CCNPP3eRAIPEm Resource

From: Arora, Surinder

Sent: Monday, September 29, 2014 2:47 PM

To: 'Infanger, Paul (paul.infanger@unistarnuclear.com)'; 'Mark.T.Finley@unistarnuclear.com'
Cc: CCNPP3eRAIPEm Resource; Bradford, Anna; Wilson, Anthony; Eudy, Michael; Som,

Swagata; Segala, John; Zimmerman, Jacob

Subject: CCNPP3 - Draft RAI 425 EEB 7659 Attachments: DRAFT RAI 425 EEB 7659.docx

Paul,

Attached is DRAFT RAI No. 425 (eRAI No. 7659) pertaining to Calvert Cliffs Unit 3 FSAR Chapter 8, Section 8.5. UniStar had introduced the new section (Section 8.5) in Chapter 8 during the issuance of interim revision 10 of the Chapter 8 FSAR. You have until October 13, 2014 to review the draft question and request a clarification phone call to discuss the RAI before the final issuance. After the clarification phone call or after October 13, 2014, this draft RAI will be finalized and sent to you for your response. You will then have 30 days to provide a technically complete response or an expected response date for the RAI.

Please note that the time durations listed above are our normal time durations. However, due to the fact that Chapter 8 is in your Group A Chapters category in accordance with your May 30th letter, it is highly recommended that you take expeditious action and respond to this RAI as soon as practical so that the staff's reviews continue without interruptions. Any interruptions could have detrimental impact on our review schedule for this chapter.

Thanks.

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

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

Email: Surinder.Arora@nrc.gov

Hearing Identifier: CalvertCliffs_Unit3Col_RAI

Email Number: 397

Mail Envelope Properties (B46615B367D1144982B324704E3BCEED018019A9CF45)

Subject: CCNPP3 - Draft RAI 425 EEB 7659

Sent Date: 9/29/2014 2:46:54 PM **Received Date:** 9/29/2014 2:46:56 PM

From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

Recipients:

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

Tracking Status: None

"Bradford, Anna" < Anna. Bradford@nrc.gov>

Tracking Status: None

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

Tracking Status: None

"Eudy, Michael" < Michael. Eudy@nrc.gov>

Tracking Status: None

"Som, Swagata" <Swagata.Som@nrc.gov>

Tracking Status: None

"Segala, John" < John. Segala@nrc.gov>

Tracking Status: None

"Zimmerman, Jacob" < Jacob. Zimmerman@nrc.gov>

Tracking Status: None

"Infanger, Paul (paul.infanger@unistarnuclear.com)" <paul.infanger@unistarnuclear.com>

Tracking Status: None

"'Mark.T.Finley@unistarnuclear.com'" <Mark.T.Finley@unistarnuclear.com>

Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files Size Date & Time

MESSAGE 1406 9/29/2014 2:46:56 PM

DRAFT RAI 425 EEB 7659.docx 31589

Options

Priority:StandardReturn Notification:NoReply Requested:NoSensitivity:Normal

Expiration Date: Recipients Received:

Request for Additional Information 425 (eRAI 7659)

Issue Date: 09/29/2014
Application Title: Calvert Cliffs Unit 3 - Docket Number 52-016
Operating Company: UniStar
Docket No. 52-016
Review Section: 08.03.01 - AC Power Systems (Onsite)
Application Section: New Section 8.5

QUESTIONS

08.03.01-17

On the July 31, 2014, Unistar submitted interim revision 10 to FSAR Chapter 8. The staff noted that the applicant introduced a new section, identified as Section 8.5, "Standby Diesel Generator for Fire Protection Building Ventilation System," related to power supply after a safe shutdown earthquake (SSE) for Fire Protection Building (FPB) Ventilation System and other loads.

The staff requests the applicant to address the following issues:

- 1. The staff noted that the new section 8.5 is related to a non-safety system introducing a new standby diesel generator (DG) which is not part of the US EPR FSAR. Explain if this is a site-specific design for Calvert Cliffs Unit 3. Please justify why this design is different from the design in the EPR FSAR.
- 2. The staff noted that the electrical power supply for the ventilation system is provided by the proposed new standby diesel generator (SDG) after the SSE to maintain the normal room design temperature. The applicant has stated that this DG will supply power to the loads which comprise of ventilation, heating, control circuits, and battery charging for the diesel-driven fire pumps, and normal and emergency lighting loads for the FPB. Please explain why this additional DG is necessary, when SBO DG's are connected to the plant Normal Power Supply System (NPSS) buses.
- 3. The applicant has stated that under normal operating mode, the NPSS System provides the ventilation and other loads of FPB, and upon loss of power to the NPSS buses, an automatic transfer switch will transfer the loads to the SDG. Identify the SDG electrical connection to the NPSS buses in a single line diagram and revise Section 8.3.1 figures as appropriate. Please provide the technical parameters/specifications, such as kW, and voltage, for the Standby DG for FPB.
- 4. The staff also noted that new information related to FPB ventilation system power supply provided in the new Section 8.5, is not consistent with the NUREG-0800, Standard Review Plan (SRP). The SRP consists of 4 sections: 8.1. 8.2, 8.3, and 8.4. Title 10 of the Code of Federal Regulations, Part 47, Item 9, states:

For applications for light-water cooled nuclear power plants, an evaluation of the standard plant design against the Standard Review Plan (SRP) revision in effect 6 months before the docket date of the application. The evaluation required by this section shall include an identification and description of all differences in design features, analytical techniques, and procedural measures proposed for the design and those corresponding features, techniques, and measures given in the SRP acceptance criteria.

Where a difference exists, the evaluation shall discuss how the proposed alternative provides an acceptable method of complying with the Commission's regulations, or portions thereof, that underlie the corresponding SRP acceptance criteria (emphasis added).

Please clarify why this information pertaining to the electrical portion of the standby DG is not a part of the Section 8.3.1, which provides information on on-site ac and dc systems. In addition, please clarify whether the mechanical portion (e.g., ventilation, fuel capacity), and I&C portions (e.g., control circuits/indication/alarm from MCR) of the information would be part of Chapter 9 (BOP) and Chapter 7 (I&C) respectively.