CCNPP3COLA PEmails

From: John Rycyna
Sent: Tuesday, February 17, 2009 4:56 PM
To: Poche, Robert; McQueeney, Jennifer
Cc: CCNPP3COL Resource; Sara Bernal; Timothy Frye; Surinder Arora; Joseph Colaccino; James Biggins; Adam Gendelman
Subject: Draft RAI No 60 CHPB 1870.doc (PUBLIC)
Attachments: Draft RAI No 60 CHPB 1870.doc

Rob,

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on February 3, 2008. No conference call was requested to discuss this RAI. 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 date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

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Subject: Draft RAI No 60 CHPB 1870.doc (PUBLIC)
Sent Date: 2/17/2009 4:56:05 PM
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From: John Rycyna

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Options
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Request for Additional Information No. 60
2/17/2009

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 12.03-12.04 - Radiation Protection Design Features
Application Section: 12.3.5, Dose Assessment

QUESTIONS for Health Physics Branch (CHPB)

12.03-12.04-2

1. In the applicant's FSAR, Revision 3, Section 12.3.5.1, "Overall Plant Doses," under the heading “Cumulative Dose Rates” the following statement is made:

“The maximum dose rates for all other Construction Zones are less than 25 mrem/yr (0.25 mSv/year). This value is less than the limits specified above for members of the public.”

This statement is incorrect because there are no “limits for members of the general public” that are discussed in Section 12.3 of the FSAR. Therefore it is not clear what limits are being referred to in the above sentence. In addition, 25 mrem is a 40 CFR 190 dose limit for the offsite general public, and therefore does not apply to construction workers who will be located onsite. Please correct this statement.

In addition, from the above reference, it appears that the applicant has classified the Unit 3 construction workers as members of the public subject to 10 CFR Part 20, Subpart D, “Radiation Dose Limits for Individual Members of the Public,” rather than as radiation workers subject to 10 CFR Part 20, Subpart C, “Occupational Dose Limits.” Confirm that construction workers will be treated as members of the public, and discuss how the applicant will ensure that this continues to be appropriate throughout construction, as well as the actions that will be taken should it become necessary to train and monitor construction workers as radiation workers in accordance with the requirements of 10 CFR Parts 19, 20, and 50.120.

2. It is not clear from the description provided in Section 12.3.5.1 of the FSAR what methodology was used to calculate the collective dose for construction workers. Provide a more detailed summary of how the numbers presented in Table 12.3-13 – Projected Collective Dose for Construction Worker by Zone, were calculated.

3. The equations presented in FSAR, revision 3, Section 12.3.5.1 have changed from Revision 2. It appears that all the exponents have been reformatted so that instead they look like numbers that are being multiplied, subtracted or added to the equation. Please reformat the equations under FSAR subsections “Gaseous Dose Rates” and “ISFSI Dose Rates,” such that the exponents are clear.

4. FSAR, Revision 3, Section 12.3.5.1, states that there are significant temporal variations in the thermoluminescent dosimeter readings surrounding the ISFSI and the Interim Resin Storage Area. These variations are due to ISFSI loading operations, as

well as significant variations in the sources and source strengths located in the Interim Storage Area.

Given the variations in dose rate associated with the Resin Storage Area and the ISFSI, as well as the uncertainty in construction start and end dates and therefore ISFSI average dose rates, describe any dose-reducing measures that will be taken to ensure that construction worker dose will be maintained ALARA in accordance with 10 CFR 20.1101(b).