From: Ennis, Rick

Sent: Wednesday, August 02, 2017 1:38 PM **To:** Richard.Gropp@exeloncorp.com

Cc: David Helker

Subject: Peach Bottom Units 2 and 3 - Request for Additional Information -

TSTF-542 Amendment Request (CACs MF9138 and MF9139)

Attachments: final01 rai mf9138-39.doc

By application dated January 30, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17030A302), Exelon Generation Company, LLC (Exelon, the licensee) submitted a license amendment request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The amendments would replace existing Technical Specification (TS) requirements related to "operations with a potential for draining the reactor vessel" (OPDRVs) with new requirements on reactor pressure vessel (RPV) water inventory control (WIC) to protect Safety Limit 2.1.1.3. Safety Limit 2.1.1.3 requires RPV water level to be greater than the top of active irradiated fuel. The proposed changes are based on TS Task Force (TSTF) Traveler TSTF-542, Revision 2, "Reactor Pressure Vessel Water Inventory Control."

The Nuclear Regulatory Commission's (NRC) staff is reviewing your submittal and has determined that additional information is needed to complete its review. The specific request for additional information (RAI) questions are attached. The RAI questions were provided in draft form to Mr. Richard Gropp of the Exelon staff via e-mail on August 1, 2017. The draft questions were sent to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed.

In a phone call on August 2, 2017, Mr. Gropp said a clarification call was not needed to discuss the draft RAI questions. Mr. Gropp stated that Exelon would provide a response to the RAI questions within 30 days.

If you have any questions, please contact me at (301) 415-1420.

Richard B. Ennis, Senior Project Manager Plant Licensing Branch I Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

REQUEST FOR ADDITIONAL INFORMATION

REGARDING PROPOSED LICENSE AMENDMENT

REACTOR PRESSURE VESSEL WATER INVENTORY CONTROL

EXELON GENERATION COMPANY, LLC

PEACH BOTTOM ATOMIC POWER STATION - UNITS 2 AND 3

DOCKET NOS. 50-277 AND 50-278

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Technical Specifications Branch (STSB)

Reviewer: Pete Snyder

PBAPS-STSB-RAI-1

Please propose separate mark-up pages for each unit for pages 3.3-47a, 3.3-47b, 3.3-47c, 3.3-47d, 3.5-15, 3.5-16, 3.5-17, and 3.5-18 since PBAPS Units 2 and 3 use separate TSs. The pages, as included in the original LAR, are labeled "PBAPS UNITS 2 & 3" at the bottom.

PBAPS-STSB-RAI 2

In the proposed mark-up for TS page 3.3-47b, the positioning of the "NOTE" (i.e., "Separate Condition entry is allowed for each channel") is not consistent with TSTF-542. Because of the existing placement (i.e., above the word "ACTIONS"), it appears as though the note is meant to apply to the APPLICABILITY and not the ACTIONS table of LCO 3.3.5.4. Please provide a revised mark-up of this TS page consistent with TSTF-542 (i.e., with note located below the word "ACTIONS), or justify this deviation.

PBAPS-STSB-RAI 3

The PBAPS Unit 2 TS mark-up for page 3.3-54 has what appears to be an open parentheses mark after Function 5.a of Table 3.3.6.1-1, page 3 of 3. This differs from the mark-up for PBAPS Unit 3 and is not consistent with TSTF-542. Please provide a revised mark-up of this TS page consistent with TSTF-542, or justify this deviation.

PBAPS-STSB-RAI 4

The licensee proposed to add new TS LCO 3.5.4 in lieu of the marked-up TS LCO 3.5.2, "RPV Water Inventory Control," however, Exelon's proposed statement in Actions table Condition E differs from TSTF-542. In Exelon's proposal, Condition E is phrased as "Required Action and associated completion time of Condition C *and* D not met." In TSTF-542, Condition E is phrased as "Required Action and associated completion time of Condition C *or* D not met." Please provide a revised mark-up of this TS page consistent with TSTF-542, or justify this deviation.

PBAPS-STSB-RAI 5

Exelon's proposed wording of PBAPS Surveillance Requirements (SRs) 3.5.4.4 and 3.5.4.5 differs from TSTF-542 in that the proposed SRs retain the word 'each' to describe the required ECCS injection/spray subsystem. TSTF-542 replaced SR 3.5.4.4's word 'each' with 'the' while SR 3.5.4.5's word 'each' is replaced with 'for the.' Please provide a revised mark-up of this TS page consistent with TSTF-542, or justify this deviation.

PBAPS-STSB-RAI 6

Exelon's proposed wording of PBAPS SR 3.5.4.8 differs from both the TSTF-542 mark-up of SR 3.5.2.8 and PBAPS current TS SR 3.5.2.6. The TSTF-542 wording for the corresponding SR is: "Verify the required ECCS injection/spray subsystem actuates on a manual initiation signal."

The justification in the LAR on page 2 of 5 of Attachment 1 states:

EGG proposes to revise PBAPS TS Surveillance Requirement (SR) 3.5.4.8 and TS Bases 3.3.5.4 to clarify that for manual initiations PBAPS utilizes hand switches in lieu of push buttons.

There are currently no functions in PBAPS TS Table 3.3.5.1-1 for manual initiation of the Core Spray (CS) and Low Pressure Coolant Injection (LPCI) systems. Please clarify whether the hand switches identified initiate CS and LPCI actuation, or if these hand switches only start the pumps, requiring operators to manually align the other CS and LPCI components for injection. Please further explain and provide additional justification for the wording proposed in the LAR.

PBAPS-STSB-RAI 7

The required channels per function of proposed function 3.a of proposed Table 3.3.5.4-1 appears to be incorrect in two ways. Firstly, since function 3.a comes from existing PBAPS Table 3.3.6.1-1, the removed note at the bottom of the page seems to indicate that only one channel per trip system may be needed. Additionally, when compared to corresponding

function of Table 3.3.5.2-1 of TSTF-542, it appears to be missing the text "In one trip system" after the numeral "2" in the 'Required Channels per Function' column. The column header of PBAPS current TS Table 3.3.6.1-1 is entitled "REQUIRED CHANNELS PER TRIP SYSTEM" as described in the approved TSTF traveler model safety evaluation. Please provide justification for the existing markups or provide new markups for function 3.a of proposed Table 3.3.5.4-1 for each unit.

PBAPS-STSB-RAI 8

The required channels per function of proposed function 4.a of proposed Table 3.3.5.4-1 appears to be missing the text "In one trip system" after the numeral "2" in the 'Required Channels per Function' column when compared to the corresponding function of Table 3.3.5.2-1 of TSTF-542. The column header of PBAPS current TS Table 3.3.6.1-1 is entitled "REQUIRED CHANNELS PER TRIP SYSTEM" as described in the approved TSTF traveler model safety evaluation. Please provide justification for the existing markup or provide a new markup for that function for each unit.