## **CCNPP3eRAIPEm Resource**

From: Arora, Surinder

**Sent:** Tuesday, May 10, 2011 7:26 AM

To: Robert.Poche@unistarnuclear.com; 'cc3project@constellation.com'

**Cc:** CCNPP3eRAIPEm Resource; Dehmel, Jean-Claude; Colaccino, Joseph; Clark, Phyllis;

Wilson, Anthony; Vrahoretis, Susan; Roach, Edward

**Subject:** Final RAI 303 CHPB 5715 **Attachments:** FINAL RAI 303 CHPB 5715.doc

## Rob,

Attached please find the subject request for additional information (RAI). The draft of this RAI was sent to you on April 25, 2011. No clarification phone call was requested by UniStar to discuss the draft question; therefore, the RAI is being 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 <u>does or does not</u> contain any sensitive or proprietary information.

Thanks.

## SURINDER ARORA, PE PROJECT MANAGER, Office of New Reactors

**US Nuclear Regulatory Commission** 

Phone: 301 415-1421 FAX: 301 415-6406

Email: Surinder.Arora@nrc.gov

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**From:** Arora, Surinder

Created By: Surinder.Arora@nrc.gov

Recipients:

"CCNPP3eRAIPEm Resource" < CCNPP3eRAIPEm.Resource@nrc.gov>

Tracking Status: None

"Dehmel, Jean-Claude" < Jean-Claude. Dehmel@nrc.gov>

Tracking Status: None

"Colaccino, Joseph" < Joseph. Colaccino@nrc.gov>

Tracking Status: None

"Clark, Phyllis" < Phyllis. Clark@nrc.gov>

Tracking Status: None

"Wilson, Anthony" < Anthony. Wilson@nrc.gov>

Tracking Status: None

"Vrahoretis, Susan" <Susan.Vrahoretis@nrc.gov>

Tracking Status: None

"Roach, Edward" < Edward. Roach@nrc.gov>

Tracking Status: None

"Robert.Poche@unistarnuclear.com" < Robert.Poche@unistarnuclear.com>

Tracking Status: None

"'cc3project@constellation.com" <cc3project@constellation.com>

Tracking Status: None

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**Options** 

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# Request for Additional Information No. 303 (eRAI 5715)

#### 5/10/2011

QUESTIONS for Health Physics Branch (CHPB)

11.02-6

# Supplemental question to the response of RAI 290, Q11.2-05(A)

While the response for RAI 290, Q11.02-5(A) refers to CCNPP-3 ER Section 5.3.2 for details (see p.4 of 31) on the basis of the stated "50-mile dilution factor of 296", a review of CCNPP-3 ER Section 5.3.2 (Discharge System) and Section 2.3.1.1.2.2 (Chesapeake Bay Circulation and Freshwater Flow), ER Tables 5.3-2 to 5.3-5, and ER Figure 5.3-1 indicates that the input parameters and results address near-field dilution effects, as shown in ER Figure 5.3-1 with a limited radial extent from the discharge diffuser outlet. Based on a review of CCNPP-3 ER Tables 5.3-2 to 5.3-5, the staff cannot find details on the stated "50-mile dilution factor of 296" from the information presented in the proposed revision to FSAR Tier 2, Section 11.2 and ER Sections 5.3.2 and 2.3.1.1.2.2. The staff's understanding of the CORMIX thermal plume model is that it cannot be used in developing far-field dilution factors. Provide the information and details supporting the basis of the "50-mile dilution factor of 296" given in the response to RAI 290, Q11.2-05(A).