

From: [Tobin, Jennifer](#)
To: [Helker, David P. \(GenCo-Nuc\)](#)
Cc: [Gropp Jr, Richard W. \(GenCo-Nuc\)](#); [Danna, James](#)
Subject: Peach Bottom Units 2 and 3 - Request for Additional Information - Replacement Buried Cable LAR- (Temporary) Extension of Completion Time (EPID L-2019-LLA-0095)
Date: Thursday, June 27, 2019 11:40:00 AM

Dear Mr. Helker,

By letter dated April 26, 2019 (ADAMS Accession No. ML19116A196), Exelon Generation Company, LLC requested to change technical specifications for Peach Bottom Atomic Power Station Units 2 and 3. The proposed change would provide a temporary one-time extension of the completion time to allow sufficient time to replace 27 electrical cables in an underground duct back.

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 provided below. These questions are being sent to ensure that the questions are understandable, the regulatory basis for the questions is clear, and to determine if the information was previously docketed. A clarification phone call was held June 27, 2019 and resulted in no change to the text of the draft RAIs. As agreed upon during the clarification call, the response to the RAIs is due by July 27, 2019.

If you have any questions, please contact me at (301) 415-2328. A copy of these RAIs will be made publicly available in ADAMS.

Thanks,
Jenny

REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST TO REVISE THE TECHNICAL SPECIFICATIONS TO
ALLOW ONE-TIME EXTENSION FOR TS 3.8.1 REQUIRED ACTION A.3 COMPLETION TIME
DOCKET NOS. 50-277 AND 50-278
(EPID NO. L-2019-LLA-0095)

By letter dated April 26, 2019 (Agencywide Document Access Management System (ADAMS) Accession No. ML19116A196), Exelon Generation Company, LLC (Exelon, the licensee) requested an amendment to the Renewed Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3. The proposed amendment would revise Technical Specifications (TS) 3.8.1, "AC Sources – Operating," by allowing a temporary, one-time extension for the Required Action A.3 completion time (CT) to replace underground electrical cables that are reaching the end of their service life. The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is needed to complete its review of the license amendment request (LAR).

Title 10 of the Code of Federal Regulations (10 CFR), Section 50.63, "Loss of All Alternating Current [AC] Power," requires that each light-water-cooled nuclear power plant to be able to withstand and recover from a station blackout (i.e., loss of the offsite electric power system concurrent with reactor trip and unavailability of the onsite emergency alternating current electric power system) of a specified duration. The 10 CFR 50.63 requirements provide assurance that necessary operator actions can be performed and that necessary control room area equipment will be functional under the expected environmental conditions during and following a station blackout. Thus, the requirements ensure that the core will be cooled and appropriate containment integrity will be maintained.

Request Additional Information (RAI) 1

The LAR states that Peach Bottom plans to meet the intent of NUREG-0800, Branch Technical Position (BTP) 8-8, "Onsite (Emergency Diesel Generators) and Offsite Power Sources Allowed Outage Time Extensions," by proposing additional defense-in-depth actions and procedures and using a currently installed alternate alternating current (AAC) power source (station blackout (SBO) line) to provide supplemental AC power to station emergency buses, as required to compensate for inoperable AC sources.

NUREG-0800, BTP 8-8 provides guidance, from a deterministic perspective, for reviewing a one-time completion time extension request. Section B of BTP 8-8 states, in part:

[Technical Specification] TS required systems, subsystems, trains, components, and devices that depend on the remaining power sources will be verified to be operable and positive measures will be provided to preclude subsequent testing or maintenance activities on these systems, subsystems, trains, components, and devices.

To address the above BTP 8-8 position, Section 4.0 of Attachment 1 to the LAR states, in part, that the remaining operable offsite circuit, diesel generators (DGs), and SBO line will be controlled as protected equipment. This statement appears to

satisfy the BTP position with respect to precluding the remaining operable offsite circuit, DGs, and SBO line from testing or maintenance activities during the requested extension of the CT to 21 days. However, Attachment 3 of the LAR states that preplanned maintenance affecting DGs or operable offsite circuits will be assessed within existing process to ensure that station Operations staff will not authorize preplanned maintenance activities affecting DGs or operating offsite circuits during the temporary onetime 21-day extended completion time period if severe adverse weather conditions are expected.

It appears that Attachment 3 of the LAR implies that the operating offsite circuit and DGs are not precluded from testing and maintenance during the 21-day extended completion time period and that testing and maintenance on the operating offsite circuits and DGs during the 21-day extended completion time period will be precluded only when the severe weather conditions are expected. Please provide a discussion of how the proposed change meets the BTP 8-8 position.

RAI 2

Section B of BTP 8-8 states, in part:

The preplanned maintenance will not be scheduled if severe weather conditions are anticipated.

The LAR states that preplanned maintenance affecting DGs or operable offsite circuits will be assessed within existing Procedures/Processes WC-AA-101, "On-line Work Control Process," and WC-AA-104, "Integrated Risk Management." These processes will ensure that station Operations staff would not authorize performance of preplanned maintenance affecting DGs or operable offsite circuits during the requested extension of the CT if severe adverse weather conditions are expected. It appears that the term "preplanned maintenance" is mischaracterized as the maintenance of the DGs and operable offsite circuits. It should be noted that the term "preplanned maintenance" in BTP 8-8 applies to activities associated with the proposed extended completion time, and in this case, it is the cable replacement activities.

It is not clear if the cable replacement activities are scheduled when severe weather is anticipated. Please provide a discussion of the proposed actions and regulatory commitments for scheduling the cable replacement activity if severe weather conditions are anticipated during the proposed extension of the CT to 21 days.

RAI 3

Section B of BTP 8-8 states, in part:

The plant should have formal engineering calculations for equipment sizing and protection and have approved procedures for connecting the AAC or supplemental power sources to the safety buses.

To address the above BTP 8-8 position, Section 4.0 of Attachment 1 to the LAR states, in part, that the existing DG loading Calculation PE-0166, "Emergency Diesel Generator Loading for Cases defined by UFSAR," confirms the capability of the DGs to meet the shutdown load requirements. The LAR also provides a list of the DG loads and a discussion of the four Class 1E DGs as supplemental power sources. It should be noted that the emergency diesel generators are part of the required onsite power system. These DGs should not be credited as the AAC or supplemental power sources. The AAC or supplemental power source is defined by BTP 8-8 as the power source that has capability and capacity to carry all loss of offsite power (LOOP) loads and bring the unit to a cold shutdown in an event of loss of the offsite electric power system concurrent with reactor trip and unavailability of the onsite emergency AC electric power system. For the purpose of this review, the NRC staff considers the SBO line as the Peach Bottom AAC or supplement power source. However, in the LAR, it is not clear:

- a. Whether the SBO line has the capability and capacity to power (1) both units' safe shutdown system loads (loads listed in Attachment 6 of the LAR); and (2) both units' systems and components listed in LCO 3.8.1.c that are currently required to be powered by the offsite circuits.
- b. Whether Peach Bottom has a procedure for connecting the SBO line to the safety buses for both units.

Please provide a discussion for Items a and b above.