CCNPP3eRAIPEm Resource

From: Arora, Surinder
Sent: Monday, January 27, 2014 1:02 PM
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Cc: CCNPP3eRAIPEm Resource; Segala, John; Wilson, Anthony; Miernicki, Michael; McLellan, Judith; Terao, David; Honcharik, John
Subject: CCNPP3 - Draft RAI 410 MCB 7395
Attachments: DRAFT RAI 410 MCB 7395.docx

Paul,

Attached is DRAFT RAI No. 410 (eRAI No. 7395) pertaining to section 3.5.1.3 of the Calvert Cliffs Unit 3 FSAR. The draft question in this RAI relates to inconsistency between Revision 5 of the Areva's Design Certification application and UniStar's Revision 9 of the COLA. As discussed with you this morning, due to some problem with our eRAI system, the RAI question number has not been generated for this draft question at this time; it will be included in the final RAI. You have until February 11, 2014 to review the draft question and request a clarification phone call to discuss the RAI before the final issuance. After the clarification phone call or after February 11, 2014, this draft RAI will be finalized and issued to you for providing your response. You will then have 30 days to provide a technically complete response or an expected response date, as applicable.

Thanks

SURINDER ARORA, PE
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Request for Additional Information 410 eRAI 7395)
DRAFT
Issue Date: 01/22/2014
Application Title: Calvert Cliffs Unit 3 - Docket Number 52-016
Operating Company: UniStar
Docket No. 52-016
Review Section: 03.05.01.03 - Turbine Missiles
Application Section: 3.5.1.3

QUESTIONS

Question Number : To be assigned

<u>This RAI Question addresses an inconsistency between COLA Revision 9 and DCA Revision 5.</u>

Section 3.5.1.3 of Revision 9 to the Calvert Cliffs COL FSAR addresses COL Item 3.5-2 identified in U.S. EPR FSAR, Tier 2, Table 1.8-2 by stating that the turbine missile analysis demonstrates that the probability of turbine rotor failure resulting in an ejection of the turbine rotor fragment through the turbine casing, P_1, is less than 1×10^{-4} for a favorably orientated turbine. However, the COL Item in Revision 5 of the U.S. EPR FSAR, Section 3.5.1.3 was revised and now specifies that P_1 should be less than 1×10^{-5} for an unfavorable orientated turbine. Therefore, verify that the turbine missile analysis meets the criteria for P_1 less than 1×10^{-5}, and revise the FSAR and turbine analysis accordingly. The turbine missile analysis includes the following reports:

- Alstom, 2007. Alstom Report TSDMF 07-018 D, Unistar Project Turbine Missile Analysis, dated May 30, 2007.
- Alstom, 2010a. Alstom Report TNUD-EI 10-011, Unistar Project Turbine Missile Analysis, Fracture Mechanics Applied to the LP Rotor, dated June 30, 2010.
- Alstom, 2010b. Alstom Document 75RC10001, Unistar Project Steam Turbine Protection System Overspeed Reliability Evaluation, dated March 2, 2010.

In addition, please note that the final results of the reports should have units that are consistent with the criteria of P_1 less than 1×10^{-5} per year as specified in SRP Section 3.5.1.3, and not 1×10^{-5} per demand, month or day.