UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

July 20, 2021

Mr. David P. Rhoades
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000277/2021010 AND 05000278/2021010

Dear Mr. Rhoades:

On June 24, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Peach Bottom Atomic Power Station, Units 2 and 3 and discussed the results of this inspection with Mr. David Henry, Plant Manager and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Glenn T. Dentel

Digitally signed by Glenn T. Dentel
Date: 2021.07.20 08:59:14 -04'00'

Glenn T. Dentel, Chief
Engineering Branch 2
Division of Operating Reactor Safety

Docket Nos. 05000277 and 05000278
License Nos. DPR-44 and DPR-56

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000277/2021010 AND 05000278/2021010 DATED JULY 20, 2021

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000277 and 05000278
License Numbers:	DPR-44 and DPR-56
Report Numbers:	05000277/2021010 and 05000278/2021010
Enterprise Identifier:	I-2021-010-0015
Licensee:	Exelon Generation Company, LLC
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Location:	Delta, PA 17314
Inspection Dates:	June 7, 2021 to June 24, 2021
Inspectors:	C. Bickett, Senior Reactor Inspector D. Kern, Senior Reactor Inspector J. Lilliendahl, Senior Emergency Response Coord
Approved By:	Glenn T. Dentel, Chief Engineering Branch 2 Division of Operating Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a triennial fire protection inspection at Peach Bottom Atomic Power Station, Units 2 and 3, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information.

List of Findings and Violations

No findings or violations of more than minor significance were identified.

Additional Tracking Items

None.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. However, all the inspection activities were performed onsite. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.21N.05 - Fire Protection Team Inspection (FPTI)

Structures, Systems, and Components (SSCs) Credited for Fire Prevention, Detection, Suppression, or Post-Fire Safe Shutdown Review (IP Section 03.01) (4 Samples)

The inspectors verified that components and/or systems will function as required to support the credited functions stated for each sample. Additional inspection considerations are located in the fire hazards analysis (FHA) or safe shutdown analysis (SSA).

(1) Fire Protection Water Supply System
(2) Automatic Suppression Systems
(3) Residual Heat Removal (RHR) system
(4) High Pressure Coolant Injection (HPCI) system

Fire Protection Program Administrative Controls (IP Section 03.02) (2 Samples)

The inspectors verified that the selected control or process is implemented in accordance with the licensee's current licensing basis. If applicable, ensure that the licensee's FPP contains adequate procedures to implement the selected administrative control. Verify that the selected administrative control meets the requirements of all committed industry standards.

(1) Control of Transient Combustible Material
(2) Fire Protection System Impairment Control

Fire Protection Program Changes/Modifications (IP Section 03.03) (2 Samples)

The inspectors verified the following:

a. Changes to the approved FPP do not constitute an adverse effect on the ability to safely shutdown.
b. The adequacy of the design modification, if applicable.
c. Assumptions and performance capability stated in the SSA have not been degraded through changes or modifications.
d. The FPP documents, such as the Updated Final Safety Analysis Report, fire protection report, FHA, and SSA were updated consistent with the FPP or design change.
e. Post-fire SSD operating procedures, such as abnormal operating procedures, affected by the modification were updated.

(1) EC 627869 – Implement Fire Hose Removal Strategy
(2) EC 623631 – Fire Safety Shutdown Improvements following 2017 Functional Areas Self-Assessment

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On June 24, 2021, the inspectors presented the triennial fire protection inspection results to Mr. David Henry, Plant Manager and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.05	Corrective Action Documents	02673479		
		04115309		
		04125405		
		04127608		
		04153095		
		04230804		
	Corrective Action Documents Resulting from Inspection	04418605		
		04428400		
		04428402		
		04428589		
		04428649		
		04428822		
		04430609		
	Drawings	M-1-S-65, Sht. 17	Unit 2 Residual Heat Removal System Electrical Schematic	101
		M-1-S-65, Sht. 20	Unit 2 Residual Heat Removal System Electrical Schematic	101
	Engineering Changes	EC 623631	FSSD Program Improvements following FASA 2017	07/13/2018
		EC 626469	86-10 Evaluation Supporting Removal of Fire Hose at Interior Hose Stations at Peach Bottom Atomic Power Station	0
		EC 627495	Replacement of MO-2-10-089A/B/C/D for HPSW Pressure Reduction	1
		EC 627869	Implement Fire Hose Removal Strategy Need to Create WO to Drive Planning	0
		EC 630114	HPCI/RCIC Pump Low Suction Pressure Trip Elimination	2
	Miscellaneous		Fire Protection Program	17
		NE-00296	Specification for Post-Fire Safe Shutdown Program Requirements at Peach Bottom Atomic Power Station	5
		PEA-05738	Failure Analysis of Fire Protection Piping IR 04133867 and 04190107	11/01/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		PEA-57860	Evaluation of Fire Valve for Selective Leaching /Corrosion - Fire Water System East Main Header South Division Shutoff PIV-D-2	12/30/2014
		PEA-71643	Selective Leaching Evaluation of One Fire Valve and One Piping Tee	05/26/2017
	Procedures	OP-AA-201-007	Fire Protection System Impairment Control	0
		OP-AA-201-009	Control of Transient Combustible Material	26
		OP-PB-102-106	Operator Response Time Program at Peach Bottom	10
		SE-10	Alternative Shut Down	23