

CCNPP3eRAIEm Resource

From: Arora, Surinder
Sent: Friday, December 20, 2013 6:17 AM
To: 'Infanger, Paul'; 'UNECC3Project@unistarnuclear.com' (UNECC3Project@unistarnuclear.com)
Cc: CCNPP3eRAIEm Resource; Segala, John; Wilson, Anthony; Clark, Phyllis; Stutzcage, Edward; McCoppin, Michael
Subject: CCNPP3 - Final RAI 409 RPAC 7293
Attachments: FINAL RAI 409 RPAC 7293.docx

Paul,

Attached to this email message is the final RAI No. 409 (eRAI No. 7293) pertaining to Calvert Cliffs Unit 3 FSAR Section 12.03-12.04.. This RAI question is a follow up to UniStar's response for RAI 391. The draft of this RAI was issued to you on December 16, 2013. Per request from UniStar, a clarification phone call was held yesterday (December 19, 2013) to discuss the draft question in the RAI. However, there were no changes made to the draft RAI question and it was concluded that the RAI can be issued as "final" without any changes.

The schedule that we have established for review of your COL application assumes that your technically complete response to the RAI question or a schedule for providing a complete response must be received within 30 days of the final issuance of the RAI. Please note that if, in lieu of a complete response, you are providing a response schedule, the staff will re-evaluate the completion schedule for the applicable chapter based on the response date provided by you.

Additionally, please make sure to include in your response letter a statement certifying whether or not your response contains any sensitive or proprietary information that needs to be withheld from public disclosure.

Thanks.

SURINDER ARORA, PE
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Options

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Request for Additional Information 409 (eRAI 7293)

Issue Date: 12/20/2013

Application Title: Calvert Cliffs Unit 3 - Docket Number 52-016

Operating Company: UniStar

Docket No. 52-016

Review Section: 12.03-12.04 - Radiation Protection Design Features

Application Section: 12.3

QUESTIONS

12.03-13

This is a follow up to RAI 391, Question 12.03-12.04-11:

10 CFR 20.1301 requires that the total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem in a year. In addition, 10 CFR 20.1101(b) requires that the dose to members of the public be as low as is reasonably achievable (ALARA). Also, 10 CFR 19.12(a) requires that all individuals who in the course of employment are likely to receive in a year an occupational dose in excess of 100 mrem be instructed in radiation protection and kept informed of the storage, transfer, or use of radioactive material and 10 CFR 19.12(b) requires that in determining those individuals subject to the requirements of 10 CFR 19.12(a), licensees must take into consideration assigned activities during normal and abnormal situations involving exposure to radiation and that the extent of the instructions must be commensurate with potential radiological health protection problems present in the work place.

The response to RAI 391, Question 12.03-12.04-11, the Calvert Cliffs Unit 3 FSAR, and the service level agreement between Calvert Cliffs Units 1 and 2 and Calvert Cliffs 3 indicate that Calvert Cliffs Units 1 and 2 radiation protection and ALARA program will control construction worker dose so that individual and collective construction worker dose is ALARA and so that individual construction workers do not receive doses in excess of 100 mrem per construction year, from Calvert Cliffs Units 1 and 2 radiation sources.

However, none of the aforementioned documents address the cumulative dose that a construction worker could receive from all of the sources at the construction site (sources from the existing units, industrial radiography sources, or other sources that may be brought on site to support Calvert Cliffs Unit 3 construction or operation). Given that construction workers are being considered individual members of the public, the dose to individual construction workers, from all sources at the licensed site (*i.e.*, all sources within the site boundaries of Calvert Cliffs Units 1, 2, and 3, and any common areas shared between Units 1, 2, and/or 3, including, but not limited to, the ISFSI and resin storage area), must not exceed 100 mrem/year. The term "all sources" in the preceding sentence includes sources from the existing units, the activities of any industrial radiographers, and other sources brought on site to support Calvert Cliffs Unit 3 construction or operation. Therefore, 1) please provide information, and update FSAR Section 12.3.5 accordingly, to explain how the dose to construction workers will be controlled so that individual construction workers do not exceed 100 mrem/year from all sources and how the dose to construction workers, individually and collectively is maintained ALARA. In addition, 2) please provide information, and update FSAR Section 12.3.5 accordingly, to explain how the requirements of 10 CFR 19.12 will be met.