



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
475 ALLENDALE RD, STE 102
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

May 8, 2024

David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer (CNO)
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 –
EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000277/2024501 AND 05000278/2024501

Dear David Rhoades:

On April 18, 2024, 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 David Henry, Site Vice President, 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,

Daniel L. Schroeder, Chief
Security, Emergency Preparedness and Incident
Response Branch
Division of Radiological Safety and Security

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 –
 EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
 05000277/2024501 AND 05000278/2024501 DATED MAY 8, 2024

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DATE	5/6/2024	5/3/2024	5/3/2024		

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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: 05000277/2024501 and 05000278/2024501

Enterprise Identifier: I-2024-501-0006

Licensee: Constellation Energy Generation, LLC

Facility: Peach Bottom Atomic Power Station, Units 2 and 3

Location: Delta, PA 17314

Inspection Dates: April 15, 2024 to April 18, 2024

Inspectors: J. DeBoer, Senior Emergency Preparedness Inspector
E. Eve, Senior Project Engineer
K. Hussar, Senior Physical Security Inspector
D. McHugh, Reactor Inspector
S. Mercurio, Emergency Preparedness Inspector

Approved By: Daniel L. Schroeder, Chief
Security, Emergency Preparedness and Incident Response Branch
Division of Radiological Safety and Security

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an emergency preparedness biennial exercise 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.

REACTOR SAFETY

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes:
 - Evaluation Number 23-46, EP-AA-120-1001, Revision 11 "Mid-Atlantic PAR Flowchart Changes – Decennial ETE Project"

This evaluation does not constitute NRC approval.

71114.07 - Exercise Evaluation - Hostile Action Event

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise. The exercise scenario simulated a hostile action-based event with loss of physical control of the facility and loss of decay heat removal capabilities on April 16, 2024.

71114.08 - Exercise Evaluation - Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed and evaluated the proposed scenario for biennial emergency plan exercise on February 28, 2024.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) For the period January 1, 2023 through March 31, 2024

EP02: Emergency Response Organization Drill Participation (IP Section 02.13) (1 Sample)

- (1) For the period January 1, 2023 through March 31, 2024

EP03: Alert And Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) For the period January 1, 2023 through March 31, 2024

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On April 18, 2024, the inspectors presented the emergency preparedness biennial exercise inspection results to David Henry, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.07	Corrective Action Documents Resulting from Inspection	IR 04768750		
		IR 04769112		
	Miscellaneous		Peach Bottom Atomic Power Station 2024 NRC-Graded Emergency Preparedness Full Participation Hostile Action Based Exercise Scenario Package	02/14/2024
		EP-AA-1000	Exelon Nuclear Standardized Radiological Emergency Plan	Revision 33
		EP-AA-1007	Exelon Nuclear Radiological Emergency Plan Annex for Peach Bottom Atomic Power Station	Revision 35
		EP-AA-1007	Exelon Nuclear Emergency Action Levels for Peach Bottom Atomic Power Station	Addendum 3, Revision 11
		EP-AA-111-F-08	Peach Bottom PAR Flowchart	Revision J