

CCNPP3eRAIPEm Resource

From: Arora, Surinder
Sent: Wednesday, June 13, 2012 8:34 AM
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Cc: CCNPP3eRAIPEm Resource; Segala, John; Stutzcage, Edward; Sampson, Michele; Wilson, Anthony; Vrahoretis, Susan; Clark, Phyllis; McLellan, Judith
Subject: CCNPP3 - Final Phase 4 RAI 354 RPAC 6474
Attachments: FINAL RAI 354 RPAC 6474.doc

Attached is Final RAI No. 354 (eRAI No. 6474) pertaining to section 12.3 of the CCNPP3 FSAR. This RAI is a follow up to RAI 199, Question 12.03-12.04-7 and is being issued because the information provided in your response to this question has been revised in the subsequent revisions of your COLA. The draft of this RAI was sent to you on May 29, 2012 asking you to request a clarification call, if required, by June 11, 2012. Since you have not requested a clarification phone call as of today, it is assumed that UniStar does not require any clarification on the draft question. This email, therefore, is to transmit the RAI as "final" for your response.

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.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks

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Request for Additional Information No. 354 (eRAI 6474)

6/13/2012

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 12.03-12.04 - Radiation Protection Design Features

Application Section: FSAR Section 12.3

QUESTIONS for Radiation Protection & Accident Consequences Branch (RPAC)

12.03-12.04-10

This question is a follow up to the response to RAI 199, Question 12.03-12.04-7

10 CFR 20.1301 requires that the total effective dose equivalent to individual members of the public does not exceed 100 mrem.

In addressing COL Item 12.3.5.1 (FSAR Section 12.3.5), the applicant provided estimated dose rate information for Calvert Cliffs Nuclear Power Plant (CCNPP), Unit 3, construction workers exposed to radiation sources from the nearby CCNPP, Units 1 and 2. During the staff's review of FSAR Revisions 7 and 8, the staff noticed that the information provided in FSAR Section 12.3.5 has changed from what was provided in the response to RAI 199, Question 12.03-12.04-7. Specifically, the construction worker dose calculations and estimated dose rates are different than those previously provided.

In addition, the staff noticed that the construction worker dose estimates in Section 12.3.5 are based on a construction time period from 2010 to 2015. During construction, one of the sources of radiation to construction workers from CCNPP Units 1 and 2 was identified as the independent spent fuel storage installation (ISFSI). Since the loading of the ISFSI increases over time, the ISFSI dose rate contribution to the construction worker also increases, and is greatest at the end of this time period (2015). However, the staff believes that the 2010 to 2015 time frame for construction of CCNPP Unit 3 is no longer realistic.

In light of the above, please update the construction worker dose estimates in FSAR Section 12.3.5 to include either construction worker dose rate information beyond 2015, through the new estimated completion date of plant construction, or using bounding dose rate information, assuming a full ISFSI. Also, explain any changes to the new construction worker dose estimate calculation methodology that occurred since the response to RAI 199, Question 12.03-12.04-7 (for example, in addition to the changes in the estimated construction period, explain the reason for any equation changes or new assumptions to the calculation methodology that occurred since the response to RAI 199, Question 12.03-12.04-7).