

## CCNPP3eRAIPEm Resource

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**From:** Arora, Surinder  
**Sent:** Wednesday, March 19, 2014 11:04 AM  
**To:** 'Infanger, Paul (paul.infanger@unistarnuclear.com)'; 'Mark.T.Finley@unistarnuclear.com'  
**Cc:** CCNPP3eRAIPEm Resource; Segala, John; Wilson, Anthony; Hearn, Peter; McLellan, Judith; Terao, David; Honcharik, John  
**Subject:** CCNPP3 - Final RAI 416 MCB 7396  
**Attachments:** FINAL RAI 416 MCB 7396.docx

Paul,

Attached to this email message is the final RAI No. 416 (eRAI No. 7396) pertaining to section 10.2.3 of the Calvert Cliffs Unit 3 FSAR. The question in this RAI relates to the COL item changes incorporated by UniStar in Revision 9 of the COLA. The draft of this RAI was issued to you previously on February 18, 2014. Per a request from UniStar, a clarification phone call was held on March 14, 2014, to discuss the draft question.

However, the clarification phone call did not result in any changes to the draft question and it was concluded that the RAI can be issued as "final" without any change. This was confirmed in your email dated March 18, 2014. Please note that the question number which was previously missing from the draft RAI has now been included in the final version.

The schedule that we have established for review of your COL application assumes that your technically complete response to the RAI question or a schedule for providing a complete response must be received within 30 days of the final issuance of the RAI. Please note that if, in lieu of a complete response, you are providing a response schedule, the staff will re-evaluate the completion schedule for the applicable chapter based on the response date provided by you.

Additionally, please make sure to include in your response letter a statement certifying whether or not your response contains any sensitive or proprietary information that needs to be withheld from public disclosure.

Thanks.

**SURINDER ARORA, PE**  
**LEAD PROJECT MANAGER,**  
**CALVERT CLIFFS U3 COLA PROJECT**  
**Office of New Reactors**  
**US Nuclear Regulatory Commission**

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**From:** Arora, Surinder

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## **Request for Additional Information 416 (eRAI 7396)**

Issue Date: 03/19/2014

Application Title: Calvert Cliffs Unit 3 - Docket Number 52-016

Operating Company: UniStar

Docket No. 52-016

Review Section: 10.02.03 - Turbine Rotor Integrity

Application Section: 10.2.3

### **QUESTIONS**

Question Number: 10.02.03-3

Section 10.2.3.6 of Revision 9 to the Calvert Cliffs COL FSAR addresses COL Item 10.2-6 identified in Revision 5 of the U.S. EPR FSAR, Tier 2, Table 1.8-2 by stating that a preservice 100% volumetric inspection of the turbine rotor welds will be performed and the manufacturer will provide an analysis demonstrating that any crack on the exterior or internal faces of the disc fingers will not reach critical size. In addition, the Calvert Cliffs COL FSAR states that the inservice inspection program plan will include a requirement to perform a visual or surface examination of the rotor, and in the event a surface defect is detected, an ultrasonic examination of the turbine rotor welds will be performed or the turbine manufacturer will provide an analysis which demonstrates that the defects in the root of the rotor welds will not grow to critical size for the life of the rotor.

However, the staff believes that this does not fully address the COL Item 10.2-6, which clearly states that the inservice inspection program plan will include ultrasonic inspection of the rotor welds (including the root of the welds), or provide an analysis which demonstrates that defects in the root of the rotor welds will not grow to critical size for the life of the rotor. This inservice inspection of the rotor welds is not a condition of whether a visual or surface examination finds a defect. In addition, an inservice visual or surface examination will not find a defect at the root of the weld, which is the area of concern for this COL Item 10.2-6. Also, this COL Item does not apply to the disc fingers of the turbine rotor. Therefore, the applicant is requested to address the COL Item 10.2-6 by providing either:

- An Inservice inspection program plan which includes 100% ultrasonic inspection of the rotor welds (including the root of the welds), or
- An analysis which demonstrates that any defects in the root of the rotor welds will not grow to critical size for the life of the rotor.