CCNPP3eRAIPEm Resource

From: Arora, Surinder

Sent: Monday, February 10, 2014 11:00 AM

To: 'Infanger, Paul (paul.infanger@unistarnuclear.com)'; Finley, Mark T

(mark.t.finley@unistarnuclear.com)

Cc: CCNPP3eRAIPEm Resource; Segala, John; Wilson, Anthony; Eudy, Michael; McLellan,

Judith; Mrowca, Lynn; Pohida, Marie CCNPP3 - Final RAI 411 SPRA 7240

Subject: CCNPP3 - Final RAI 411 SPRA 72
Attachments: FINAL RAI 411 SPRA 7240.docx

Paul,

A Attached to this email message is the final RAI No. 411 (eRAI No. 7240) pertaining to Chapter 19 of the FSAR for UniStar's combined license application for CCNPP3. These RAI questions are follow ups to UniStar's responses to the staff's previous questions, 19-28 and 19-29 respectively, issued in RAI 387 (eRAI 6937). The draft of this RAI was issued to you on January 27, 2014. Per request from UniStar, a clarification phone call was held on February 6, 2014, to discuss the draft questions in the RAI. However, there were no changes made to the draft RAI questions and it was concluded that the RAI can be issued as "final" without any changes. Please note that the question numbers which were marked, "To be assigned" have been filled in as discussed during the clarification call.

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 LEAD PROJECT MANAGER, CALVERT CLIFFS U3 COLA PROJECT Office of New Reactors US Nuclear Regulatory Commission

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From: Arora, Surinder

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Options

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Request for Additional Information 411 (eRAI 7240)

Issue Date: 02/10/2014
Application Title: Calvert Cliffs Unit 3 - Docket Number 52-016
Operating Company: UniStar
Docket No. 52-016

Review Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation Application Section:

QUESTIONS

Question Number: 19-31

This RAI is a Follow Up to RAI 387 (eRAI 6937), Question 19-28.

The staff has reviewed the applicant's response to RAI Question 19-28 and agrees with the applicant's proposed quantiative screening thresholds. However, shutdown high wind induced LOOPs are similar to LOOPs caused by loss of the switchyard at LPSD. Both intiating events result in a loss or interruption of the DHR function, and both initiating events are analyzed in the PRA. In order to be consistent with the high winds evaluation provided in FSAR Section 19.1.5, the staff requests for the applicant to please remove the exclusion of shutdown high wind events from the screening thresholds.

Question Number: 19-32

This RAI is a Follow Up to RAI 387 (eRAI 6937), Question 19-29.

The staff has reviewed the applicant's response to RAI 19-29. The staff understands that the Transformer and Switchyard Areas and the Normal Heat Sink are non-safety related and not designed for high wind loads. The staff also reviewed NUREG/CR 6890 which reports in Table D-1 a plant specific weather related LOOP frequency of 3.8E-3 per reactor year. The frequency was estimated by using a Bayesian update based on the industry frequency (4.8E-3 per reactor year from Table ES-2) as a prior and plant specific data from the period 1997-2004. These frequency estimates are different and lower than the design wind velocity of 102 mph per 100 year return period as documented in Section 3.3.1.1 of the FSAR. The staff requests for the applicant to please use the re-occurrence interval of 1/150 reactor year wind speed to confirm that extreme winds for the site (beyond the design wind speeds) do not affect the full power and shutdown CDF by more than 10% (positive or negative). In addition, please report the CDF values and the results if they exceed the 10% threshold.