



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

March 4, 2013

Mr. Michael J. Pacilio
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 (REPORT 05000277/2012001 AND
05000278/2012001)**

Dear Mr. Pacilio:

On February 12, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of the Peach Bottom Atomic Power Station (Peach Bottom) Units 2 and 3. The NRC reviewed the most recent quarterly performance indicators in addition to inspection results and enforcement actions from January 1, 2012 through December 31, 2012. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. Security-related information and/or the security inspection plan will be sent via separate correspondence.

The NRC determined that overall, Peach Bottom Units 2 and 3 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Peach Bottom Units 2 and 3 during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all performance indicators demonstrated that your performance was within the nominal, expected range (i.e, green). Therefore, the NRC plans to conduct Reactor Oversight Process baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through June 30, 2014. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. In addition to baseline inspections, the NRC will perform Inspection Procedure (IP) 71003, "Post-Approval Site Inspection for License Renewal," IP 60855, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants," and Temporary Instruction (TI) 182, "Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping and Tanks." The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC

will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In accordance with 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 Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (610) 337-5209 with any questions you have regarding this letter.

Sincerely,

/RA/

Mel Gray, Chief
Projects Branch 4
Division of Reactor Projects

Docket Nos.: 50-277, 50-278
License Nos.: DPR-44, DPR-56

Enclosure: Peach Bottom Atomic Power Station Inspection Plan

cc w/encl: Distribution via ListServ

will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In accordance with 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 Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (610) 337-5209 with any questions you have regarding this letter.

Sincerely,

/RA/

Mel Gray, Chief
 Projects Branch 4
 Division of Reactor Projects

Docket Nos.: 50-277, 50-278
 License Nos.: DPR-44, DPR-56

Enclosure: Peach Bottom Atomic Power Station Inspection Plan

cc w/encl: Distribution via ListServ

Distribution w/encl:(via E-mail)

W. Dean, RA
 D. Lew, DRA
 D. Roberts, DRP
 P. Wilson, DRP
 C. Miller, DRS
 J. Clifford, DRS
 M. Gray, DRP
 A. Rosebrook, DRP

J. Ayala, DRP
 A. Turilin, DRP
 S. Hansell, DRP, SRI
 A. Ziedonis, DRP, RI
 S. Schmitt, DRP, AA
 J. Cassidy, RI, OEDO
 DRS Branch Chiefs (6)
 N. McNamara, RI, SLO
 D. Tiff, RI, SLO

D. Screnci, RI, PAO
 N. Sheehan, RI, PAO
 RidsNrrDirspab Resource
 ROPassessment Resource
 RidsNrrPMPeachBottom Resource
 RidsNrrDorlLpl1-2 Resource
 ROPreports Resource

DOCUMENT NAME: S:\ROP-13 EOC Review\Branch 4\Peach Bottom\Peach Bottom AAL.docx
 ADAMS ACCESSION NUMBER: **ML13059A032**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP			
NAME <i>mmt</i>	ARosebrook/AAR	MGray/ MG			
DATE	02/ 15 /13	02/28 /13			

OFFICIAL RECORD COPY

Peach Bottom
 Inspection / Activity Plan
 01/01/2013 - 06/30/2014

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			3/25 EXM - PEACH BOTTOM INITIAL EXAM		4
2	02/11/2013	02/15/2013	U01867	FY13-PB INITIAL OPERATOR LICENSING EXAM	
2	03/25/2013	03/29/2013	U01867	FY13-PB INITIAL OPERATOR LICENSING EXAM	
			71003 - U2 LR COMMITMENTS PHASE II		6
2	01/14/2013	01/18/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
2	01/28/2013	02/01/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
			7111111B - PEACH BOTTOM REQUAL WITH P/F RESULTS		2
2,3	03/04/2013	03/08/2013	IP 7111111B	Licensed Operator Requalification Program	
			71124 - HP		1
2,3	02/04/2013	02/08/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2,3	02/04/2013	02/08/2013	IP 71124.02	Occupational ALARA Planning and Controls	
2,3	02/04/2013	02/08/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			EP PROGR - EP PROGRAM INSPECTION		2
2,3	02/11/2013	02/15/2013	IP 7111402	Alert and Notification System Testing	
2,3	02/11/2013	02/15/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2,3	02/11/2013	02/15/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
			7111107T - TRIENNIAL HEAT SINK		1
2,3	03/18/2013	03/22/2013	IP 7111107T	Heat Sink Performance	
			PI&R - PROBLEM IDENTIFICATION & RESOLUTION		4
2,3	05/06/2013	05/10/2013	IP 71152B	Problem Identification and Resolution	
2,3	05/20/2013	05/24/2013	IP 71152B	Problem Identification and Resolution	
			7111117 - PERMANENT PLANT MODIFICATIONS		3
2,3	05/20/2013	05/24/2013	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
2,3	06/03/2013	06/07/2013	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			60855 - ISFSI LOADING INSPECTION		2
2,3	05/06/2013	06/30/2013	IP 60855	Operation Of An ISFSI	
2,3	05/06/2013	06/30/2013	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			2561 - SAFSTOR		1
1	05/13/2013	05/17/2013	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors	
1	05/13/2013	05/17/2013	IP 37801	Safety Reviews, Design Changes, And Modifications At Permanently Shutdown Reactors	
1	05/13/2013	05/17/2013	IP 40801	Self-Assessment, Auditing, And Corrective Action At Permanently Shutdown Reactors	
1	05/13/2013	05/17/2013	IP 62801	Maintenance And Surveillance At Permanently Shutdown Reactors	
1	05/13/2013	05/17/2013	IP 71801	Decommissioning Performance And Status Review At Permanently Shutdown Reactors	
1	05/13/2013	05/17/2013	IP 83750	Occupational Radiation Exposure	

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

Peach Bottom
Inspection / Activity Plan
01/01/2013 - 06/30/2014

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			2561 - SAFSTOR		1
1	05/13/2013	05/17/2013	IP 84750	Radioactive Waste Treatment, And Effluent And Environmental Monitoring	
1	05/13/2013	05/17/2013	IP 86750	Solid Radioactive Waste Management And Transportation Of Radioactive Materials	
			71124.07 - REMP		1
2,3	06/24/2013	06/28/2013	IP 71124.07	Radiological Environmental Monitoring Program	
			71124 - HP		1
2,3	07/29/2013	08/02/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2,3	07/29/2013	08/02/2013	IP 71124.02	Occupational ALARA Planning and Controls	
2,3	07/29/2013	08/02/2013	IP 71124.04	Occupational Dose Assessment	
2,3	07/29/2013	08/02/2013	IP 71124.05	Radiation Monitoring Instrumentation	
			7111108G - U3 INSERVICE INSPECTION		1
3	09/16/2013	09/20/2013	IP 7111108G	Inservice Inspection Activities - BWR	
			71124 - HP		1
3	09/16/2013	09/20/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
3	09/16/2013	09/20/2013	IP 71124.02	Occupational ALARA Planning and Controls	
			71124.08 - RADWASTE		1
2,3	10/21/2013	10/25/2013	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			71124 - HP		1
2,3	01/06/2014	01/10/2014	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2,3	01/06/2014	01/10/2014	IP 71124.02	Occupational ALARA Planning and Controls	
2,3	01/06/2014	01/10/2014	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2,3	01/06/2014	01/10/2014	IP 71124.04	Occupational Dose Assessment	
			EP - EP ANNUAL REPORT		4
2,3	01/01/2014	12/31/2014	IP 7111406	Drill Evaluation	
			CDBI - CDBI		7
2,3	01/27/2014	01/31/2014	IP 7111121	Component Design Bases Inspection	
2,3	02/10/2014	02/14/2014	IP 7111121	Component Design Bases Inspection	
2,3	02/24/2014	02/28/2014	IP 7111121	Component Design Bases Inspection	
			TI-182 - DEGRAD UNDERGROUND PIPING - PHASE 2		1
2,3	02/24/2014	02/28/2014	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	
			EP EXER - EP EXERCISE INSPECTION		1
2,3	04/07/2014	04/11/2014	IP 7111407	Exercise Evaluation - Hostile Action (HA) Event	
			71124 - HP		1
2,3	05/19/2014	05/23/2014	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	

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

Peach Bottom
Inspection / Activity Plan
01/01/2013 - 06/30/2014

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			71124	- HP	1
2,3	05/19/2014	05/23/2014	IP 71124.02	Occupational ALARA Planning and Controls	
2,3	05/19/2014	05/23/2014	IP 71124.05	Radiation Monitoring Instrumentation	

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