



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

June 4, 2015

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

**SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – NUCLEAR  
REGULATORY COMMISSION PROBLEM IDENTIFICATION AND RESOLUTION  
INSPECTION REPORT 05000277/2015008 AND 05000278/2015008**

Dear Mr. Hanson:

On April 24, 2015, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Peach Bottom Atomic Power Station, Units 2 and 3. The enclosed report documents the inspection results, which were discussed on April 24, 2015, with Mr. Patrick Navin, Plant Manager, and other members of your staff.

This inspection examined activities conducted under your license as they relate to identification and resolution of problems and compliance with the Commission's rules and regulations and conditions of your license.

Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel. The inspectors concluded that Exelon was effective in identifying, evaluating, and resolving problems. Exelon personnel identified problems and entered them into the corrective action program at a low threshold. Exelon prioritized and evaluated issues commensurate with the safety significance of the problems and corrective actions were implemented in a timely manner. Lessons learned from industry operating experience were effectively reviewed and applied when appropriate. Additionally, the inspectors concluded that self-assessments and audits reviewed during the inspection were critical, thorough, and effective in identifying issues.

This report documents one NRC-identified finding of very low safety significance (Green). If you disagree with the finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; and the NRC Senior Resident Inspector at the PBAPS. In addition, if you disagree with the cross-cutting aspect assigned to this finding, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Senior Resident Inspector at PBAPS.

In accordance with Title 10 *Code of Federal Regulations* 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) 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 Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Fred L. Bower, III, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

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

Enclosure:  
Inspection Report 05000277/2015008 and 05000278/2015008  
w/Attachment: Supplementary Information

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Sincerely,

*/RA/*

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**U.S. NUCLEAR REGULATORY COMMISSION**

REGION I

Docket Nos. 50-277 and 50-278

License Nos. DPR-44 and DPR-56

Report Nos. 05000277/2015008 and 05000278/2015008

Licensee: Exelon Generation Company, LLC

Facility: Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3

Location: Delta, PA

Dates: April 6, 2015 through April 24, 2015

Team Leader: Scott Barber, Senior Project Engineer

Inspectors: Mike Orr, Reactor Inspector  
Jeromy Petch, Reactor Engineer  
Brian Smith, Peach Bottom Resident Inspector

Approved by: Fred Bower, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

## SUMMARY

IR 05000277/2015008 and 05000278/2015008; 04/06/15 – 04/24/15; Peach Bottom Atomic Power Station, Units 2 and 3; Biennial Baseline Inspection of Problem Identification and Resolution, Problem Identification.

This NRC team inspection was performed by three regional inspectors and one resident inspector. One NRC-identified finding was identified during this inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5, dated February 2014.

### Problem Identification and Resolution

The inspectors concluded that Exelon was effective in identifying, evaluating, and resolving problems. Exelon personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. Exelon appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Exelon implemented corrective actions to address the problems identified in the corrective action program in a timely manner.

The inspectors concluded that PBAPS identified, reviewed, and applied relevant industry operating experience to Peach Bottom operations appropriately. In addition, based on those items selected for review, the inspectors determined that PBAPS's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues, nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

### Cornerstone: Initiating Events

Green. The inspectors identified a finding of very low safety significance (Green) because PBAPS did not initiate issue reports (IR) to identify out-of-tolerance conditions for a number of single point vulnerability (SPV) instruments. An SPV instrument is any instrument for which a single failure could initiate a plant transient or cause a plant scram. Specifically, during routine preventative maintenance (PM) calibrations, certain SPV instruments' as-found data was found outside expected tolerance bands, with many being significantly outside of their bands. In most cases, IRs were not written to document these adverse conditions contrary to station guidance.

The finding is determined to be more than minor because it affected the reliability of the initiating cornerstone's attribute of equipment performance and affected its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during power operations. Specifically, by not identifying and trending out-of calibration SPVs in a timely manner, a resulting transient from the loss of a single feed pump or a single reactor recirculation pump is more likely to occur. The inspectors conducted a Phase 1 screening in accordance with NRC Inspection Manual Chapter (IMC) Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety

significance (Green) because the finding did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g. loss of condenser, loss of feed water.) A loss of a single feed pump or a single recirculation pump typically results in a power reduction but not a reactor scram.

The inspectors determined that the finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Identification. In the case of the finding, PBAPS did not ensure that degraded conditions, namely, out of tolerance SPV instruments, were promptly reported and documented in the corrective action program at a low threshold. (P.1)

## REPORT DETAILS

### 4. OTHER ACTIVITIES (OA)

#### 4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

#### .1 Assessment of Corrective Action Program Effectiveness

##### a. Inspection Scope

The inspectors reviewed the procedures that described PBAPS's corrective action program at Peach Bottom. To assess the effectiveness of the corrective action program, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in Title 10 *Code of Federal Regulations* 50, Appendix B, Criterion XVI, "Corrective Action," and Exelon procedure LS-AA-125, "Corrective Action Program Procedure." For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed issue reports selected across the seven cornerstones of safety in the NRC's Reactor Oversight Process. Additionally, the inspectors attended multiple Station Ownership Committee and Management Review Committee meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and radiation protection.

##### (1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed corrective and preventive maintenance work orders, completed surveillance test procedures and periodic trend reports. The inspectors also completed field walkdowns of various systems on site, such as the emergency diesel generators, high pressure coolant injection, reactor core isolation cooling, core spray, residual heat removal, and 4kV equipment rooms. Additionally, the inspectors reviewed a sample of issue reports written to document issues identified through internal self-assessments, audits, and the operating experience program. The inspectors completed this review to verify that PBAPS entered conditions adverse to quality into their corrective action program as appropriate.

##### (2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of issue reports issued since the last NRC biennial Problem Identification and Resolution inspection completed in May 2013. The inspectors also reviewed issue reports that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were properly classified. The inspectors' review included the appropriateness of

the assigned significance, the scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed PBAPS's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed issue reports for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed PBAPS's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of issue reports associated with selected non-cited violations and findings to verify that PBAPS personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate PBAPS actions related to emergency diesel generator (EDG) maintenance and operation.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that PBAPS generally identified problems and entered them into the corrective action program at a low threshold. PBAPS initiated approximately 32,000 issue reports between May 2013 and April 2015. The inspectors observed supervisors at the Station Ownership Committee and Management Review Committee meetings appropriately questioning and challenging issue reports to ensure that identified issues were appropriately characterized for significance level and investigation class. Based on the samples reviewed, the inspectors determined that PBAPS typically trended equipment and programmatic issues, and identified problems in issue reports in an appropriate manner. Additionally, inspectors concluded that personnel were identifying trends at low levels. PBAPS personnel initiated corrective action to address the questions and minor equipment observations identified by the inspectors during plant walkdowns. With the exception of the below finding regarding out of tolerance single point vulnerabilities not being adequately identified in the station's CAP, PBAPS identification of issues was appropriate. The details of this issue are described in the finding in Section 4OA2.1.c below.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that PBAPS appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. PBAPS screened issue reports for operability and reportability, categorized the issue reports by significance, and assigned actions to the appropriate department for evaluation and resolution. The issue report screening process considered human performance issues,

radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety conscious work environment.

Based on the sample of issue reports reviewed, the inspectors noted that the guidance provided by Exelon corrective action program implementing procedures appeared sufficient to ensure consistency in categorization of issues. Operability and reportability determinations were performed when conditions warranted and the evaluations supported the conclusion. Causal analyses appropriately considered the extent of condition or problem, generic issues, and previous occurrences of the issue.

### (3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were, timely and adequately implemented. For significant conditions adverse to quality, PBAPS identified actions to prevent recurrence. The inspectors concluded that corrective actions to address the sample of NRC non-cited violations and findings since the last problem identification and resolution inspection were timely and effective.

#### c. Findings

Introduction. The inspectors identified a finding of very low safety significance (Green) because PBAPS did not initiate issue reports (IR) to identify out-of-tolerance conditions for a number of single point vulnerability (SPV) instruments. An SPV instrument is any instrument for which a single failure could cause a significant power reduction or a plant scram. Specifically, during routine preventative maintenance (PM) calibrations, certain SPV instruments' as-found data was found outside expected tolerance bands, with many being significantly outside of their bands. In most cases, IRs were not written to document these adverse conditions contrary to station guidance.

Description. On August 30, 2013, PBAPS Unit 2 experienced an unplanned trip of the 'B' reactor recirculation motor-generator (MG) set. PBAPS subsequently performed an apparent cause evaluation (ACE) and determined that the MG Set Lube Oil Temperature Switch (TS-4637B) was out of tolerance low and caused the 'B' recirculation MG set to trip prematurely. During subsequent troubleshooting, the as-found calibration check of TS-4637B showed the trip set point to have drifted to 175 degrees F, when the desired set point was 210 degrees F +/- 1.1 degrees F. PBAPS reviewed TS-4637B's as-found calibration history and found the temperature switch had a history of set point drift. During each of PBAPS's calibration check PM activities, the temperature switch was able to be returned to within tolerance but no IR was written to document the out of tolerance conditions. Since there are no IRs written to document the as-found results, the component did not get identified as one that needed to be replaced. As a result of the ACE, PBAPS specified a corrective action, ACIT-1552843-17, to communicate the requirement to initiate an IR when instruments were outside of their expected tolerance bands. On December 13, 2013, ACIT-1552843-17 was completed when the PBAPS maintenance manager reinforced the need to initiate IRs for these adverse conditions at a maintenance all-hands meeting.

PBAPS' procedure ER-AA-520, Revision 3, "Instrument Performance Trending," states that an individual instrument could begin to show signs of failure by not meeting its nominal tolerance band or exceeding the "leave alone" zone for repeated calibrations. The inspectors reviewed PBAPS' ACE and associated corrective actions including an

extent of condition for similar SPVs. PBAPS defines an SPV as any condition in which the failure of a single individual instrument could result in a power reduction of greater than twenty percent reactor power. For example, on February 25, 2015, PBAPS Unit 2 experienced a recirculation runback and rapid reduction in reactor power when the 'B' feed water pump tripped due to the failure of a single reactor feed pump turbine (RFPT) exhaust vacuum pressure trip switch which was classified as an SPV. Because of PBAPS' history with SPV instruments, the inspectors selected six groups of SPVs to review to determine if PBAPS' staff initiated IRs for these conditions. The inspectors reviewed the calibration history for these groups before and after the December 13, 2013 maintenance all-hands meeting for the following instruments: the RFPT bearing lube oil pressure trip switches, the reactor feed pump suction pressure trip switches, the RFPT exhaust vacuum pressure trip switches, the RFPT stop valve oil pressure trip switches, the RFPT hydraulic power unit header pressure trip switches, and the RFPT bearing low oil pressure trip switches. The PBAPS staff characterized all of these instruments as SPVs.

The inspectors identified 31 PM activities from the group of SPVs where the as-found tolerance data was outside the expected tolerance or leave alone zone as defined in PBAPS' procedure MA-AA-716-011, Revision 11, Attachment 2, "As Found" Condition Codes. Seventeen of the PM activities occurred following the Unit 2 MG set trip on August 30, 2013. Of these 17 activities, PBAPS could only retrieve two IRs that were written to document these out of tolerance conditions. According to PBAPS procedure MA-AA-716-011, if the condition is coded as outside the expected tolerance but able to be adjusted to within tolerance, the procedure step refers personnel to initiate an IR in accordance with procedure PI-AA-120, Revision 1, "Issue Identification and Screening Process." Thus, the inspectors identified a number of cases where IRs were not written to document these out of tolerance conditions which was contrary to internal licensee procedural guidance. As a result of this inspection, PBAPS initiated IR 02485800 to evaluate the inspectors' concern for the group of SPVs that were not appropriately identified and trended in the CAP.

Analysis. The inspectors identified a performance deficiency in that PBAPS personnel did not initiate IRs for multiple out-of-tolerance SPV instruments. The finding is determined to be more than minor because it affected the reliability of the initiating cornerstone's attribute of equipment performance and affected its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during power operations. Specifically, by not identifying and trending out-of calibration SPVs in a timely manner, a resulting transient from the loss of a single feed pump or a single reactor recirculation pump is more likely to occur. The inspectors conducted a Phase 1 screening in accordance with NRC Inspection Manual Chapter (IMC) Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the finding did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g. loss of condenser, loss of feed water.) A loss of a single feed pump or a single recirculation pump typically results in a power reduction but not a reactor scram.

The inspectors determined that the finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Identification. In the case of the finding, PBAPS did not ensure that degraded conditions, namely, out of tolerance SPV instruments, were promptly reported and documented in the corrective action program at a low threshold. (P.1)

Enforcement. This finding does not involve enforcement because no regulatory requirement violation was identified. This finding constituted a failure to adhere to a non-quality assurance program related procedure. Because this finding does not involve a violation and has very low safety significance, it is identified as **FIN 05000278/279/2015008-01, Failure to Initiate IRs for Out-of-Calibration SPVs.**

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of issue reports associated with review of industry operating experience, including 10 CFR 21 reports, to determine whether PBAPS personnel appropriately evaluated the operating experience information for applicability to Peach Bottom and had taken appropriate actions, when warranted. The inspectors also reviewed evaluations of operating experience documents associated with a sample of NRC generic communications to ensure that PBAPS personnel adequately considered the underlying problems associated with the issues for resolution via their corrective action program. In addition, the inspectors observed various plant activities to determine if the station considered industry operating experience during the performance of routine and infrequently performed activities.

b. Assessment

The inspectors determined that PBAPS appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. In most cases, the inspectors determined that operating experience was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable. The inspectors also observed that industry operating experience was routinely discussed and considered during the conduct of Station Ownership Committee and Management Review Committee meetings.

During review of a specific 10 CFR 21 report, the inspectors noted that PBAPS did not adequately implement corrective actions by transferring vendor recommended actions into plant procedures related to a problem with the Wide Range Neutron Monitor (WRNM). Specifically, on August 9, 2007, PBAPS initiated IR 659120 for the receipt of a 10 CFR 21 report concerning GE Safety Communication SC 07-16, "Wide Range Set Parameters Concern." The GE SC 07-16 indicated that an anomaly can occur anytime a user entered parameter is changed. The anomaly changes the Hi-Hi reactor period scram setpoint by a factor of 10 meaning that an original value of 19 seconds would be changed to 190 seconds. On September 21, 2007, the licensee identified that certain procedures, such as, S12N-60C-WRNM-A1MX and IC-11-00395, "Calibration and Alignment for NUMAC Wide Range Neutron Monitor" would be affected by this 10 CFR Part 21 report. Plant staff concluded that these procedures would need to be revised

to include a statement to verify that the top-level display trip set points represent the desired values upon exit from "SET PARAMETERS" or at final restoration. Approximately seven years later, on November 26, 2014, PBAPS Unit 2 experienced an unexpected half scram resulting from the "G" wide range neutron monitors. Upon investigation, plant staff found that this was caused by conditions described in the Part 21 report and that multiple affected procedures were not identified by IR 659120 and specifically, procedures SI3N-60C-WRNM-A(B-H)1MX were not identified. The NRC determined that procedures SI2N-60C-WRNM-A(B-H)1MX were identified in the IR 659120 and corrective action to revise the procedures was not executed prior to the Unit 2 half scram on November 26, 2014. The inspectors noted that PBAPS staff did not to provide timely implementation of the recommended actions for this Part 21 report.

The inspectors independently evaluated the deficiency noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors noted that Unit 2 experienced a half scram condition and not an actual scram. Another scram signal would be required for the plant to scram; therefore, this condition had only minimal safety impact. Thus, the inspectors determined this issue was a deficiency of minor significance, and therefore, was not subject to enforcement action in accordance with the NRC's Enforcement Policy. PBAPS had previously documented in IR 02418039 for this issue.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, including the most recent audit of the corrective action program, focused area self-assessments, and check-in self-assessments performed by PBAPS. Inspectors performed these reviews to determine if PBAPS entered problems identified through these assessments into the corrective action program, when appropriate, and whether PBAPS initiated corrective actions to address identified deficiencies. The inspectors evaluated the effectiveness of the audits and assessments by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

b. Assessment

The inspectors concluded that focused area self-assessments, check-in self-assessments, and audits were critical, thorough, and effective in identifying issues. The inspectors observed that PBAPS personnel knowledgeable in the subject completed these audits and self-assessments in a methodical manner. PBAPS staff completed these audits and self-assessments to a sufficient depth to identify issues which were then entered into the corrective action program for evaluation. The station implemented corrective actions associated with the identified issues commensurate with their safety significance.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment at Peach Bottom. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management or the NRC. The inspectors also interviewed the station Employee Concerns Program coordinator to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the Employee Concerns Program files to ensure that PBAPS entered issues into the corrective action program when appropriate.

b. Assessment

During interviews, Peach Bottom staff expressed a willingness to use the corrective action program to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the corrective action program and the Employee Concerns Program. Based on these limited interviews, the inspectors concluded that there was not evidence of an unacceptable safety conscious work environment and there were not significant challenges to the free flow of information.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On April 24, 2015, the inspectors presented the inspection results to Mr. Patrick Navin, Plant Manager, and other members of the Peach Bottom staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

**ATTACHMENT: SUPPLEMENTARY INFORMATION**

## SUPPLEMENTARY INFORMATION

### KEY POINTS OF CONTACT

#### Licensee Personnel

M. Massaro, Site Vice President  
P. Navin, Plant Manager  
P. Breidenbaugh, Director – Maintenance  
M. Herr, Director – Operations  
D. Dullum, Sr. Regulatory Engineer  
M. Flynn, Sr. Regulatory Specialist  
J. Armstrong, Regulatory Assurance Manager  
M. Mitchell, Employee Concerns Representative  
S. Griffith, Security Operations Manager  
S. Sturm, Security Programs Lead  
D. Hild, Acting Shift Operations Superintendent  
C. Weichler, Operations Shift Manager  
E. Wright, Operations Shift Supervisor  
C. Dye, HPSW/ESW System Engineer  
E. Fredrickson, Engineering NSSS Manager  
B. Holmes, Radiation Protection Manager  
F. Leone, Chemistry Manager  
D. Baracoo, Radiation Engineering Manager  
R. Stiltner, Maintenance I & C Manager  
J. Dorris, Maintenance Planning  
G. Thompson, Maintenance Planning  
B. Binz, Engineering Programs  
D. Wheeler, Maintenance Rule Coordinator  
R. Brower, Engineering Modification Design Senior Manager  
G. Cilluffo, Buried Pipe Corrosion Engineer  
M. Simon, EDG Systems Manager

### LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

#### Opened and Closed

Open	FIN 05000278/279/2015008-01	Failure to Initiate IRs for Out-of-Calibration SPVs.
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### LIST OF DOCUMENTS REVIEWED

#### Section 40A2: Problem Identification and Resolution

##### Audits and Self-Assessments

2013 Pre-NRC Force-On-Force Focused Area Self-Assessment, (AR1512666),  
Security Programs Audit Report, NOSA-PEA-14-02 (AR 1606535)  
Operations Audit Report, NOSA-PEA-13-08 (AR 1548534)  
Reactivity Management, Check-In Self-Assessment (AR 01612209)  
Level 3 OPEX Evaluations, (AR1607315)

NOSCPA-PB-13-17 RP Performance Report  
 NOSCPA-PB-14-07 RP Performance Report  
 NOSCPA-PB-13-17 RP Performance Report  
 NOSCPA-PB-13-19 Engineering Performance Report  
 NOSCPA-PB-14-09 Engineering Performance Report  
 NOSCPA-PB-14-19 Engineering Performance Report  
 NOSCPA-PB-14-03 Chemistry Performance Report  
 NOSCPA-PB-14-13 Chemistry/Environmental Performance Report  
 NOSCPA-PB-13-13 Chemistry/Environmental Performance Report  
 Maintenance Audit Report, NOSA-PEA-14-01 (AR 1601856)  
 Maintenance Procedure Quality, (AR 1508267)  
 Planning Improvement Initiative, (AR 1566780)  
 Corrective Action Program Audit Report, NOSA-PEA-13-04  
 Temporary Configuration Change Program, NOSA-PEA-14-14

Issue Reports (\* indicates that issue report was generated as a result of this inspection)

1568345	1658041	1650326	1625158	1677924
2427793	1680741	2487361	708255	2406267
2387262	1655777	2394489	2383721	2393582
2480176	2480225	1515015	1588317	1569460
1586949	872452	1511733	2439611	2438704
1559700	1546001	1538726	2464628	2480019
2480097	1687330	1642084	2451148	1690648
2424070	2389578	218860	2417909	659120
2432394	2473317	1567006	1584102	1584105
1585207	1665388	1649670	1649671	1649672
*2485800	1552843	2480663	2465833	2473728
2473732	2477266	2477275	2477287	2472864
2472868	2472871	2473214	2473024	2477216
2478114	2477300	2456152	2471084	2477235
2477239	2477250	2472857	2466533	2467603
2472499	2477197	2477204	2476722	2476218
2476234	2476516	2464631	2464630	2464641
2476355	2479568	1549942	2402909	1555896
1470658	1555896	1673063	1673055	1592012
2473317	1575532	1586631	2444224	1567200
1509161	1523212	1542508	1555796	1558523
1560211	1562039	1573674	1619453	1630965
1642720	1682865	1537120	1656572	2421301
226273	240561	272144	279159	303323
343566	394629	442781	454117	551561
587924	589518	620297	741815	865939
865950	968205	980843	980844	980848
1047934	1057754	1126755	1215912	1399061
1418484	1443095	1465529	1465536	1471703
1479030	1481015	1508082	1509774	1510201
1512832	1524240	1534990	1550688	1553215
1558013	1559086	1561425	1562474	1563256
1563493	1565707	1566342	1567722	1581077
1584250	1586679	1592008	1613751	1613751
1616313	1621889	1660890	1680363	1685261

2402567	2435894	2452494	2454701	2482498
2484379	2485735	2485798	1912779	1915755
1922193	1926296	1926473	1931164	1940567
1941206	1942530	1963592		
00659120	02417909	*1512643		

Operating Experience

IER-L3-13-46, IR1569493

02414147, Crane and Heavy Lift Issues Identified, NRC IN 2014-12

02446609, Qualification Requirements for Bolt and Stud NDE, NRC RIS 2015-01

GE Safety Communication SC07-16, Wide Range Neutron Monitoring System

Non-Cited Violations and Findings

05000277/2013002, Untimely Operability Call

05000277/2014002 and 05000278/2014002, ISFSI Security Level III

05000277/2014004, Scaffolding interference with RHR check valve

2014-007-01 MOVs at Degraded Voltages

2014-007-02 EDG Exceeds Maximum Loading

2013-004-02 Not Controlling Locked High Radiation Area

01592008, NRC Violation 2013-004-01, E-Plan Revision Not Coordinated with Operations, December 2, 2013

02427794, NRC 3Q14 NCV 2014-004-002, CORP EP did not Provide ETES by Required Date, December 19, 2014

02448712, 2013-004-001, Inadequate Evaluation of NRC Violation for Extent of Condition Review, February 2, 2015

01592008, NRC Identified GREEN NCV for Inadequate Program Control of PBAPS Emergency Plan Annex (EP-AA-1007), July 25, 2013

01660890, MA.1 Maintenance Fundamentals Area for Improvement, June 26, 2014

05000277&amp;278/2011502-01, Changes Made to EAL HU6 which Decreased the Effectiveness of the Plans without Prior NRC Approval

Drawings

M-6214, Horizontal Diesel Oil Storage Tank, Revision 5

M-1-S-34, Sheet 78, PRNM Elementary Diagram, Revision 1

Procedures

PI-AA-115-1003, Processing of Level 3 OPEX Evaluations, Revision 1

PI-AA-115, Operating Experience Program, Revision 0

PI-AA-120, Issue Identification and Screening Process, Revision 1

OP-AA-112-101, Shift Turnover and Relief, Revision 10

OP-PB-112-101-1002, Shift Manager Shift Turnover Checklist, Revision 5

OP-PB-112-101-1001, Shift Turnover Meeting Protocol, Revision 6

PI-AA-125, Corrective Action Program (CAP) Procedure, Revision 1

ST-O-003-635-2, ESW Piping Pressure Test Examination, Revision 6

ER-AA-520, Instrument Performance Trending, Revision 3

MA-AA-716-011, Work Execution and Close Out, Revision 19

ER-AA-2003, System Performance Monitoring and Analysis, Revision 13

LS-AA-125-1003, Apparent Cause Evaluation Manual, Revision 10

LS-AA-125, Corrective Action Program (CAP) Procedure, Revision 17

PI-AA-125-1003, Apparent Cause Evaluation Manual, Revision 2

PI-AA-125-1001, Root Cause Analysis Manual, Revision 10

ST-O-60F-405-2, Revision 16, MSIV Partial Closure and RPS Input Functional Test  
 PI-AA-126, Self-Assessment and Bench Mark Program, Revision 0  
 PI-AA-120, Issue Identification and Screening Process, Revision 1  
 PI-AA-125, Corrective Action Program (CAP), Revision 2  
 PI-AA-125-1003, Apparent Cause Evaluation Manual, Revision 2  
 PI-AA-126-1005-F-01, Check-In Self-Assessment, Revision 0  
 WC-AA-106, Work Screening and Processing, Revision 14

Work Orders

C0223901	A1149567	A1966370	A1967916	A1612209
A1329457	C0250794	A0145774		

Miscellaneous

Fleet Vulnerability Comparison Matrix – Single Point Vulnerabilities  
 Maintenance Briefing Sheet on Procedural Requirements of ER-AA-520 dated 9/03/2013  
 Instrument Calibration As Found/As-Left Data Sheets  
 PEA – Peach Bottom – Material Condition Matrix  
 PEA Station Ownership Committee Agenda for 4/07/15  
 FASA on Engineering Programs and Station Blackout  
 FASA on Radiation Protection  
 FASA on Chemistry and Environmental Programs  
 FAMA on High Radiation/Locked High Radiation Access Control  
 NRC IN 2013-13 Deficiencies with Effluent Radiation Instruments  
 NRC IN 2013-14 Design Deficiency with MOV Circuitry  
 NRC IN 2014-15 Inadequate Controls with Respiratory Training  
 NRC RIS 2014-07 Enhancements to Vendor Inspection Program  
 Corrosion 2014 Paper No. 4410, Automated UT Informs Risk-Based Inspection Plans for an  
 Underground Storage Tank at Operating Nuclear Power Plant, March 2014  
 Operator Logs, EDG E-4 ST Runs, 2/13/15 – 2/15/15  
 Level 3 OPEX Evaluation Process Changes Briefing Slides for End-Users

**LIST OF ACRONYMS**

ADAMS	Agency-wide Documents Access and Management System
CAP	Corrective Action Program
EDG	Emergency Diesel Generator
IMC	Inspection Manual Chapter
IN	Information Notice
IR	Issue Report
LO	Lube Oil
MOV	Motor-Operated Valve
NDE	Non-Destructive Examinations
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records System
ST	Surveillance Test
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report