

CCNPP3eRAIPEm Resource

From: Arora, Surinder
Sent: Friday, January 20, 2012 1:41 PM
To: 'Infanger, Paul'; 'UNECC3Project@unistarnuclear.com'
Cc: Wheeler, Larry; CCNPP3eRAIPEm Resource; McKenna, Eileen; Hearn, Peter; Segala, John; Wilson, Anthony; Vrahoretis, Susan; Clark, Phyllis
Subject: Final RAI 332 SBPA 6228
Attachments: FINAL RAI 332 SBPA 6228.doc

Paul,

Attached please find the subject request for additional information (RAI) on FSAR Section 9.2.5. The draft of this RAI was sent to you on January 4, 2012. A clarification phone call on this RAI, requested by UniStar, was held on January 18, 2012. Several editorial changes discussed and agreed during this clarification phone call have been incorporated in the attached version of the RAI.

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, it is expected that a schedule date for submitting your technically correct and complete response will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the review schedule of the applicable FSAR Chapter.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks.

SURINDER ARORA, PE
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From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

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Request for Additional Information No. 332 (eRAI 6228)

1/20/2012

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 EPRI 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 contaminants 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:

1. 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.
2. 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.
3. Discuss in the RAI response your justification for a 24 month testing of the UHS makeup water system given the importance to safety classification post DBA.
4. 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 is drained and requires filling to provide water to the UHS basins.

5. Discuss in the RAI response that the filling of the UHS makeup water system is not considered as 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 consider the potential for operator error, such as improper valve sequencing/manipulation in filling the UHS makeup water system.
6. Clarify in the FSAR the valve positions and locations on an FSAR 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.