

## CCNPP3eRAIPEm Resource

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**Sent:** Monday, August 27, 2012 1:30 PM  
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**Cc:** CCNPP3eRAIPEm Resource; Segala, John; Wilson, Anthony; Vrahoretis, Susan; Thomas, Brian; Jeng, David; Miernicki, Michael; McLellan, Judith; Canova, Michael  
**Subject:** CCNPP3 - Draft RAI 370 SEB 6691  
**Attachments:** DRAFT RAI 370 SEB 6691.doc

Paul,

Attached is Draft RAI No. 370 (eRAI No. 6691) pertaining to section 3.8.4 of the Calvert Cliffs Unit 3 FSAR. You have until September 10, 2012 to review it and decide whether you need a conference call to discuss the RAI before the final issuance. After the phone call or after September 10, 2012, the RAI will be finalized and sent to you for your response. You will then have 30 days to provide a technically complete response or an expected response date for the RAI.

Thanks

**SURINDER ARORA, PE**  
**PROJECT MANAGER,**  
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## Request for Additional Information 370 (eRAI 6691)

DRAFT

Issue Date: 8/27/2012

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

Operating Company: UniStar

Docket No. 52-016

Review Section: 03.08.04 - Other Seismic Category I Structures

Application Section: FSAR 3.8.4

### QUESTIONS

03.08.04-35

#### **Follow up RAI Question to RAI 333, Question 03.08.04-30:**

SRP Sections 3.8.4.I.6 and SRP 3.8.5.I.6 discuss information on the materials used in the construction of Seismic Category I structures and their foundations. In RAI 333, Question 03.08.04-30, the staff requested that the applicant provide FSAR updates for all applicable FSAR 3.8 subsections related to the use of waterproofing and dampproofing systems.

The staff reviewed the RAI response provided in UniStar Letter UN#12-054, dated June 21, 2012 (ML12178A452) and found that additional FSAR updates are needed to reflect the use of waterproofing and dampproofing systems for portions of Seismic Category I structures below grade. For example:

(1) Since waterproofing and dampproofing systems will be used for the EPGBs, ESWBs and Seismic Category I Intake structures, in FSAR Section 3.8.5.5 and Table 3.8-1, "Static Frictional Parameters," the potential sliding interfaces under the EPGBs, ESWBs and/or CBIS need to be revised to include the interface between sand/soil/backfill and waterproofing/dampproofing systems.

(2) U.S. EPR FSAR Section 3.4.2 states that "... Portions of Seismic Category I structures located below grade elevation incorporate the use of waterstops and waterproofing to mitigate environmental deterioration of exposed surfaces and thereby minimize long term maintenance..." Since CCNPP Unit 3 Seismic Category I structures include the Seismic Category I buried utilities, waterproofing and dampproofing systems should be applied to all CCNPP Unit 3 Seismic Category I buried utilities, to comply with the U.S EPR guideline quoted above. However, based on CCNPP Unit 3 FSAR Section 3.8.4.6.1, it is not clear to the staff that waterproofing and dampproofing systems will be applied to all CCNPP Unit 3 Seismic Category I buried utilities. Therefore, provide updates for FSAR Section 3.8.4.6.1, or other appropriate FSAR section(s), to clearly indicate that waterproofing and dampproofing systems will be applied to all CCNPP Unit 3 Seismic Category I buried utilities, including duct banks and buried pipes.

(3) FSAR Section 3.8.4.6.1 only provides the description of the waterproofing system for the NI common basemat structure. A description needs to be provided in the FSAR of the waterproofing and dampproofing systems to be provided for portions of other Seismic Category I structures below grade, including foundation walls and basemat, as well as buried utilities.

In summary, the staff requests that the applicant review all FSAR sections and provide FSAR updates for all applicable 3.8 subsections to clearly reflect the use of waterproofing and dampproofing systems for portions of Seismic Category I structures below grade.

The staff needs the above information to determine whether FSAR Section 3.8 is consistent with SRP Acceptance Criteria 3.8.4.II.6 and 3.8.5.II.6.

