From: Richard Guzman
To: Jurek, Shane

Subject: RE: Salem Generating Station, Units 1 and 2 - Risk-Informed Completion Time TSTF-505/TSTF-591 and 10 CFR

50.69 (2nd Set) Audit Questions (EPIDs L-2025-LLA-0021, L-2025-LLA-0022)

**Date:** Wednesday, July 9, 2025 8:42:04 AM

Shane,

Below are the additional audit questions that should have been included in the batch sent to you yesterday. Sorry for the inconvenience.

Thanks,

## Rich Guzman

Sr. PM, Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Office: 0-11C21 | Phone: (301) 415-1030 Richard.Guzman@nrc.gov

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## Audit Question-37 (APLA-08), Interfacing System Categorization [10 CFR 50.69]

Section 7.1 of NEI 00-04 states, "[d]ue to the overlap of functions and components, a significant number of components support multiple functions. In this case, the SSC, or part thereof, should be assigned the highest risk significance for any function that the SSC or part thereof supports." Section 4 of NEI 00-04 states that a candidate low safety-significant (LSS) SSC that supports an interfacing system should remain uncategorized until all interfacing systems are categorized. The LAR does not discuss consideration or implementation of the guidance in Section 7.1 of NEI 00-04.

Explain how the categorization process will be implemented to ensure that the cited guidance in NEI 00-04 will be followed and that any functions/SSCs that serve as an interface between two or more systems will not be categorized until the categorization for all of the systems that they support is completed and that SSCs that support multiple functions will be assigned the highest risk significance for any of the functions they support.

## Audit Question-38 (APLA-09), Interfacing System Categorization [10 CFR 50.69]

Paragraphs (c)(1)(i) and (ii) of 10 CFR 50.69 require that a licensee's PRA be of sufficient quality and level of detail to support the SSC categorization process, and that all aspects of the integrated, systematic process used to characterize SSC importance must reasonably reflect the current plant configuration and operating practices, and applicable plant and industry operational experience. The guidance in NEI 00-04 specifies sensitivity studies to

be conducted for each PRA model to address uncertainty. The sensitivity studies are performed to ensure that assumptions and sources of uncertainty (e.g., human error, common cause failure, and maintenance probabilities) do not mask importance of components. NEI 00-04 guidance states that additional "applicable sensitivity studies" from characterization of PRA adequacy should be considered.

NRC staff reviewed PRA assumptions and uncertainties from Attachment 6 of the LAR dated 31 January 2025. Decisions were made based on impacts on "base model results". It is unclear whether this refers core damage frequency (CDF) and large early release frequency (LERF) impacts only or also includes risk metrics such as Risk Achievement Worth (RAW) and Fussell-Vesely (FV) that are used for SSC categorization. The NRC staff notes that even slight changes in plant risk can affect SSC categorization since RAW and FV metrics, not plant risk values, determine high-safety-significant (HSS) and low-safety-significant (LSS) designations.

To address the above observation, the licensee is requested to provide the following additional information:

If impact on "base model results" refer to impacts on CDF and LERF only, explain why assessing plant risk impacts (i.e., CDF and LERF) as substitutes for RAW and FV impacts is appropriate.

Alternatively, evaluate these uncertainties' impacts on RAW and FV metrics used for SSC categorization. If any new sensitivity studies were conducted, provide their details and results. If any sources of uncertainty are determined to be significant (key) for the 10 CFR 50.69 application, then explain how they will be addressed during SSC categorization.

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From: Richard Guzman

**Sent:** Tuesday, July 8, 2025 9:12 AM

**To:** Jurek, Shane <<u>shane.jurek@pseg.com</u>>

**Subject:** Salem Generating Station, Units 1 and 2 - Risk-Informed Completion Time TSTF-505/TSTF-591 and 10 CFR 50.69 (2nd Set) Audit Questions (EPIDs L-2025-LLA-0021, L-2025-LLA-0022)

Shane,

By letters dated January 31, 2025 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML25031A416 and ML25031A371), PSEG Nuclear, LLC (PSEG, the licensee) submitted two license amendment requests (LARs) for Salem Generating Station, Units 1 and 2 (Salem). The proposed amendments would modify Salem licenses DPR-70 and DPR-75 and the Technical Specifications (TSs) to adopt Technical Specifications Task Force (TSTF) Traveler 505 (TSTF-505), "Provide Risk-informed Extended Completion Times, RITSTF Initiative 4b," TSTF-591, "Revise the Risk Informed Completion Time (RICT) Program," and the provisions of Title 10 of the Code of Federal Regulations (10 CFR), Section 50.69, "Risk-informed categorization and treatment

of structures, systems and components for nuclear power reactors."

On April 14, 2025, the NRC staff issued an audit plan (ML25096A002) that conveyed intent to conduct a regulatory audit to support its review of the subject licensing actions. Based on the commonalities between the LARs and subsequent overlap in technical content and review personnel, the staff is conducting a combined audit that addresses both LARs. In the audit plan, the NRC staff requested an electronic portal setup and provided a list of documents to be added to the online portal. The audit plan also indicated that the NRC may request information and audit meetings/interviews throughout the audit period. The NRC staff performed an initial review of the list of documents and has developed a list of audit questions.

The first set of audit questions were sent to you via email on May 8, 2025 (ML25169A316) and the associated audit meeting with the NRC staff is scheduled for July 15<sup>th</sup>. The second set of questions are provided in the attachment. Please post the response(s) for the questions to the online portal as the responses are completed. The staff would like to target the end of July for a virtual audit call to discuss the responses to the second set of audit questions, if possible. Please contact me at any time prior if a clarification discussion is needed. We look forward to discussing these questions and PSEG's responses during the virtual audit meeting.

Thank you,

## Rich Guzman

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