

CCNPP3eRAIPEm Resource

From: Arora, Surinder
Sent: Monday, November 28, 2011 3:23 PM
To: Infanger, Paul
Cc: CCNPP3eRAIPEm Resource; Colaccino, Joseph; Segala, John; Ford, Tanya; Wilson, Anthony; Vrahoretis, Susan; See, Kenneth; Raione, Richard; Jones, Henry
Subject: Final RAI 328 RHEB 6186
Attachments: FINAL RAI 328 RHEB 6186.doc

Paul,

Attached please find the subject request for additional information (RAI). The draft of this RAI was sent to you on November 17, 2011. A clarification phone call requested by UniStar to discuss the draft RAI question was held on November 23, 2011: however, no changes were required to the draft question as a result of this phone call. The RAI is, therefore, being issued as "Final" without any changes.

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
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From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

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Options

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Request for Additional Information No. 328 (eRAI 6186)

11/28/2011

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 02.04.10 - Flooding Protection Requirements

Application Section: FSAR Section 2.4.10

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.10-1

In accordance with 10 CFR 52.79(a)(1)(iii) and General Design Criteria (GDC) 2, the ultimate heat sink (UHS) must be able to withstand natural phenomena without the loss of function. The U.S. Evolutionary Power Reactor (EPR) Final Safety Analysis Report (FSAR) Section 2.4.10 states that “[a] COL applicant that references the U.S. EPR design certification will use site-specific information to compare the location and elevations of safety-related facilities, and of structures and components required for protection of safety-related facilities, with the estimated static and dynamic effects of the design basis flood conditions.” Further, EPR FSAR Section 2.4.12 states that “[a] COL applicant that references the U.S. EPR design certification will provide site-specific information ... to establish the effects of groundwater on plant structures.” Because the UHS makeup water intake structure and the associated safety-related piping system that provides water to the UHS cooling tower basins from 72 hours to 30 days post-accident is outside the scope of the U.S. EPR design certification, the NRC staff requests that the COL applicant provide quantified information in the CCNPP FSAR (e.g., pipe burial depth, pipe layout figures, etc) demonstrating that the UHS system and associated safety-related piping system are protected from adverse effects of natural phenomena including flooding from local intense precipitation, storm surge, tsunami, ice formation, and groundwater (dynamic/hydrostatic forces, scour, freezing, sedimentation, etc).