CCNPP3eRAIPEm Resource

From: Arora, Surinder

Sent: Wednesday, January 04, 2012 7:50 AM

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Cc: CCNPP3eRAIPEm Resource; Segala, John; Wheeler, Larry; Wilson, Anthony; Vrahoretis,

Susan; McKenna, Eileen; Hearn, Peter

Subject: Draft RAI 332 SBPA 6228

Attachments: DRAFT RAI 332 SBPA 6228.doc

Attached is DRAFT RAI No. 332 (eRAI No. 6228). You have until January 19, 2012 to review it and decide whether you need a conference call to discuss the RAI before the final issuance. After the phone call or after January 19, 2012, the RAI will be finalized and sent to you for your response. You will then have 30 days to provide a technically complete response or an expected response date for the RAI.

Thanks

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 Draft RAI 332 SBPA 6228

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Request for Additional Information No. 332 (eRAI 6228) DRAFT 1/4/2012

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 09.02.05 - Ultimate Heat Sink
Application Section: 9.2.5

QUESTIONS for Balance of Plant Branch 1 (AP1000/EPR Projects) (SBPA)

09.02.05-22

Follow-up to RAI 279, Question 09.02.05-10

The staff understands the reason for a layup program for the UHS makeup water system and understands that it is undesirable to leave a safety-related water system in a filled, no flow status since it is only used after a DBA and only during testing, once every 24 months. However, a system drain followed by a dry layup may not be the best approach since ERPI NP-5106, "Sourcebook for Plant Layup and Equipment Preservation," suggests there are other means of layup including circulation, dry layup with air drying and dry air with dehumidified. The preferred layup method for cooling water system, see table 5-5 and 5-6 of this EPRI sourcebook, was to maintain system circulation. Relative humidity (RH) should be controlled for dry layup between 30 to 40 % and the applicant did not specifically address the layup conditions related to RH in the RAI response. The RAI response is also not clear that the low point drains remain open during the dry layup conditions in which humidity and contaminates may enter the piping system. In addition, for the system fill, it is not clear that the closing/opening of the valves is by MCR operator, operator in the field, or operator at a local control panel. Also it is not clear the exact location of the safety classification for the drain and vent valves since they are not shown on any of the FSAR figures.

The applicant should address the following items:

- · Discuss in the RAI response your complete review and analysis of the layup method using the material that is to be used in the piping system.
- Discuss the selection process given that in EPRI NP-5106, the preferred layup may not be 'drained'. Clarify in the CCNPP Unit 3 application the piping materials since between Revision 7 of the FSAR, RAI responses, and ITAAC it varies between carbon steel, super austenitic steel, carbon steel with rubber lining, or SB-675SS.
- Discuss in the RAI response your analysis for a 24 month testing of the UHS makeup water system given the importance to safety classification post DBA.
- Discuss in the RAI response your analysis to call the UHS makeup system "operable" knowing that operator actions will be required to restore the UHS makeup system since the system in drained and requires filling to provide water to the UHS basins.

- Discuss in the RAI that the filling of the UHS makeup water system is not consider pre-condition before performing the Technical Specification surveillance.
 Describe the procedure for performing the surveillance, for example confirm that the procedures include the testing of the operator's ability to fill the piping system in a timely manner. Confirm that the surveillance procedures include the potential for operator error, such as improper valve sequencing/manipulation in filling the UHS makeup water system.
- Clarify in the FSAR the valve positions and locations on a USAR Figure, of the UHS makeup water system vent and drain valves to support the layup program and if these valves are open, describe the controls in place to maintain the system cleanliness. Describe in the FSAR the operator actions needed to close open valves.