



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

March 4, 2019

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

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (REPORTS 05000277/2018006 AND 05000278/2018006)**

Dear Mr. Hanson,

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, including review of performance indicators, inspection results, and enforcement actions from January 1, 2018, through December 31, 2018. 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 NRC determined the performance at Peach Bottom Atomic Power Station, Units 2 and 3 during the most recent quarter was within the Regulatory Response Column (Column 2) of the NRC's Reactor Oversight Process (ROP) Action Matrix in Inspection Manual Chapter 0305, "Operating Assessment Program." This conclusion was based on one finding of low-to-moderate safety significance (White) associated with inadequate corrective actions which resulted in the failure of the E-3 emergency diesel generator shared between both units. Units 2 and 3 entered Column 2 as of the third quarter of 2018. The Notice of Violation was issued on December 11, 2018 (ML18341A206<sup>1</sup>).

Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." The objectives of this inspection are to assure that the root and contributing causes of degraded performance are understood; to independently assess and assure that the extents of condition and cause are identified; and to assure that appropriate corrective actions are taken to prevent recurrence in a prompt manner. This inspection will be scheduled after you notify the NRC of your readiness.

The enclosed inspection plan lists the inspections scheduled through December 31, 2020. This updated inspection plan now includes planned security inspections which were formerly transmitted under separate correspondence. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections

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<sup>1</sup> The designation in parentheses refers to an Agencywide Documents Access and Management System (ADAMS) Accession Number. Documents referenced in this letter are publicly available using the Accession Number in ADAMS.

performed by resident inspectors are not included in the inspection plan. You should be aware that the agency is pursuing potential changes to the ROP, including changes to engineering inspections (SECY-18-0113, "Recommendations for Modifying the Reactor Oversight Process Engineering Inspections"). Should these changes to the ROP be implemented, the engineering and other region-based inspections are subject to change in scope, as well as schedule, beginning in January 2020. Furthermore, all 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 will also conduct Inspection Procedure 81311, "Physical Security Requirements for Independent Spent Fuel Storage Installations," in February 2020.

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 Jonathan Greives at (610) 337-5337 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Daniel S. Collins, Director  
Division of Reactor Projects

Docket Nos. 50-277 and 50-278  
License Nos. DPR-44 and DPR-56

Enclosure:  
Inspection Plan

cc w/encl: Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (REPORTS 05000277/2018006 AND 05000278/2018006) DATED MARCH 4, 2019

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DOCUMENT NAME: S:\ROP Assessment Meetings\ROP-19 EOC Review\Branch 4\Peach Bottom 2018 Annual Assessment- final 2.docx  
 ADAMS ACCESSION NUMBER: **ML19060A170**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive Sensitive		<input checked="" type="checkbox"/> Publicly Available Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	GCroon via email	JGreives	DCollins		
DATE	2/21/19	2/22/19	3/4/19		

OFFICIAL RECORD COPY

# IP 22 Inspection Activity Plan Report

## Peach Bottom

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
<b>EQ PROGRAM</b>						<b>4</b>
2, 3	01/14/2019	01/18/2019	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
2, 3	01/28/2019	02/01/2019	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
<b>PEACH BOTTOM INITIAL OL EXAM</b>						<b>5</b>
2, 3	01/27/2019	02/01/2019	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
2, 3	02/24/2019	03/08/2019	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
<b>Annual Sample - HPCI Steam Sensing Line Leak</b>						<b>1</b>
3	02/24/2019	03/02/2019	IP 71152	000748	Problem Identification and Resolution	
<b>EP PROGRAM INSPECTION</b>						<b>2</b>
2, 3	03/04/2019	03/08/2019	IP 71114.02	000717	Alert and Notification System Testing	
2, 3	03/04/2019	03/08/2019	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
2, 3	03/04/2019	03/08/2019	IP 71114.05	000720	Maintenance of Emergency Preparedness	
2, 3	03/04/2019	03/08/2019	IP 71151	001397	Performance Indicator Verification	
<b>PB REQUAL INSP WITH P/F RESULTS</b>						<b>2</b>
2, 3	03/10/2019	03/15/2019	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance (Annual)	
2, 3	03/10/2019	03/15/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance (Biennial)	
<b>ACCESS CONTROL, PROTECTIVE STRATEGY, TSR</b>						<b>4</b>
2, 3	03/25/2019	03/29/2019	IP 71130.02	000734	Access Control	
2, 3	03/25/2019	03/29/2019	IP 71130.05	000737	Protective Strategy Evaluation	
2, 3	03/25/2019	03/29/2019	IP 71130.14	000743	Review of Power Reactor Target Sets	
2, 3	03/25/2019	03/29/2019	IP 71151	001338	Performance Indicator Verification	
<b>CYBER FULL IMP</b>						<b>4</b>
2, 3	04/01/2019	04/05/2019	IP 71130.10P	000741	Cyber Security	
2, 3	04/15/2019	04/19/2019	IP 71130.10P	000741	Cyber Security	
<b>RAD EFFLUENTS Mod 06</b>						<b>1</b>
2, 3	04/15/2019	04/19/2019	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	

This report does not include INPO and OUTAGE activities.  
 This report shows only on-site and announced inspection procedures.

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01/01/2019 - 12/31/2020

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<b>Triennial Heat Sink</b>						1
2, 3	05/13/2019	05/17/2019	IP 71111.07T	000700	Heat Sink Performance -Triennial	
<b>RAD HAZARD &amp; ALARA Mod 01</b>						1
2, 3	05/13/2019	05/17/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
<b>PI&amp;R BIENNIAL</b>						4
2, 3	06/10/2019	06/14/2019	IP 71152B	000747	Problem Identification and Resolution	
2, 3	06/24/2019	06/28/2019	IP 71152B	000747	Problem Identification and Resolution	
<b>Radwaste</b>						1
2, 3	07/29/2019	08/02/2019	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
<b>Material Control and Accountability</b>						1
2, 3	08/11/2019	08/17/2019	IP 71130.11	000742	Material Control and Accounting (MC&A)	
<b>50.59 Process</b>						3
2, 3	09/22/2019	09/28/2019	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
<b>INSERVICE INSPECTION - UNIT 3</b>						1
3	10/27/2019	11/02/2019	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
<b>RAD HAZARD, ALARA, AIR ACT CNTRL Mod 01</b>						1
2, 3	10/28/2019	11/01/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
<b>RAD SAFETY Mods 01, PI (OR01, PR01)</b>						1
2, 3	12/02/2019	12/06/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
2, 3	12/02/2019	12/06/2019	IP 71151	000746	Performance Indicator Verification	
<b>Access Authorization and Fitness for Duty</b>						2
2, 3	01/06/2020	01/10/2020	IP 71130.01	000733	Access Authorization	
2, 3	01/06/2020	01/10/2020	IP 71130.08	000740	Fitness For Duty Program	
2, 3	02/03/2020	02/07/2020	IP 71130.01	000733	Access Authorization	
2, 3	02/03/2020	02/07/2020	IP 71130.02	000734	Access Control	
2, 3	02/03/2020	02/07/2020	IP 71130.08	000740	Fitness For Duty Program	
2, 3	02/03/2020	02/07/2020	IP 71151	001338	Performance Indicator Verification	

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<b>Access Authorization and Fitness for Duty</b>						<b>2</b>
2, 3	02/03/2020	02/07/2020	IP 81311	000831	Physical Security Requirements for Independent Spent Fuel Storage Installations	
<b>RAD MONITORING INSTRUMENT Mod 05</b>						<b>1</b>
2, 3	03/23/2020	03/27/2020	IP 71124.05	000729	Radiation Monitoring Instrumentation	
<b>FY2020 Peach Bottom Initial Exam</b>						<b>3</b>
2, 3	04/19/2020	04/24/2020	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
2, 3	05/24/2020	05/29/2020	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
<b>PEACH BOTTOM EP EXERCISE INSPECTION</b>						<b>5</b>
2, 3	04/20/2020	04/24/2020	IP 71114.01	000716	Exercise Evaluation	
2, 3	04/20/2020	04/24/2020	IP 71151	001397	Performance Indicator Verification	
<b>AIR ACTIVITY CNTRL, OCC DOSE ASSESS; Mod 03, 04</b>						<b>1</b>
2, 3	04/27/2020	05/01/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
2, 3	04/27/2020	05/01/2020	IP 71124.04	000728	Occupational Dose Assessment	
<b>Design Basis Assurance Inspection - Team</b>						<b>4</b>
2, 3	07/13/2020	07/19/2020	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
2, 3	07/27/2020	08/02/2020	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
<b>FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS</b>						<b>6</b>
2, 3	07/27/2020	07/31/2020	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
2, 3	08/17/2020	08/21/2020	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
<b>REMP Mod 07</b>						<b>1</b>
2, 3	09/21/2020	09/25/2020	IP 71124.07	000731	Radiological Environmental Monitoring Program	
<b>ISI - UNIT 2</b>						<b>1</b>
2	10/26/2020	10/30/2020	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
<b>RAD HAZARD, ALARA, AIR ACT CNTRL Mods 01, 02, 03</b>						<b>1</b>
2, 3	10/26/2020	10/30/2020	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
2, 3	10/26/2020	10/30/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
2, 3	10/26/2020	10/30/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	

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<b>RAD HAZARD, ALARA, AIR ACT CNTRL Mods 01, 02, 03, PI</b>						1
2, 3	12/07/2020	12/11/2020	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
2, 3	12/07/2020	12/11/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
2, 3	12/07/2020	12/11/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
2, 3	12/07/2020	12/11/2020	IP 71151	000746	Performance Indicator Verification	