



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

September 4, 2012

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: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
PEACH BOTTOM ATOMIC POWER STATION  
(REPORT 05000277/2012006 and 05000278/2012006)**

Dear Mr. Pacilio:

On August 15, 2012, the U. S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Peach Bottom Atomic Power Station (PBAPS) Units 2 and 3. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2011 through June 30, 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. This assessment reflects the integration of the Security Cornerstone into the ROP performance assessment program governed by IMC 0305, "Operating Reactor Assessment Program."

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 (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to the baseline inspections, consistent with the Agency's actions related to Fukushima, the NRC will perform TI-187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns" and TI-188, "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." We also plan to conduct Inspection Procedure (IP) 71003, "Post-Approval Site Inspection for License Renewal," and independent spent fuel storage installation inspections (ISFSI) using Inspection Procedure 60855.1, "Operation of an ISFSI at Operating Plants." The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. 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 NRC's document 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 610-337-5120 with any questions you have regarding this letter.

Sincerely,

**/RA/**

Paul G. Krohn, Chief  
Division of Reactor Projects  
Projects Branch 4

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

Enclosure: Peach Bottom Atomic Power Station Inspection/Activity Plan

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<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	SMcCarver/SM	PKrohn/ PGK			
DATE	08/27 /12	08/ 27/12			

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**Peach Bottom**  
**Inspection / Activity Plan**  
**07/01/2012 - 12/31/2013**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
<b>2561 - SAFSTOR INSPECTION</b>					<b>1</b>
1	07/23/2012	07/28/2012	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors	
1	07/23/2012	07/28/2012	IP 37801	Safety Reviews, Design Changes, And Modifications At Permanently Shutdown Reactors	
1	07/25/2012	07/28/2012	IP 40801	Self-Assessment, Auditing, And Corrective Action At Permanently Shutdown Reactors	
1	07/25/2012	07/28/2012	IP 62801	Maintenance And Surveillance At Permanently Shutdown Reactors	
1	07/25/2012	07/28/2012	IP 71801	Decommissioning Performance And Status Review At Permanently Shutdown Reactors	
1	07/25/2012	07/28/2012	IP 83750	Occupational Radiation Exposure	
1	07/25/2012	07/28/2012	IP 84750	Radioactive Waste Treatment, And Effluent And Environmental Monitoring	
1	07/25/2012	07/28/2012	IP 86750	Solid Radioactive Waste Management And Transportation Of Radioactive Materials	
<b>TI-187 - FLOODING WALKDOWNS</b>					<b>1</b>
2, 3	07/17/2012	08/28/2012	IP 2515/187	Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	
<b>TI-188 - SEISMIC WALKDOWNS</b>					<b>1</b>
2, 3	08/27/2012	09/14/2012	IP 2515/188	Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	
<b>7111108G - U2 INSERVICE INSPECTION</b>					<b>1</b>
2	09/17/2012	09/21/2012	IP 7111108G	Inservice Inspection Activities - BWR	
<b>71003 - LR COMMITMENTS INSP - PHASE I</b>					<b>2</b>
2	09/17/2012	09/21/2012	IP 71003	Post-Approval Site Inspection for License Renewal	
<b>71124 - HP</b>					<b>1</b>
2	09/24/2012	09/28/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2	09/24/2012	09/28/2012	IP 71124.02	Occupational ALARA Planning and Controls	
2, 3	09/24/2012	09/28/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
<b>TI 182 - DEGRADATION OF UNDERGROUND PIPING</b>					<b>1</b>
2, 3	11/12/2012	11/16/2012	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	
<b>3/25 EXM - PEACH BOTTOM INITIAL EXAM</b>					<b>4</b>
2	02/25/2013	03/01/2013	U01867	FY13-PB INITIAL OPERATOR LICENSING EXAM	
2	03/25/2013	03/29/2013	U01867	FY13-PB INITIAL OPERATOR LICENSING EXAM	
<b>71124 - RETS</b>					<b>1</b>
2, 3	12/03/2012	12/07/2012	IP 2515/185	Follow-up on the Industry's Ground Water Protection Initiative	
2, 3	12/03/2012	12/07/2012	IP 71124.05	Radiation Monitoring Instrumentation	
2, 3	12/03/2012	12/07/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
<b>71003 - U2 LR COMMITMENTS PHASE II</b>					<b>5</b>
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	

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

**Peach Bottom**  
**Inspection / Activity Plan**  
**07/01/2012 - 12/31/2013**

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	Start	End			
<b>711111B - PEACH BOTTOM REQUAL WITH P/F RESULTS</b>					<b>2</b>
2, 3	03/04/2013	03/08/2013	IP 711111B	Licensed Operator Requalification Program	
<b>71124 - HP</b>					<b>1</b>
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	
<b>EP PROGR - EP PROGRAM INSPECTION</b>					<b>1</b>
2, 3	02/25/2013	03/01/2013	IP 7111402	Alert and Notification System Testing	
2, 3	02/25/2013	03/01/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2, 3	02/25/2013	03/01/2013	IP 7111404	Emergency Action Level and Emergency Plan Changes	
2, 3	02/25/2013	03/01/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
<b>7/15 EXM - PEACH BOTTOM LSRO INITIAL EXAM</b>					<b>2</b>
2	06/24/2013	06/28/2013	U01878	FY13-PEACH BOTTOM LSRO INITIAL OPERATOR LICENSING EXAM	
2	07/15/2013	07/19/2013	U01878	FY13-PEACH BOTTOM LSRO INITIAL OPERATOR LICENSING EXAM	
<b>60855 - ISFSI LOADING INSPECTION</b>					<b>2</b>
2, 3	03/01/2013	06/30/2013	IP 60855	Operation Of An ISFSI	
2, 3	03/01/2013	06/30/2013	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
<b>7111107T - TRIENNIAL HEAT SINK</b>					<b>1</b>
2, 3	03/11/2013	03/15/2013	IP 7111107T	Heat Sink Performance	
<b>PI&amp;R - PI&amp;R</b>					<b>4</b>
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	
<b>7111117 - PERMANENT PLANT MODIFICATIONS</b>					<b>4</b>
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	
<b>71124.07 - REMP</b>					<b>1</b>
2, 3	06/24/2013	06/28/2013	IP 71124.07	Radiological Environmental Monitoring Program	
<b>71124 - HP</b>					<b>1</b>
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	
<b>2561 - SAFSTOR</b>					<b>1</b>
1	07/29/2013	07/31/2013	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors	

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1	07/29/2013	07/31/2013	IP 86750	Solid Radioactive Waste Management And Transportation Of Radioactive Materials	
<b>711108G - U3 INSERVICE INSPECTION</b>					<b>1</b>
3	09/16/2013	09/20/2013	IP 711108G	Inservice Inspection Activities - BWR	
<b>71124 - HP</b>					<b>1</b>
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	
<b>71124.08 - RADWASTE</b>					<b>1</b>
2,3	10/21/2013	10/25/2013	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	

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