

CCNPP3eRAIPEm Resource

From: Arora, Surinder
Sent: Thursday, February 10, 2011 3:34 PM
To: 'Poche, Robert'; 'cc3project@constellation.com'
Cc: CCNPP3eRAIPEm Resource; Jeng, David; Hawkins, Kimberly; Colaccino, Joseph; Miernicki, Michael; Wilson, Anthony; Vrahoretis, Susan
Subject: Draft RAI 297 SEB2 5435
Attachments: DRAFT RAI 297 SEB2 5435.doc

Rob,

Attached is Draft RAI No. 297 (eRAI No. 5435). You have until February 24, 2011 to review it and decide whether you need a clarification phone call to discuss any questions in the RAI before the final issuance. After the phone call or on February 24, 2011, the RAI will be finalized and sent to you for response. You will then have 30 days to provide a technically complete response or an expected response date for the RAI.

Thanks.

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2/10/2011

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)

14.03.02-17

The staff reviewed the response to Question 14.03.02-7 provided in UniStar Letter UN#10-259 dated October 26, 2010 (ML103020475) and found that the responses to Items 1 and 4 of the RAI are adequate. However, the following information is needed to address Items 2, 3 and 5 of the RAI:

Regarding Item 2, for the Circulating Water System (CWS) Makeup Water Intake Structure (MWIS), the RAI response indicated that ITAAC Table 2.4-19 Item 1 had been divided into two parts, one for analysis and one for inspection, and the analysis would demonstrate that the steel superstructure meets the Acceptance Criteria 8.B of SRP 3.7.2. However, as indicated by the response to RAI 03.08.04-1, the latest FSAR Section 3.7.2.8 states that the above ground steel structure of the CWS MWIS is located such that its potential collapse cannot directly strike any Seismic Category I SSCs. The supplemental RAI to RAI 03.08.04-1 requests that the applicant explain the inconsistency. Therefore, the RAI response to this part of Item 2 will remain open pending the resolution of the corresponding item of RAI 03.08.04-1. In addition, the response did not provide the information requested by the RAI 14.03.02-7. The information requested is quoted herewith: "As stated in the original RAI, if criterion B is utilized, the applicant was requested to include as part of the ITAAC the technical basis for the determination that collapse of the non-Category I structure is acceptable. This should include a description of any additional loads imposed on any Category I SSCs that could be impacted and the method used to conclude that these loads are not damaging. Also, any protective shields installed to prevent direct impact on Category I SSCs should be described." Therefore, the staff requests again that the applicant complete the response to this part of the RAI. Without this information, the staff will not be able to conclude that the design methodology for the steel superstructure of the Circulating Water System (CWS) Makeup Water Intake Structure (MWIS) meets the Acceptance Criteria 8.B of SRP 3.7.2.

Regarding Item 3, the staff found that ITAAC tables 2.4-11, 2.4-12 and 2.4-19 for the Seismic Category II Turbine building, Switchgear Building, and CWS MWIS only refer to "seismic event" or "seismic loads". The tables should be revised to include other extreme event loads such as tornado loads and to be consistent with the corresponding wording of "applicable Extreme Environmental loads" in other ITAAC tables such as Table 2.4-35 for Access Building. Similarly, for other Non-seismic Category I structures, ITAAC Tables 2.4-34 and 2.4-36 for Waste Water Treatment Facility and Sheet Pile Wall use the acceptable wording of "Extreme Environmental loads", while Tables 2.4-13 through 2.4-

18 and Table 2.4-20 only refer to "seismic event" or "seismic loads". Tables 2.4-13 through 2.4-18 and Table 2.4-20 should be revised to be consistent with Tables 2.4-34 and 2.4-36 regarding extreme event loads. Also, ITAAC table 2.4-19 for the CWS MWIS should be updated to be consistent with the resolution of Item 2 as discussed above.

Regarding Item 5, the RAI response indicated the Sheet Pile Wall will be designed to satisfy SRP 3.7.2 Acceptance criterion 8.A. However, as indicated by the response to RAI 03.08.04-1, the latest FSAR Section 3.7.2.8 states that the Sheet Pile Wall will be analyzed using site specific SSE to prevent any adverse interaction with the Seismic Category I Buried Intake Pipes. The supplemental RAI to RAI 03.08.04-1 requests that the applicant explain the inconsistency. Therefore, the response to Item 5 will remain open pending the resolution of the corresponding items of RAI 03.08.04-1.