



**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

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| DATE   | 02/ 15 /13     | 02/28 /13   |  |   |  |

**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 |
|-------------|---------------------|-------------------|---|--|----------------------|
|             |                     |                   | <b>3/25 EXM - PEACH BOTTOM INITIAL EXAM</b>               |  | <b>4</b>             |
| 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  |                      |
|             |                     |                   | <b>71003 - U2 LR COMMITMENTS PHASE II</b>                 |  | <b>6</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                                  |                      |
|             |                     |                   | <b>7111111B - PEACH BOTTOM REQUAL WITH P/F RESULTS</b>    |  | <b>2</b>             |
| 2,3         | 03/04/2013          | 03/08/2013        | IP 7111111B   | 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>2</b>             |
| 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                   |                      |
|             |                     |                   | <b>7111107T - TRIENNIAL HEAT SINK</b>                     |  | <b>1</b>             |
| 2,3         | 03/18/2013          | 03/22/2013        | IP 7111107T   | Heat Sink Performance  |                      |
|             |                     |                   | <b>PI&amp;R - PROBLEM IDENTIFICATION &amp; RESOLUTION</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>3</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>60855 - ISFSI LOADING INSPECTION</b>                   |  | <b>2</b>             |
| 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    |                      |
|             |                     |                   | <b>2561 - SAFSTOR</b>                                     |  | <b>1</b>             |
| 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**

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|-------------|---------------------|-------------------|---|--|----------------------|
|             |                     |                   | <b>2561 - SAFSTOR</b>                               |  | <b>1</b>             |
| 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                       |                      |
|             |                     |                   | <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>7111108G - U3 INSERVICE INSPECTION</b>           |  | <b>1</b>             |
| 3           | 09/16/2013          | 09/20/2013        | IP 7111108G   | 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    |                      |
|             |                     |                   | <b>71124 - HP</b>                                   |  | <b>1</b>             |
| 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   |                      |
|             |                     |                   | <b>EP - EP ANNUAL REPORT</b>                        |  | <b>4</b>             |
| 2,3         | 01/01/2014          | 12/31/2014        | IP 7111406  | Drill Evaluation   |                      |
|             |                     |                   | <b>CDBI - CDBI</b>                                  |  | <b>7</b>             |
| 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  |                      |
|             |                     |                   | <b>TI-182 - DEGRAD UNDERGROUND PIPING - PHASE 2</b> |  | <b>1</b>             |
| 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 |                      |
|             |                     |                   | <b>EP EXER - EP EXERCISE INSPECTION</b>             |  | <b>1</b>             |
| 2,3         | 04/07/2014          | 04/11/2014        | IP 7111407  | Exercise Evaluation - Hostile Action (HA) Event  |                      |
|             |                     |                   | <b>71124 - HP</b>                                   |  | <b>1</b>             |
| 2,3         | 05/19/2014          | 05/23/2014        | IP 71124.01   | Radiological Hazard Assessment and Exposure Controls   |                      |

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|             |                     |                   | 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     |                      |

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