisions and their bases for the changes made in Revision 5 to the U.S. EPR FSAR Tier 2, Table 3.9.6-2, "Inservice Valve Testing Program Requirements." For example, provide the following information:

- a. Discuss the new valves with manual actuators in Table 3.9.6-2, and the basis for relying on manual action for their safety functions.
- b. Discuss the deletion of Containment Inflating/Deflating and Leakoff Valves from Sheets 12 and 13 of Table 3.9.6-2.
- c. Discuss the addition of Passive Flooding Motorized Isolation Valves on Sheet 14 of Table 3.9.6-2, including specification of these valves as ASME OM Category B when they have leakage testing requirements in the table.
- d. Discuss the basis for changing the designation of the Medium Head Safety Injection (MHSI) check valves on Sheets 23, 25, 26, and 27 of Table 3.9.6-2 from an SA (self-actuated) valve to an MA (manual) actuator.
- e. Discuss the valves on Sheets 24 and 25 of Table 3.9.6-2, and their duplicate numbers of 30JND11AA008, 009, and 012 for three pairs of valves. Also, discuss the specification of the 30JND11AA012 valves as passive valves when they have exercising and stroke time testing requirements in the table.
- f. Discuss the basis for changing the designation of the Low Head Safety Injection (LHSI) check valves on Sheets 28, 33, 37, and 42 of Table 3.9.6-2 from an SA (self-actuated) to an MA (manual) or MO (motor-operated) actuator.
- g. Discuss the change of active valve 30PEB80AA004 on Sheet 101 of Table 3.9.6-2 from an MA (manual) to an MO (motor-operated) actuator, without specification of stroke time testing requirements in the table.
- h. Discuss the basis for addition and deletion of various Emergency Diesel Generator (EDG) fuel system (XJN) valves, and their basis, on Sheets 123 to 127 of Table 3.9.6-2.
- i. Discuss the basis for the addition and deletion of the various EDG operating system (XJX) valves, and their basis, on Sheets 133 to 136 of Table 3.9.6-2.

03.09.06-23

Tier 1 of Revision 5 to the U.S. EPR FSAR does not match some of the planned changes specified in the response to RAI 14.03.03-54. In particular, discuss the following differences between the RAI response and Revision 5 to the U.S. EPR FSAR:

- a. ITAAC 3.1 in the "Inspections, Tests, Analyses" column of Table 2.2.2-3, "In-Containment Refueling Water Storage Tank System ITAAC," in Tier 1 of Revision 5 to the U.S. EPR FSAR did not delete "pumps and" as specified in the RAI response.
- b. Subsection 3.2 in Section 2.6.8, "Containment Building Ventilation System," in Tier 1 of Revision 5 to the U.S. EPR FSAR does not match the response provided to RAI 14.03.03-54. The RAI response stated that valves listed in Table 2.6.8-1 will function to change position as listed in Table 2.6.8-1 under normal operating conditions. Subsection 3.2 in Section 2.6.8 in Tier 1 of Revision 5 to the U.S. EPR FSAR refers only to Class 1E valves in Table 2.6.8-3 to change position.
- c. ITAAC 3.2 in Table 2.6.8-4, "Containment Building Ventilation System ITAAC," in Tier 1 of Revision 5 to the U.S. EPR FSAR does not match the response to RAI 14.03.03-54. The RAI response stated that valves listed in Table 2.6.8-1 will function to change position as listed in Table 2.6.8-1 under normal operating conditions. This ITAAC in Revision 5 to the U.S. EPR FSAR refers only to Class 1E valves in Table 2.6.8-3 to change position.