

## CCNPP3eRAIPEm Resource

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**From:** Arora, Surinder  
**Sent:** Monday, July 16, 2012 4:33 PM  
**To:** 'Infanger, Paul'; 'UNECC3Project@unistarnuclear.com'  
**Cc:** CCNPP3eRAIPEm Resource; Segala, John; Kleeh, Edmund; Kowal, Mark; Wilson, Anthony; Vrahoretis, Susan; Jaffe, David; McLellan, Judith  
**Subject:** CCNPP3 - Final RAI 360 CITB 6562  
**Attachments:** FINAL RAI 360 CITB 6562.doc

Paul,

Attached is the "Final" version of RAI No. 360 (eRAI No. 6562) pertaining to Part 10 of the Calvert Cliffs Unit 3 Combined License Application. The draft version of this RAI was issued to you on June 27, 2012. A clarification phone call, requested by UniStar to discuss the draft RAI questions, was held on July 12, 2012. Based on this call, only Draft Question 14.03-15 was modified. This email forwards the subject RAI as "final" for your response.

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.

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**  
**PROJECT MANAGER,**  
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**Hearing Identifier:** CalvertCliffs\_Unit3Col\_RAI  
**Email Number:** 235

**Mail Envelope Properties** (B46615B367D1144982B324704E3BCEEDC6EDEE8AB7)

**Subject:** CCNPP3 - Final RAI 360 CITB 6562  
**Sent Date:** 7/16/2012 4:33:07 PM  
**Received Date:** 7/16/2012 4:33:10 PM  
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**Post Office:** HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	1265	7/16/2012 4:33:10 PM
FINAL RAI 360 CITB 6562.doc	38906	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

Request for Additional Information No. 360 (eRAI 6562)

7/16/2012

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 14.03 - Inspections, Tests, Analyses, and Acceptance Criteria

Application Section: Part 10-ITAAC and ITAAC Closure

QUESTIONS for ITAAC Branch (CITB)

14.03-15

Regarding ITAAC 2.4.00.02, 2.4.00.03, 2.4.00.04, 2.4.00.05 and 2.4.00.06 in Table 2.4-1 in Part 10, why do the Commitment Wording, ITA, and Acceptance Criteria not state the same words about where the shear wave velocity is measured? The Commitment Wording states "at bottom of the foundation and below." The ITA states "at the elevation of the bottom of the foundation and at finish grade" The AC states "at its foundation depth and below"

14.03-16

ITAAC 2.4.00.01 in Table 2.4-2

Why do the Commitment Wording and ITA both state that the concrete in the below grade foundation and walls of Nuclear Island Structures have a "low water to cement ratio" whereas the acceptance criteria states the "concrete in the below grade concrete foundation and walls have a maximum water to cementitious materials ratio?" In addition, why do the Commitment Wording and ITA refer to "cement" and the AC refer to "cementitious materials?" If the water to cement ratio has an upper limit for amount of water, why is there not a lower limit at which there is too little water? This comment is also applicable to the following ITAACs:

ITAAC 2.4.00.01 in Table 2.4-3

ITAAC 2.4.00.01 in Table 2.4-4

ITAAC 2.4.00.01 in Table 2.4-5

ITAAC 2.4.00.01 in Table 2.4-6

ITAAC 2.4.00.02 in Table 2.4-7

ITAAC 2.4.00.06 in Table 2.4-8

ITAAC 2.4.00.04 in Table 2.4-10

ITAAC 2.4.00.05 in Table 2.4-11

ITAAC 2.4.00.02 in Table 2.4-18

14.03-17

ITAAC 2.4.00.03a in Table 2.4-7

Why does the AC not refer to the "internal hazards separation barrier" similar to the Commitment Wording?

Is the ITA both an inspection and an analysis since there is some analysis for deviations from the approved design?  
Should the ITA refer to the deviations being reconciled or should just the AC make that reference?

This is also applicable to ITAAC 2.4.00.04a in Table 2.4-11

#### 14.03-18

ITAAC 2.4.00.03c in Table 2.4-7

Why does the ITA not just state the following "Inspection will be performed of the as-built fire barriers, doors, dampers, and penetrations analyzed in part (b) to verify agreement with construction drawings determined by part (b) analysis"?

Why does the AC not just state the following "A report exists and concludes that the as-built fire barriers, doors, dampers, and penetrations analyzed in part (b) agree with construction drawings determined by that analysis"?

Applicable also to ITAAC 2.4.00.04c in Table 2.4-11

#### 14.03-19

ITAAC 2.4.00.03d in Table 2.4-7

Why does the ITA not just state the following "Testing of dampers, analyzed in part (b) will be performed"?

Why does the AC not indicate what signal causes the dampers to close?

Applicable also to ITAAC 2.4.00.04d in Table 2.4-11

#### 14.03-20

ITAAC 2.4.00.03g in Table 2.4-7

Why does the ITA not just state the following "An inspection of the mechanical and electrical division flood protection features analyzed in part (f) will be performed"?

Why does the AC not state the following "A report exists and concludes that the mechanical and electrical division flood protection features analyzed in part (f) are installed in accordance with construction drawings with all deviations reconciled?"

Applicable also to ITAAC 2.4.00.04g in Table 2.4-11

#### 14.03-21

ITAAC 2.4.00.01 and 2.4.00.02 in Table 2.4-8

The Commitment Wording and AC of these ITAAC do not consist of multiple ITAAC, but are instead just bulleted lists. Why are letters or numbers placed in front of listed items instead of just bullets?

Applicable also to ITAAC 2.4.00.15 in Table 2.4-22

14.03-22

ITAAC 2.4.00.04a in Table 2.4-8

Why does the AC not include the reference to FSAR section 3.8.4.2 similarly to the Commitment Wording?

Applicable also to ITAAC 2.4.00.05a

14.03-23

ITAAC 2.4.00.06b in Table 2.4-8

Why is there not a second ITA that is for the second AC for analysis or test that assesses the quantity of supplementary cementitious material? What is meant by supplementary cementitious material?

14.03-24

ITAAC 2.4.00.03a in Table 2.4-20

Why does this ITAAC want to determine a test specification given the fact that the following ITAAC can be for a test, analysis, or combination of test and analysis? If an analysis is used solely, the test specification is not required.

Applicable also to ITAAC 2.4.00.03a in Table 2.4-22

14.03-25

ITAAC 2.4.00.04 in Table 2.4-20

Shouldn't the phrase "is independently" be inserted before the word "powered" in the Commitment Wording to provide consistency with the ITA and AC?

Applicable also to ITAAC 2.4.00.16 in Table 2.4-22

14.03-26

ITAAC 2.4.00.05a in Table 2.4-20

Why does the ITA verify by inspection the existence of report instead of the components of UHS Makeup Water Intake Structure Ventilation System being designed per ASME AG-1 Code requirements?

14.03-27

ITAAC 2.4.00.05b in Table 2.4-20

Why does the AC not state the respective components are fabricated in accordance with ASME AG-1 instead of meeting AG-1 Code requirements?