

From: [Marshall, Michael](#)
To: [Mascitelli, Francis J:\(Exelon Nuclear\)](#)
Cc: [Danna, James](#)
Subject: Calvert Cliffs Nuclear Power Plant, Units 1 and 2 – Request for Additional Information Regarding License Amendment Request Concerning Containment Sump (EPID L 2020-LLA-0256)
Date: Monday, June 28, 2021 2:52:00 PM

Hello Frank,

By letter dated November 24, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20329A334), Exelon Generation Company, LLC (Exelon; licensee) submitted license amendment requests (LAR) for Calvert Cliffs Nuclear Power Plant, Units 1 and 2 (Calvert Cliffs). The proposed amendments would revise Technical Specification (TS) 3.5.2, "ECCS [Emergency Core Cooling System] – Operating," and TS 3.5.3, "ECCS – Shutdown," and TS 5.5.15, "Safety Function Determination Program (SFDP)." The proposed changes would also add a new TS 3.6.9, "Containment Emergency Sump," to Section 3.6, "Containment Systems," and an associated surveillance requirement.

The U.S. Nuclear Regulatory Commission staff has reviewed the information provided in the LAR and has determined that additional information is needed to complete its review. The request for additional information was discussed with you on June 28, 2021, and it was agreed that your response would be provided within 30 days of the date of this email.

REQUEST FOR ADDITIONAL INFORMATION

Technical Specification Task Force Traveler (TSTF) 567 Revision 1, Section 3.3.2 (ADAMS Accession No. ML17214A813) states:

Should a plant have previously adopted TSTF 505 and have a Risk-Informed Completion Time program in the Administrative Controls section of their [Technical Specifications] TS, the option to calculate a Risk-Informed Completion Time for Required [TS 3.6.9] Action B.1 may be proposed and a plant-specific justification, consistent with the justification provided when adopting TSTF-505, must be provided in the license amendment request.

NEI 06-09-A is the methodology document that supports the adoption of Risk-Informed Completion Time (RICT) Program. The NRC safety evaluation (SE) for NEI 06-09 (ADAMS Accession No. ML071200238) specifies that the LAR for RICTs should provide a comparison of the TS functions to the functions modeled in the probabilistic risk assessment (PRA). Justification should be provided to show that the scope of the PRA model is consistent with the licensing basis assumptions. The Calvert Cliffs RICT Program LAR (ADAMS Accession No. ML16060A223), as supplemented, provided information consistent with the NRC SE for NEI 06-09. Accordingly, Enclosure 1 of Calvert Cliffs RICT Program LAR provided confirmation that the PRA models include the necessary scope of structures, systems, and components (SSCs) and their functions to address each proposed application of the RICT Program to the TS Required Actions. Enclosure 2 of Calvert Cliffs RICT Program LAR provided information supporting the licensee evaluation of the technical adequacy of the PRA models supporting the RICT Program.

Regulatory Position 2.3.3 of RG 1.174, Revision 3 (ADAMS Accession No. ML17317A256)

states that the level of detail in the PRA should be sufficient to model the impact of the proposed licensing basis change. The characterization of the change should include establishing a cause-effect relationship to identify portions of the PRA affected by the change being evaluated. Full-scale applications of the PRA should reflect this cause-effect relationship in a quantification of the impact of the proposed licensing basis change on the PRA elements.

The SE for NEI 06-09-A also states the following:

NEI 06-09, Revision 0, specifically applies the [Risk Managed Technical Specifications] RMTS only to those SSCs which mitigate core damage or large early releases. Where the SSC is not modeled in the PRA, and its impact cannot otherwise be quantified using conservative or bounding approaches, the RMTS are not applicable [...]

The LAR requested the option to apply a RICT for Required Action B.1 of proposed new TS 3.6.9. In its application the licensee stated that it had reviewed the NRC SE provided to the Technical Specifications Task Force on July 3, 2018 and the information provided in TSTF-567, Revision 1. Further, the licensee stated that the justifications presented in TSTF-567, Revision 1 and the NRC staff SE are applicable to Calvert Cliffs and justify the amendment request for the incorporation of the changes to the Calvert Cliffs TS. However, the LAR did not include a plant-specific justification for applying a RICT to TS 3.6.9 Action B.1, as stated in TSTF-567, Revision 1.

1. Provide plant-specific justification for the use of a RICT for Required Action B.1 of proposed TS 3.6.9 consistent with information provided for Calvert Cliffs RICT Program LAR, as supplemented. Consistent with Enclosure 1 to Calvert Cliffs RICT Program LAR, as supplemented, this information should include confirmation that the PRA models include the necessary scope of SSCs and their functions to address the application of the RICT Program to TS 3.6.9:
 - a. The TS Required Action;
 - b. The corresponding SSC;
 - c. Each design basis function of the SSC;
 - d. How each design basis function is modeled in the PRA. If one of the design basis functions of an SSC or the SSC is not modeled in the PRA, describe any proposed surrogates and why the proposed surrogate adequately captures the configuration risk;
 - e. The success criteria used in the PRA model compared to the licensing basis criteria. The success criteria should include both train-level and component/parameter level; and
 - f. Numerical RICT estimate for TS 3.6.9 Action B1.
2. To address information needs provided in Enclosure 2 of Calvert Cliffs RICT Program LAR, as supplemented, provide a high level summary of changes to the PRA

model/methods since the issuance of the amendment to add risk-informed completion time for Calvert Cliffs (ADAMS Accession No. ML18270A130), and confirmation that any PRA model/method changes been evaluated and closed consistent with the guidance in RG 1.200.

Best Regards,
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Senior Project Manager

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301-415-2871

Docket Nos. 50-317 and 50-318