

## CCNPP3COLA PEmails

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**From:** Steckel, James  
**Sent:** Friday, July 01, 2011 1:28 PM  
**To:** CCNPP3COLA PEmails  
**Subject:** FW: Draft RAI No 29 CIB1 1542.doc (P)  
**Attachments:** Draft RAI No 29 CIB1 1542.doc

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**From:** John Rycyna  
**Sent:** Friday, January 16, 2009 4:30 PM  
**To:** Poche, Robert  
**Cc:** CCNPP3COL Resource; John Honcharik; David Terao; Michael Miernicki; Joseph Colaccino; Meena Khanna; James Biggins; Adam Gendelman  
**Subject:** Draft RAI No 29 CIB1 1542.doc (P)

Rob,

Attached is DRAFT RAI No. 29. You have until January 29, 2009 to review it and to decide whether you need a conference call to discuss it. After the call or after January 29, 2009 the RAI will be finalized and sent to you. You then have 30 days to respond.

John Rycyna, PE  
Sr. Project Manager  
Division of New Reactor Licensing  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
301-415-4122

**Hearing Identifier:** CalvertCliffs\_Unit3Cola\_Public\_EX  
**Email Number:** 2606

**Mail Envelope Properties** (0AA17736E4C4154CA37233EEBFC8DEB27400C0E61D)

**Subject:** FW: Draft RAI No 29 CIB1 1542.doc (P)  
**Sent Date:** 7/1/2011 1:27:38 PM  
**Received Date:** 7/1/2011 1:27:40 PM  
**From:** Steckel, James

**Created By:** James.Steckel@nrc.gov

**Recipients:**  
"CCNPP3COLA PEmails" <CCNPP3COLA.PEmails@nrc.gov>  
Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	714	7/1/2011 1:27:40 PM
Draft RAI No 29 CIB1 1542.doc	25710	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

Request for Additional Information No. 29  
DRAFT  
1/16/2009

Calvert Cliffs Unit 3  
UniStar  
Docket No. 52-016  
SRP Section: 03.05.01.03 - Turbine Missiles  
Application Section: 3.5.1.3

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

03.05.01.03-1

COL information item 3.5-2 in the U.S. EPR Rev. 0, FSAR, Tier 2, Ch. 1, Table 1.8-2 states that the COL applicant will confirm the evaluation of the probability of turbine missile generation for the selected turbine generator, P1, is less than  $1 \times 10^{-4}$  for turbine-generators favorably oriented with respect to containment. Section 3.5.1.3 of the Calvert Cliffs COL FSAR states that a turbine missile analysis has been developed for the selected turbine design, and includes charts on missile generation probabilities of turbine rotor failure versus service time for the high pressure/intermediate pressure and low pressure turbine rotors consistent with the guidance in RG 1.115. It should be noted that Section 10.0 of the Calvert Cliffs COL FSAR states that the turbine generator is an Alstom design. Section 10.2 states that it meets the requirements of Section 10.2 of the U.S. EPR FSAR. To determine whether the turbine missile generation probability is less than  $1 \times 10^{-4}$ , which establishes the inspection interval of the turbine rotors, the staff requests that the applicant provide the turbine missile generation probability analysis to the staff for review.

03.05.01.03-2

Section 3.5.1.3 of the Calvert Cliffs COL FSAR states that the turbine rotor inspection program is described in the U.S. EPR FSAR, Section 10.2, and is consistent with the turbine manufacturer's recommended inspection intervals required to meet the calculated failure probability of the turbine rotor. In response to staff's RAIs, AREVA stated that U.S. EPR FSAR, Tier 2 Section 10.2.3.6 will be changed to perform inservice inspections consistent with the inspection intervals from the turbine manufacturer's turbine missile analysis provided by the COL applicant. A COL applicant that references the U.S. EPR FSAR will provide a site-specific turbine rotor inservice inspection interval consistent with the turbine manufacturer's turbine missile analysis. Therefore, the NRC staff requests that the corresponding turbine inspection program description, including the inspection interval that follows the guidance of SRP Sections 3.5.1.3 and 10.2.3 be submitted to the staff for review in order to meet the requirements of GDC 4, "Environmental and Dynamic Effects Design Bases" of 10 CFR Part 50, Appendix A.