

**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

May 30, 2019

Docket No. 05000171

License No. DPR-12

Mr. Bryan Hanson
Senior Vice President, Exelon Generation, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555

SUBJECT: NRC INSPECTION REPORT NO. 05000171/2019001, EXELON GENERATION COMPANY, LLC, PEACH BOTTOM ATOMIC POWER STATION UNIT 1, DELTA, PENNSYLVANIA

Dear Mr. Hanson:

On May 1-2, 2019, the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection at the Peach Bottom Atomic Power Station Unit 1. The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of observations by the inspectors, interviews with personnel, and a review of procedures and records. The results of the inspection were discussed with Pat Navin, Site Vice President, and other members of your organization on May 2, 2019, at the conclusion of the inspection. The enclosed report presents the results of this inspection. No findings of safety significance were identified.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Regulations, Guidance and Communications**. The current Enforcement Policy is included on the NRC's website at www.nrc.gov; select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents**; then **Enforcement Policy (Under 'Related Information')**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

B. Hanson

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No reply to this letter is required. Please contact Steve Hammann at 610-337-5399 if you have any questions regarding this matter.

Sincerely,

/RA/

Raymond Powell, Chief
Decommissioning, ISFSI, and
Reactor HP Branch
Division of Nuclear Materials Safety

Enclosure: Inspection Report No.
05000171/2019001

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NRC INSPECTION REPORT NO. 05000171/2019001, EXELON GENERATION COMPANY, LLC, PEACH BOTTOM ATOMIC POWER STATION UNIT 1, DELTA, PENNSYLVANIA DATED MAY 30, 2019

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U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No. 05000171/2019001
Docket No. 05000171
License No. DPR-12
Licensee: Exelon Generation Company, LLC (Exelon)
Facility: Peach Bottom Atomic Power Station Unit 1
Address: 1848 Lay Road
Delta, Pennsylvania 17314-9032
Inspection Dates: May 1-2, 2019
Inspectors: Steve Hammann, Senior Health Physicist
Decommissioning, ISFSI, and Reactor HP Branch
Division of Nuclear Materials Safety
Jim Cassata, Health Physicist
Commercial, Industrial, R&D and Academic Branch
Division of Nuclear Materials Safety
Approved By: Raymond Powell, Chief
Decommissioning, ISFSI, and Reactor HP Branch
Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

Exelon Generation Company, LLC
Peach Bottom Atomic Power Station Unit 1 (Unit 1)
NRC Inspection Report No. 05000171/2019001

An announced safety inspection was conducted on May 1-2, 2019, at Unit 1. The inspectors reviewed activities related to the decommissioning performance and status, management oversight, corrective action program (CAP), and site radiological programs. The inspection consisted of interviews with Exelon personnel, a review of procedures and records, and plant walk-downs. The NRC's program for overseeing the safe operation of a shut-down nuclear power reactor is described in Inspection Manual Chapter (IMC) 2561, "Decommissioning Power Reactor Inspection Program." Based on the results of this inspection, no findings of safety significance were identified.

REPORT DETAILS

1.0 Background

Unit 1 was a high temperature gas-cooled demonstration power reactor that operated from February 1966 until October 31, 1974, and has been permanently shut down and in SAFSTOR since that time. All fuel has been removed from the reactor and shipped to an offsite facility. The spent fuel pool has been drained and decontaminated and radioactive liquids have been removed. Intrusion water that collects in the reactor building sump is periodically pumped out of the sump and transferred to the common radwaste building for Peach Bottom Units 2 and 3 for processing.

The NRC's program for overseeing the safe operation of a shut-down nuclear power reactor is described in IMC 2561.

2.0 SAFSTOR Performance and Status Review

- a. Inspection Scope (Inspection Procedures (IPs) 36801, 37801, 40801, 71801, 83750, 84750, 86750)

A routine announced safety inspection was conducted on May 1-2, 2019, at Unit 1. The inspection consisted of plant walkdowns, interviews with Exelon personnel, and a review of procedures and records. The inspectors reviewed the SAFSTOR program as outlined in the Updated Final Safety Analysis Report (UFSAR), Technical Specifications (TS), and procedure DC-PB-800, "Unit 1 Process Control Program," to assess the adequacy of management oversight for Unit 1 facility. Specifically, the inspectors reviewed the decommissioning management and staff organization and Exelon's implementation of Unit 1 programs for the SAFSTOR phase of decommissioning. The inspectors also conducted a walk-down to assess the material condition of the Unit 1 buildings.

The inspectors reviewed the results of the Exelon "Unit 1 Exclusion Area Inspection" semi-annual surveillance test to ensure exclusion area barriers, water intrusion, and effluent release limits are as specified in the TS. The inspectors reviewed the occupational dose records, radwaste records, and environmental monitoring reports to determine the effectiveness of site radiological programs.

The inspectors reviewed documents and interviewed personnel to verify issues were identified and corrected in accordance with the site's CAP. The inspectors reviewed assignment reports associated with Unit 1 to determine if a sufficiently low threshold for problem identification existed, follow-up evaluations were of sufficient quality, and Exelon assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue.

b. Observations and Findings

The inspectors verified that management oversight was adequate for the SAFSTOR phase of decommissioning and that no significant changes had been made to the Unit 1 SAFSTOR organization since the previous inspection. The inspectors confirmed that no design changes or plant modifications were made since the previous inspection.

The inspectors confirmed surveillances were performed as required by the TS. The inspectors determined site radiological programs were effective in limiting exposure and intrusion water was transferred to Units 2 and 3 in accordance with plant procedures. The inspectors verified that the annual radiological effluent report demonstrated that calculated doses were below regulatory dose criteria of 10 CFR 50, Appendix I.

The inspectors determined that issues were being identified and entered into the CAP in a timely manner and the issues were effectively screened, prioritized and evaluated commensurate with their safety significance.

c. Conclusions

Based on the results of this inspection, no findings of safety significance were identified.

3.0 Exit Meeting Summary

On May 2, 2018, the inspectors presented the inspection results to Pat Navin, Site Vice President, and other members of Exelon's staff. The inspectors confirmed that no copies of proprietary information were used during this inspection and none were removed from the site.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

D. Dullum, Senior Regulatory Engineer
C. Fabricante, Radiation Protection Supervisor
C. Hardee, Unit 1 Project Manager
T. McDonald, Radiation Protection Technician
P. Navin, Site Vice President

BHI

J. Baldwin, Radiation Protection Technician

ITEMS OPEN, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Assignment Reports – 04017818, 04136286, 04137245, 04138066, 04149453, 04157814, 04168270, 04176753, 04199436, 04204483, 04205159, 04222653, 04236437
DC-PB-800, Rev.0, Unit 1 Process Control Program
DC-PB-800-1000, Rev. 1, Entry Into Unit 1 During SAFSTOR Decommissioning Status
PBAPS Unit 1 Decommissioning Status Report – 2018, dated March 29, 2019
Peach Bottom Atomic Power Station 2017-2018 Biennial 10CFR50.59 and 10CFR72.48 Report
Peach Bottom Atomic Power Station 2018 Occupational Exposure Report
Peach Bottom Atomic Power Station Annual Radioactive Effluent Release Report 61, January 1, 2018 through December 31, 2018, dated April 26, 2019
Peach Bottom Atomic Power Station, Unit 1 Facility Operating License, Amendment No. 13
PI-AA-120, Rev. 8, Issue Identification and Screening Process
PI-AA-125, Rev. 6, Corrective Action Program (CAP) Procedure
PI-AA-126, Rev. 2, Self-Assessment and Benchmark Program
Radiation Work Permit: PB-C-19-00121, Rev 0, Unit 1 RCA Areas
Radiological Surveys 2019-036999, 2019-039963
Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations, April 1, 2019
ST-H-099-960-2, Rev. 24, “Unit 1 Exclusion Area Inspection”, performed May 31, 2018
Updated Final Safety Analysis Report, Rev. 9.0
Work Order 04792086, PB U-1 Exclusion Area Inspection

LIST OF ACRONYMS USED

CAP	Corrective Action Program
Exelon	Exelon Generation Company, LLC
IMC	Inspection Manual Chapter
IP	Inspection Procedure
NRC	Nuclear Regulatory Commission
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
Unit 1	Peach Bottom Atomic Power Station Unit 1