



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

March 2, 2022

Mr. 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: ANNUAL ASSESSMENT LETTER FOR PEACH BOTTOM ATOMIC POWER
STATION, UNITS 2 AND 3 (REPORTS 05000277/2021006 AND
05000278/2021006)

Dear Mr. Rhoades:

The U.S Nuclear Regulatory Commission (NRC) has completed its end-of-cycle performance assessment of Peach Bottom Atomic Power Station, Units 2 and 3, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2021 through December 31, 2021. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety. The baseline inspection program was completed at your facility as defined in Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase." All NRC inspections that occurred at your facility in 2021 were performed while the operating license was held by Exelon Generation Company, LLC. On February 1, 2022, the operating license was transferred to Constellation Energy Generation, LLC (Constellation), as documented in a license amendment (ADAMS Accession No. ML22021B660). As such, this letter and future communications regarding your facility will be addressed to and refer to the licensee as Constellation.

The NRC determined the performance at Peach Bottom Atomic Power Station, Units 2 and 3, during the most recent quarter was within the Licensee Response Column (Column 1) of the NRC's Reactor Oversight Process (ROP) Action Matrix in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at Peach Bottom Atomic Power Station, Units 2 and 3.

The enclosed inspection plan lists the inspections scheduled through December 31, 2023. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In addition to baseline inspections, the NRC also plans to conduct Inspection Procedure 37060, "10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection," for Units 2 and 3 in January and February 2023.

In response to the COVID-19 public health emergency (PHE), the NRC adjusted inspection plans and schedules in order to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. While the PHE continues, overall conditions throughout the country support performance of our inspection and oversight activities to return to normal onsite presence by our resident and region-based inspectors and completion of nominal baseline inspection samples. We continue to monitor site-specific conditions and as discussed in our November 2, 2021 memo, "Implementation of Inspection Programs Following Re-Entry from the Public Health Emergency for the Reactor Safety Program" (ADAMS Accession No. ML21295A302), it may be necessary to alter how and when we perform our inspection and oversight activities as we balance the importance of protecting the health and safety of our staff with the need to conduct effective oversight that supports the NRC's critical safety mission.

For inspections requiring extensive coordination with offsite organizations, such as evaluated emergency preparedness exercises, NRC guidance and frequently asked questions for security and emergency preparedness can be found here: <https://www.nrc.gov/about-nrc/covid-19/security-ep/>. Similarly, the NRC has developed guidance if force-on-force inspections cannot be completed as scheduled due to an emergency, such as the COVID-19 PHE. These changes help ensure the health and safety of both NRC and licensee staff while maintaining the NRC's important safety and security mission during the COVID-19 PHE. The attached inspection plan is accurate on the date of issuance but remains subject to change based on approval of potential exemption requests or other changes needed due to changing conditions in the COVID-19 PHE. NRC staff will contact your appropriate regulatory affairs staff in order to coordinate inspection planning and scheduling.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at 610-337-5337 with any questions you have regarding this letter.

Sincerely,

Jonathan E. Greives, Chief
Projects Branch 4
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: ANNUAL ASSESSMENT LETTER FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (REPORTS 05000277/2021006 AND 05000278/2021006) DATED MARCH 2, 2022

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DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/ROPAssessmentMeetings/Shared Documents/ROP-22 EOC Review/Branch 4/Peach Bottom/Peach Bottom 2021 Annual Assessment Letter.docx>

ADAMS ACCESSION NUMBER: ML22059A052

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OFFICE	RI/DORS	RI/DORS			
NAME	LCasey	JGreives			
DATE	2/25/22	2/28/22			

OFFICIAL RECORD COPY

Site Inspection Activity Plan

Peach Bottom

01/01/2022 - 12/31/2023

Unit	Start	End	Activity	CAC	Title	Staff Count
Design Basis Assurance Inspection - Power Operated Valves - Peach Bottom Units 2 and 3						3
2, 3	3/21/2022	4/8/2022	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
Resp Protection & Dose Assessment (71124.03/71124.04)						1
2, 3	4/18/2022	4/22/2022	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
2, 3	4/18/2022	4/22/2022	IP 71124.04	000728	Occupational Dose Assessment	
EP EXERCISE INSPECTION - PEACH BOTTOM						4
2, 3	4/25/2022	4/29/2022	IP 71114.01	000716	Exercise Evaluation	
2, 3	4/25/2022	4/29/2022	IP 71151	001397	Performance Indicator Verification	
Access Control, Protective Strat, TSR, SPR, PI-PB						4
2, 3	5/16/2022	5/20/2022	IP 71130.02	000734	Access Control	
2, 3	5/16/2022	5/20/2022	IP 71130.05	000737	Protective Strategy Evaluation	
2, 3	5/16/2022	5/20/2022	IP 71130.09	001656	Security Plan Changes	
2, 3	5/16/2022	5/20/2022	IP 71130.14	000743	Review of Power Reactor Target Sets	
2, 3	5/16/2022	5/20/2022	IP 71151	001338	Performance Indicator Verification	
FY22 Peach Bottom Initial License Examination						4
2, 3	4/24/2022	4/29/2022	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
2, 3	5/22/2022	5/27/2022	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
Cyber Security - Peach Bottom						4
2, 3	5/23/2022	5/27/2022	IP 71130.10	000741	Cybersecurity	
50.59 Inspection - Peach Bottom Units 2 and 3						3
2, 3	6/13/2022	6/17/2022	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
RETS (71124.06)						1
2, 3	7/18/2022	7/22/2022	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
Material Control and Accountability - Peach Bottom Units 2 and 3						1
2, 3	8/22/2022	8/26/2022	IP 71130.11	000742	Material Control and Accounting (MC&A)	
Triennial Heat Sink - Peach Bottom Units 2 and 3						1
2, 3	9/19/2022	9/23/2022	IP 71111.07T	000700	Heat Sink Performance	
Inservice Inspection - Peach Bottom Unit 2						1
2	10/24/2022	10/28/2022	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
Rad Hazards (71124.01) and PIs (71151)						1
2, 3	10/24/2022	10/28/2022	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
50.69 - Risk Informed SSC Implementation - Peach Bottom						4

Site Inspection Activity Plan

2, 3	1/23/2023	1/27/2023	IP 37060	000521	10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection	
2, 3	2/6/2023	2/10/2023	IP 37060	000521	10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection	
EP PROGRAM INSPECTION - PEACH BOTTOM						1
2, 3	2/27/2023	3/3/2023	IP 71114.02	000717	Alert and Notification System Testing	
2, 3	2/27/2023	3/3/2023	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
2, 3	2/27/2023	3/3/2023	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
2, 3	2/27/2023	3/3/2023	IP 71114.05	000720	Maintenance of Emergency Preparedness	
2, 3	2/27/2023	3/3/2023	IP 71151	001397	Performance Indicator Verification	
PB Requal Inspection with P/F Results						2
2, 3	3/5/2023	3/10/2023	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance	
2, 3	3/5/2023	3/10/2023	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
AA, FFD-PB						2
2, 3	3/6/2023	3/10/2023	IP 71130.01	000733	Access Authorization	
2, 3	3/6/2023	3/10/2023	IP 71130.08	000740	Fitness For Duty Program	
Design Bases Assurance Inspection Teams - Peach Bottom Unit 2 and 3						6
2, 3	4/10/2023	4/28/2023	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
HP Instrumentation (71124.05)						1
2, 3	5/15/2023	5/19/2023	IP 71124.05	000729	Radiation Monitoring Instrumentation	
FY23 Peach Bottom Initial License Exam						4
2, 3	4/30/2023	5/5/2023	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
2, 3	5/28/2023	6/9/2023	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
ISFSI Loading Inspection (60855) - PB						2
2, 3	6/26/2023	6/30/2023	IP 60855	001001	Operation Of An ISFSI	
PI&R Biennial Team Inspection - PB						4
2, 3	7/17/2023	7/21/2023	IP 71152B	000747	Problem Identification and Resolution	
2, 3	7/31/2023	8/4/2023	IP 71152B	000747	Problem Identification and Resolution	
HP Rad Waste (71124.08)						1
2, 3	7/24/2023	7/28/2023	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	
FORCE-ON-FORCE PLANNING AND EXERCISE - PB						4
2, 3	7/24/2023	7/28/2023	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
2, 3	8/14/2023	8/18/2023	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
HP REMP (71124.07)						1
2, 3	9/18/2023	9/22/2023	IP 71124.07	000731	Radiological Environmental Monitoring Program	

Site Inspection Activity Plan

Inservice Inspection - PB 3R24

1

3	10/23/2023	10/27/2023	IP 71111.08G	000701	Inservice Inspection Activities (BWR)
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HP Rad Hazards (71124.01) and PIs (71151)

1

2, 3	10/30/2023	11/3/2023	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls
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Access Control, Equipment, Sec Trng, Sec Plan Review, PI, ISFSI-PB

3

2, 3	12/11/2023	12/15/2023	IP 71130.02	000734	Access Control
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2, 3	12/11/2023	12/15/2023	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance
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2, 3	12/11/2023	12/15/2023	IP 71130.07	000739	Security Training
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2, 3	12/11/2023	12/15/2023	IP 71130.09	001656	Security Plan Changes
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2, 3	12/11/2023	12/15/2023	IP 71151	001338	Performance Indicator Verification
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2, 3	12/11/2023	12/15/2023	IP 81311	000831	Physical Security Requirements for Independent Spent Fuel Storage Installations
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