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> 10 CFR 50 10 CFR 51 10 CFR 54

July 25, 2019

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555-0001

> Peach Bottom Atomic Power Station, Units 2 and 3 Renewed Facility Operating License Nos. DPR-44 and DPR-56 NRC Docket Nos. 50-277 and 50-278

- Subject: Supplement No. 8 Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application
- References: 1. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated July 10, 2018, "Application for Subsequent Renewed Operating Licenses"
  - Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated September 14, 2018, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 1)
  - 3. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated January 23, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 2)
  - Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated February 11, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 3)
  - 5. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated March 18, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 4)
  - Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated June 12, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 5)
  - Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated July 1, 2019, "First 10 CFR 54.21(b) Annual Amendment to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 6)

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> Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated July 12, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 7)

In Reference 1, Exelon submitted the Subsequent License Renewal Application (SLRA) for the Peach Bottom Atomic Power Station, Units 2 and 3 (PBAPS). In References 2, 3, 4, 5, 6, 7 and 8, Exelon submitted Supplement Nos. 1, 2, 3, 4, 5, 6 and 7 to the SLRA for PBAPS. The purpose of this letter is to provide Supplement No. 8 to the SLRA for PBAPS. Supplement No. 8 includes one change to the SLRA which provides additional information and clarification in the SLRA to address the NRC Safety Review Audit information needs.

Enclosure A to this letter provides a description of the changes, and corresponding mark-ups to the affected portions of the SLRA, thereby supplementing the PBAPS SLRA.

This letter contains no new regulatory commitments.

This submittal has been discussed with the NRC License Renewal Senior Project Manager for the PBAPS Subsequent License Renewal project.

If you have any questions, please contact Mr. David Distel, Licensing Lead, Exelon License Renewal Projects, at 610-765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 25<sup>th</sup> day of July 2019.

Respectfully submitted,

Michael P. Gallagher Vice President - License Renewal and Decommissioning Exelon Generation Company, LLC

Enclosure: A. Changes to the PBAPS Subsequent License Renewal Application

cc: Regional Administrator – NRC Region I NRC Senior Project Manager (Safety Review), NRR-DMLR NRC Project Manager (Environmental Review), NRR-DMLR NRC Project Manager, NRR-DORL – Peach Bottom Atomic Power Station NRC Senior Resident Inspector, Peach Bottom Atomic Power Station R.R. Janati, Pennsylvania Bureau of Radiation Protection D.A. Tancabel, State of Maryland

# Enclosure A

#### Changes to the PBAPS Subsequent License Renewal Application

### Introduction

This Enclosure contains one change that is being made to the Subsequent License Renewal Application (SLRA) that was identified after submittal of the SLRA. For each item, the change is described and the affected page number(s) and portion(s) of the SLRA is provided. For clarity, entire sentences or paragraphs from the SLRA are provided with deleted text highlighted by strikethroughs and inserted text highlighted by **bolded italics**.

# Underwater inspections not addressed in the Appendix B program descriptions for the ASME Section XI, Subsection IWF (B.2.1.31) and Structures Monitoring (B.2.1.34) programs

Affected SLRA Sections: Appendix B, Sections B.2.1.31 and B.2.1.34

SLRA Page Numbers: B-179 and B-196

#### **Description of Changes:**

The SLRA Appendix B program description for the Inspection of Water-Control Structures Associated with Nuclear Power Plants (B.2.1.35) program includes a discussion of underwater inspections. The ASME Section XI, Subsection IWF (B.2.1.31) program and the Structures Monitoring (B.2.1.34) program also include underwater inspections; however, underwater inspections are not addressed in the SLRA Appendix B program descriptions for the ASME Section XI, Subsection IWF (B.2.1.31) and Structures Monitoring (B.2.1.34) programs.

Accordingly, SLRA Appendix B, Sections B.2.1.31 and B.2.1.34 are revised to address underwater inspections.

SLRA Appendix B, Section B.2.1.31 on page B-179 is revised as shown below:

# B.2.1.31 ASME Section XI, Subsection IWF

#### **Program Description**

The ASME Section XI, Subsection IWF aging management program is an existing condition monitoring program that consists of periodic visual examination of ASME Section XI Class 1, 2, 3, and MC piping and component support members for loss of material, loss of mechanical function, cracking, and loss of preload in air-indoor uncontrolled, air-outdoor, raw water, and treated water environments. Bolting for supports is also included with these components and inspected for loss of material and loss of preload by inspecting for missing, detached, or loosened bolts and nuts. The program utilizes procedures that are consistent with industry guidance to ensure proper specification of bolting material, lubricant, and installation torque to prevent or minimize loss of bolting preload or other loss of structural integrity. Indications of degradation are entered in the corrective action program for evaluation or correction to ensure the intended function of the component support is maintained.

# Support members located underwater will not be accessible for evaluation with the same level of visual acuity as support members above water. Inspections will be implemented that establish the condition of these support members by using divers or by dewatering.

This program consists of periodic visual examination of piping and component supports for signs of degradation, evaluation, and corrective actions. The enhanced program implements additional inspections beyond the inspections required by the 10 CFR 50.55a ASME Code Section XI, Subsection IWF program. This consists of a one-time inspection of an additional five percent of the sample size specified in Table IWF-2500-1 for Class 1, 2, and 3 piping supports. This one-time inspection is conducted within five years prior to entering the second period of extended operation. For high-strength bolting in sizes greater than 1 inch nominal diameter, volumetric examination comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1 will be performed to detect cracking in addition to the VT-3 examination.

SLRA Appendix B, Section B.2.1.34 on page B-196 is revised as shown below:

# B.2.1.34 Structures Monitoring

#### **Program Description**

The Structures Monitoring aging management program is an existing condition monitoring program that consists of periodic visual inspection and monitoring the condition of concrete and steel structures, structural components, component supports, and structural commodities to ensure that aging degradation (such as those described in ACI 349.3R, ACI 201.1R, SEI/ASCE 11, and other documents) will be detected, the extent of degradation determined and evaluated, and corrective actions taken prior to loss of intended functions. Quantitative results (measurements) and qualitative information from periodic inspections are trended with sufficient detail, such as photographs and surveys for the type, severity, extent, and progression of degradation, to ensure that corrective actions can be taken prior to a loss of intended function. The acceptance criteria are derived from applicable consensus codes and standards. For concrete structures, the program includes personnel qualifications and auantitative evaluation criteria of ACI 349.3R. Inspection frequency for the in scope structures will not exceed five years, with provisions for more frequent inspections when conditions are observed that have a potential for impacting an intended function. Unacceptable conditions, when found, are evaluated or corrected in accordance with the corrective action program. The monitoring methods are effective in detecting the applicable aging effects and the frequency of monitoring is adequate to prevent significant age-related degradation to ensure there is no loss of intended function.

The Structures Monitoring aging management program was developed to implement the requirements of 10 CFR 50.65 and is based on NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The program includes elements of the Masonry Walls (B.2.1.33) program and Inspection of Water-Control Structures Associated with Nuclear Power Plants (B.2.1.35) program.

#### Structural components located underwater will not be accessible for evaluation with the same level of visual acuity as structural components above water. Inspections will be implemented that establish the condition of these structural components by using divers or by dewatering.

Concrete structures are inspected for indications of deterioration and distress including evidence of leaching, loss of material, cracking, and a loss of bond, as defined in ACI 201.1R. Steel components are inspected for loss of material due to corrosion.