

From: [Tobin, Jennifer](#)
To: [Helker, David P:\(Exelon Nuclear\)](#)
Cc: [Gropp Jr, Richard W:\(Exelon Nuclear\)](#)
Subject: Peach Bottom, Units 2 and 3 - AUDIT PLAN REGARDING LICENSE AMENDMENT REQUEST TO IMPLEMENT RISK-INFORMED EXTENDED COMPLETION TIMES (L-2020-LLA-0120)
Date: Tuesday, August 04, 2020 11:04:00 AM

Good morning Mr. Helker,

The U.S. Nuclear Regulatory Commission (NRC) staff has started our review of the risk informed completion time license amendment request (LAR) and determined that a regulatory audit of the technical acceptability of the probabilistic risk assessments (PRAs) used to develop insights to support the licensee's proposed approach would assist in the timely completion of the LAR review. A regulatory audit is a planned activity that includes the examination and evaluation of primarily non-docketed information. The audit will be conducted to increase the NRC staff's understanding of the LAR and identify information that will require docketing to support the NRC staff's regulatory finding. The NRC staff will conduct a regulatory audit to support its review of the LAR in accordance with the following audit plan.

1. BACKGROUND

By application dated May 29, 2020, Exelon Generation Company, LLC (the licensee) submitted a license amendment request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20150A007). The amendment would revise technical specification (TS) requirements to permit the use of risk-informed completion times (RICTs) for actions to be taken when limiting conditions for operation (LCOs) are not met. The proposed changes are based on Technical Specifications Task Force (TSTF) Traveler TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b," dated July 2, 2018 (ADAMS Accession No. ML18183A493). The U.S. Nuclear Regulatory Commission (NRC) issued a final model safety evaluation (SE) approving TSTF-505, Revision 2, on November 21, 2018 (ADAMS Accession No. ML18269A041).

2. REGULATORY AUDIT BASES

The basis of this remote audit is the licensee's LAR for PBAPS, and the Standard Review Plan (SRP) Section 19.2, "Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance" (ADAMS Accession No. ML071700658).

The remote audit will be performed consistent with NRC Office of Nuclear Reactor Regulation Office Instruction LIC-111, Revision 1, "Regulatory Audits," dated October 31, 2019 (ADAMS Accession No. ML19226A274). An audit was determined to be the most efficient approach toward a timely resolution of issues associated with this LAR review, since the staff will have an opportunity to minimize the potential for multiple rounds of requests for additional information (RAIs) and ensure no unnecessary burden will be imposed by requiring the licensee to address issues that are no longer necessary to make a safety determination.

3. PURPOSE AND SCOPE

The purpose of the remote audit is to gain a more detailed understanding of licensee's RICT program and its application to the TS completion times as proposed in the LAR. This will support NRC staff preparation for the future onsite audit. The NRC staff will review the internal events, internal flooding, and fire probabilistic risk assessments (PRAs) and the risk-informed approach for establishing extended completion times.

The areas of focus for the regulatory audit are the information contained in the licensee's submittal, the enclosed audit information needs, and all associated and relevant supporting documentations (e.g., methodology, process information, calculations). The relevant supporting documents are identified below.

4. INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY REMOTE AUDIT

The following documentation should be available to the audit team:

1. Reports of peer reviews (full-scope and focused-scope), any self-assessments, and facts and observations (F&Os) closure reviews for the internal events, internal flooding, and fire PRAs cited in PBAPS's LAR dated May 29, 2020;
2. Uncertainty notebooks for the PBAPS internal events, internal flooding, and fire PRAs related to PRA model assumptions and sources of uncertainty;
3. Documentation on evaluation of the generic and plant-specific uncertainties with respect to the PBAPS's LAR dated May 29, 2020;
4. Documentation supporting the example RICT calculations presented in LAR Enclosure 1, Table E1-2, including determination of corresponding risk management actions;
5. PRA notebooks for the modeling of FLEX equipment and FLEX human error probabilities, if credited in the PRA;
6. Results of the fire PRA and resolution of fire F&Os;
7. Draft or final RICT program procedures (e.g., procedures related to risk management actions, PRA functionality determination, and recording limiting conditions for operation);
8. Plant and PRA configuration control procedures;
9. Documentation supporting the development and benchmarking against the PRA of the real-time risk tool;
10. Design details of Unit 2 and Unit 3 cross-tied and shared systems, including electrical and mechanical systems, and modeling of these systems in the Unit 2 and Unit 3 PRAs;

11. Relevant design documentation, e.g., single line diagrams of the electrical power distribution systems, mechanical flow diagrams, process and instrumentation diagrams;
12. Any other supporting documentation that the licensee may determine is responsive to the staff's above information requests.

The licensee will be informed by electronic mail of the NRC staff's request for any additional documentation to support the regulatory audit.

5. AUDIT TEAM

The members of the audit team are:

- Jennifer Tobin, Project Manager, NRC (Jennifer.Tobin@nrc.gov)
- Todd Hilsmeier, Team Leader, APLA, NRC (Todd.Hilsmeier@nrc.gov)
- Jeff Circle, APLA, NRC (Jeff.Circle@nrc.gov)
- Milton Valentin-Olmeda, APLC, NRC (Milton.Valentin-Olmeda@nrc.gov)
- Wesley Wu, APLC, NRC (De.Wu@nrc.gov)
- Robert Vettori, APLB, NRC (Robert.Vettori@nrc.gov)
- Khoi Nguyen, EEOB, NRC (Khoi.Nguyen@nrc.gov)
- Stephen Wyman, EEOB, NRC (Stephen.Wyman@nrc.gov)
- Ming Li, EICB, NRC (Ming.Li@nrc.gov)
- Norbert Carte, EICB, NRC (Norbert.Carte@nrc.gov)
- Andrea Russell, STSB, NRC (Andrea.Russell@nrc.gov)
- Vic Cusumano, STSB, NRC (Victor.Cusumano@nrc.gov)
- Mark Wilk, Contractor, PNNL (mark.wilk@pnnl.gov)

6. SPECIAL REQUESTS

The NRC staff would like access to the documents listed above in Section V through an online portal that allows the NRC staff and contractors to access documents remotely via the internet. NRC staff and contractors' access to the online portal should be terminated upon issuance of the audit summary discussed in Section VII of this audit plan.

The following conditions associated with the online portal must be maintained throughout the duration that the NRC staff and contractors have access to the online portal:

- The online portal will be password-protected, and separate passwords will be assigned to the NRC staff and contractors who are participating in the audit.
- The online portal will be sufficiently secure to prevent the NRC staff and contractors from printing, saving, downloading, or collecting any information on the online portal.
- Conditions of use of the online portal will be displayed on the login screen and will require acknowledgement by each user.

Username and password information should be provided directly to the NRC staff and contractors. The NRC project manager will provide the licensee the names and contact information of the NRC staff and contractors who will be participating in the audit. All other communications should be coordinated with the NRC project manager.

7. DELIVERABLES

An audit summary, which may be public, will be prepared within 90 days of the completion of the audit. If the NRC staff identifies information during the audit that is needed to support its regulatory decision, the staff will issue RAIs to the licensee.