

## CCNPP3eRAIPEm Resource

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**From:** Arora, Surinder  
**Sent:** Monday, May 23, 2011 1:57 PM  
**To:** Robert.Poche@unistarnuclear.com; 'cc3project@constellation.com'  
**Cc:** CCNPP3eRAIPEm Resource; Jeng, David; Hawkins, Kimberly; Colaccino, Joseph; Miernicki, Michael; Wilson, Anthony; Vrahoretis, Susan  
**Subject:** Final RAI 309 SEB2 5750  
**Attachments:** FINAL RAI 309 SEB2 5750.doc

Rob,

Attached please find the subject request for additional information (RAI). The draft of this RAI was sent to you on May 11, 2011. In a phone call on May 23, 2011, you informed us that no clarification phone call was required by UniStar to discuss the draft questions and the RAI can be issued as "Final".

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**  
**PROJECT MANAGER,**  
**Office of New Reactors**  
**US Nuclear Regulatory Commission**

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**From:** Arora, Surinder

**Created By:** Surinder.Arora@nrc.gov

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Request for Additional Information No. 309 (eRAI 5750)

5/23/2011

Calvert Cliffs Unit 3  
UniStar

Docket No. 52-016

SRP Section: 14.03.02 - Structural and Systems Engineering - Inspections, Tests, Analyses, and  
Acceptance Criteria

Application Section: FSAR 14.3.2

QUESTIONS for Structural Engineering Branch 2 (ESBWR/ABWR Projects) (SEB2)

14.03.02-18

The staff reviewed the response to Question 14.03.02-2 K (Item 5) provided in UniStar Letter UN#10-217, dated August 6, 2010 (ML102230156). The response indicates that Items with ITAAC information related to the waterproof membrane for buried duct banks or waterproof wrapping or coating for buried pipes have been deleted from Table 2.4-9 in Rev. 6 of CCNPP Unit 3 ITAAC (now ITAAC Table 2.4-8 in Rev. 7) because the waterproofing system (membrane, wrapping or coating) does not serve a safety-related function as discussed in the response to Question 14.03.02-2 Item G in the same letter. The ITAAC Table 2.4-9 in Rev. 6 (now ITAAC Table 2.4-8 in Rev. 7) is for Category I buried duct banks and pipes.

The staff notes that, for buried duct banks and buried concrete pipes, it is acceptable not to include ITAAC information related to the waterproofing membrane in the ITAAC table, considering that the durability of below-grade concrete against aggressive groundwater will be achieved by using a low water/cementitious ratio and supplementary cementitious materials; however, for buried steel pipes/conduits, the waterproofing system (wrapping or coating) that is provided will be the only protection against the detrimental effects of aggressive groundwater. Since for such cases, the waterproofing membrane does serve a safety related function, it should be confirmed by ITAAC that such wrappings or coatings have been properly installed for the buried steel pipes/conduits.

Based on the above discussion, the staff requests that the applicant provide in ITAAC Table 2.4-8 in FSAR Rev. 7, ITAAC information related to the waterproofing wrapping or coating for buried steel pipes/conduits. The wording used in Item No. 8 of Table 2.4-9 in Rev. 6 of CCNPP Unit 3 ITAAC would be acceptable to the staff. The staff needs this information to be able to conclude in the SER that adequate ITAAC is proposed and there is reasonable assurance that adequate ITAAC, including the waterproofing system for buried steel pipes/conduits in aggressive groundwater will be implemented pursuant to 10 CFR 52.80(a).