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

May 2, 2018

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 – INTEGRATED INSPECTION REPORT 05000277/2018001 AND 05000278/2018001

Dear Mr. Hanson:

On March 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Peach Bottom Atomic Power Station, Units 2 and 3. On April 6, 2018, the NRC inspectors discussed the results of this inspection with Mr. Matthew Herr, Plant Manager, and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. The finding involved a violation of NRC requirements. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC's Resident Inspector at Peach Bottom. In addition, if you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement 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 U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC, 20555-0001; with copies to the Regional Administrator, Region I, and the NRC's Resident Inspector at Peach Bottom.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and the NRC's Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

James A. Krafty, Acting Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Numbers: 50-277 and 50-278
License Numbers: DPR-44 and DPR-56

Enclosure:
Inspection Report 05000277/2018001
and 05000278/2018001

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	50-277 and 50-278
License Numbers:	DPR-44 and DPR-56
Report Numbers:	05000277/2018001 and 05000278/2018001
Enterprise Identifier:	I-2018-001-0070
Licensee:	Exelon Generation Company, LLC
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Location:	Delta, Pennsylvania
Inspection Dates:	January 1, 2018 to March 31, 2018
Inspectors:	J. Heinly, Senior Resident Inspector B. Smith, Resident Inspector S. Barber, Senior Project Engineer J. Cassata, Health Physicist M. Modes, Senior Reactor Inspector P. Ott, Operations Engineer
Approved By:	James A. Krafty, Acting Chief Reactor Projects Branch 4 Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring Exelon's performance at Peach Bottom Atomic Power Station (PB), Units 2 and 3, by conducting the baseline inspections described in this report in accordance with the Reactor Oversight Process (ROP). The ROP is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information. NRC identified and self-revealed findings, violations, and additional items are summarized in the table below.

List of Findings and Violations

Untimely Corrective Actions to Address Primary Containment Isolation Valve Condition Adverse to Quality			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Barrier Integrity	Green Finding NCV 05000278/2018001-01 Opened/Closed	H.6 – Human Performance, Design Margins	71111.12
A Green self-revealing non-cited violation (NCV) of 10 *Code of Federal Regulation*s (CFR) 50, Appendix B, Criterion XVI, Corrective Action, was identified because Exelon did not implement prompt corrective actions to address a condition adverse to quality (CAQ) on primary containment isolation valve (PCIV) SV-3-7D-3671G. Specifically, drywell air sampling valve SV-3-7D-3671G failed to perform its PCIV function on February 1, 2018, by failing to stroke closed during its surveillance test as a result of untimely corrective actions. Exelon isolated the associated piping in accordance with technical specifications (TSs).			

PLANT STATUS

Unit 2 operated at or near rated thermal power (RTP) for the entire inspection period.

Unit 3 began the inspection period at RTP. On February 27, 2018, the unit was down powered to 18 percent thermal power and the turbine was removed from service to repair turbine overspeed probes. The unit was returned to RTP on March 2, 2018, and remained at or near RTP for the remainder of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515 Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification, and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess Exelon's performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather (1 Sample)

The inspectors evaluated readiness for impending adverse weather conditions for extreme cold and icing on January 5, 2018.

71111.04 - Equipment Alignment

Partial Walkdowns (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

(1) Unit 3 'A' core spray on January 25, 2018
(2) Unit Common E-2 emergency diesel generator (EDG) on February 7, 2018
(3) Unit 2 high-pressure coolant injection (HPCI) on March 8, 2018
(4) Unit 2 startup source on March 12, 2018

71111.05 - Fire Protection

Quarterly Inspection (5 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

(1) Unit 3 HPCI on January 29, 2018
(2) Unit Common E-1, E-2, E-3, and E-4 EDG rooms on February 16, 2018
(3) Unit 3 turbine building front standard on March 1, 2018
(4) Unit 3 'C' battery room on March 5, 2018
(5) Unit 2 recirculation motor generator set room on March 13, 2018

71111.06 - Flood Protection Measures

Internal Flooding (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the Unit 2 reactor core isolation cooling (RCIC) room on January 26, 2018.

71111.07 - Heat Sink Performance

Heat Sink (1 Sample)

The inspectors evaluated Exelon's monitoring and maintenance of the 2B residual heat removal (RHR) heat exchanger performance.

71111.11 - Licensed Operator Requalification Program and Licensed Operator Performance

Operator Requalification (1 Sample)

The inspectors observed and evaluated an extended loss of offsite power & anticipated transient without scram drill in the simulator on January 23, 2018.

Operator Performance (1 Sample)

The inspectors observed the Unit 3 measurement uncertainty recapture (MUR) power ascension during the week of January 8, 2018. On February 16, 2018, the inspectors observed the Unit 3 load drop for control rod pattern adjustment. On February 27, 2018, the inspectors observed the power reduction for the Unit 3 turbine speed probe repair.

Licensed Operator Requalification Program Examinations (71111.11A - 1 Sample)

The inspectors reviewed and evaluated requalification examination results on March 29, 2018.

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness (3 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

(1) Turbine building closed cooling water 10 CFR 50.65 a(1) determination during the week of January 29, 2018
(2) Unit 2 main steam isolation valve (80D) functional failure determination during the week of February 20, 2018
(3) Unit 2 and Unit 3 containment atmosphere control/dilution (CAC/CAD) PCIV failures on March 7, 2018

71111.13 - Maintenance Risk Assessments and Emergent Work Control (5 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

(1) Unit 2 HPCI outage and yellow risk on January 18, 2018
(2) Unit 2 RCIC outage and yellow risk on January 22, 2018
(3) Unit 3 HPCI outage and yellow risk on January 29, 2018
(4) Unit 3A RHR outage and elevated fire risk on February 5, 2018
(5) Unit 3 RCIC outage and elevated risk on February 26, 2018

71111.15 - Operability Determinations and Functionality Assessments (6 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) Unit 3 purge valve inservice stroke time test extent of condition on January 4, 2018
(2) Unit 2 HPCI elevated temperatures on January 24, 2018
(3) Unit 2 and Unit 3 main control room emergency ventilation low filter efficiency on January 24, 2018
(4) Unit 3 ‘C’ core spray degraded flood seal on January 28, 2018
(5) Unit 3 degraded speed probes on February 27, 2018
(6) Unit 2 and 3 degraded external flood debris shields on March 12, 2018

71111.18 - Plant Modifications (1 Sample)

The inspectors evaluated the following permanent modification:

Unit 2 and Unit 3 MUR implementation on January 3 and January 12, 2018

71111.19 - Post-Maintenance Testing (7 Samples)

The inspectors evaluated post-maintenance testing for the following maintenance/repair activities:

(1) Unit 3 rod 18-27 hydraulic control unit maintenance on January 8, 2018
(2) Unit 2 containment isolation valve,SV-2978C, repair on January 11, 2018
(3) Unit 2 HPCI system outage window (SOW) on January 19, 2018
(4) Unit 2 RCIC SOW on January 22, 2018
(5) Unit 3 HPCI SOW on January 30, 2018
(6) Unit 3 'A' standby liquid control gasket and deflector ring replacement on January 30, 2018
(7) Unit Common E-1 EDG governor replacement on March 6, 2018

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (1 Sample)

Unit 3 control rod drive integrity test and scram time testing on February 18, 2018

Inservice (1 Sample)

Unit 2, S12P-10-122-ABCE, calibration check of RHR discharge and shutdown pressure switches, dated February 21, 2018 (IST)

Reactor Coolant System Leak Detection (1 Sample)

Unit 2 elevated reactor coolant system leakage on January 30, 2018

Containment Isolation Valve (1 Sample)

Unit 3, ST-O-007-420-3, primary containment isolation system, normally closed valves, on February 21, 2018.

71114.06 - Drill Evaluation

Emergency Planning Drill (1 Sample)

The inspectors evaluated an emergency preparedness training drill on January 23, 2018. The training scenario involved a loss of off-site power during a snow storm later complicated by a loss of onsite power and station blackout (SBO) when PB's SBO source from the nearby Conowingo Dam was lost.

RADIATION SAFETY

71124.05 - Radiation Monitoring Instrumentation

Walk Downs and Observations (1 Sample)

The inspectors evaluated radiation monitoring instrumentation during plant walkdowns to include the following:

(1) Portable survey instruments
(2) Radiation area monitors and continuous air monitors
(3) Personnel contamination monitors, portal monitors and small article monitors

Calibration and Testing Program (1 Sample)

The inspectors evaluated Exelon's calibration and testing program. The inspectors specifically assessed the following instruments and equipment:

(1) Laboratory instrumentation
(2) Whole body counter
(3) Post-accident monitoring instrumentation
(4) Portal monitors, personnel contamination monitors, and small article monitors
(5) Portable survey instruments, area radiation monitors, and air samplers/continuous air monitors
(6) Instrument calibrator
(7) Calibration and check sources
(8) Electronic alarming dosimeters

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification (6 Samples)

The inspectors verified licensee performance indicators submittals listed below for the period from January 1, 2017, through December 31, 2017.

(1) Unit 2 Unplanned Scrams per 7,000 Critical Hours (IE01)
(2) Unit 3 Unplanned Scrams per 7,000 Critical Hours (IE01)
(3) Unit 2 Unplanned Power Changes per 7,000 Critical Hours (IE03)
(4) Unit 3 Unplanned Power Changes per 7,000 Critical Hours (IE03)
(5) Unit 2 Unplanned Scrams with Complications (IE04)
(6) Unit 3 Unplanned Scrams with Complications (IE04)

71152 - Problem Identification and Resolution-

Annual Follow-up of Selected Issues (1 Sample)

The inspectors reviewed Exelon's implementation of its CAP related to the following issue:

AR-04031182, "The structural monitoring program did not match the procedural requirements for all elements (e.g., the inspection frequency for some structures did not correspond with the frequency stated in the procedure)."

INSPECTION RESULTS

Untimely Corrective Actions to Address Primary Containment Isolation Valve Condition Adverse to Quality			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000278-2018-001-01	H.6 - Human Performance, Design Margins	71111.12

Introduction: A Green self-revealing NCV of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action (CA), was identified because Exelon did not implement prompt CAs to address a condition adverse to quality (CAQ) on PCIV SV-3-7D-3671G. Specifically, drywell air sampling valve SV-3-7D-3671G failed to perform its PCIV function on February 1, 2018, by failing to stroke closed during its surveillance test as a result of untimely CAs. Exelon isolated the associated piping in accordance with TSs.

Description: A primary function of the CAC/CAD system is to sample the containment atmosphere to determine combustible gas concentrations during normal power operations. SV-3-7D-3671G is a solenoid operated valve (SV) located in the sample line from the drywell to the CAC/CAD analyzer. This valve normally remains open to support the sampling function. However, the valve has a safety function to close during certain primary containment isolation actuation signals. . This SV, along with multiple identical CAC/CAD SVs, is local leak rate tested (LLRT) to ensure it maintains its leak tightness requirements for containment operability. On March 31, 2017, the NRC problem identification and resolution (PIR) team identified a NCV for Exelon not addressing elevated leakage in PCIVs SV-3-7D-3671A and SV-3-7D-3671D in a timely manner (NCV 05000278/2017008-02).

As a result, Exelon performed a work-group evaluation (WGE) under IR 3990490 to address CAs regarding multiple failures for the grouping of CAC/CAD solenoid PCIVs (SV 2 (3)-07D-2 (3) 671A-G). The WGE identified that the SV bonnet tube, pilot seat, valve body, and plunger assembly were coated with a film of corrosion debris that did not allow the assembly to move freely. Exelon's WGE created the CA to implement a design change to replace the CAC/CAD SVs with a new debris-tolerant style Valcor design. As an interim CA until the new design strategy could be implemented, Exelon specified that preventative maintenance (PM) activities be performed during the SVs scheduled LLRTs. The PMs included replacing the resilient parts and vacuuming the corrosion debris from the valve internals and from the surrounding area. Exelon's engineering department provided new due dates for the resilient parts PM and new cleaning PM in order to align with the scheduled LLRTs which was approved on August 25, 2017. The CA was then closed on August 31, 2017.
A review of the history of the SVs showed that SV-3-7D-3671G had the highest number of failures, five, compared to the other SVs. Exelon targeted the newly established PM for SV-3-7D-3671G to be performed on December 7, 2017, during the valve's regularly scheduled LLRT. However, on December 7, 2017, Exelon performed the LLRT, which successfully passed, but did not perform the PM to vacuum the valve internals and surrounding area. On February 1, 2018, SV-3-7D-3671G failed to stroke closed during its surveillance test, ST-I-07C-470-3, “Drywell Exhaust Sample Isolation Valve Functional Test,” due to corrosion debris inhibiting valve movement. The inspectors interviewed Exelon maintenance and engineering personnel and determined that the PM scheduled for December 7, 2017 was not performed because of a maintenance scheduling backlog. Contrary to procedure WC-AA-120, “PM Database Revision Requirements,” Revision 4, the station had not scheduled the PMs within 60 days of their approval.
In addition, the inspectors determined that the backlog had not been prioritized according to safety significance, failure history, or days past its original schedule date. Following the February 2018 failure, Exelon isolated the associated piping in accordance with TSs.

Corrective Actions: Exelon documented the issue into the CAP, ensured future PMs were appropriately scheduled, performed the PM on SV-3-7D-3671G, and accelerated the schedule to implement the design change.

Corrective Action Reference: IR 4099762

Performance Assessment:

Performance Deficiency: The inspectors determined that not promptly correcting a CAQ associated with PCIV SV-3-7D-3671G was a performance deficiency that was within Exelon's ability to foresee and correct.

Screening: The finding is more than minor, because it is associated with the barrier performance attribute of the barrier integrity cornerstone and adversely affected the cornerstone's objective to provide reasonable assurance that the containment design barrier protect the public from radionuclide releases caused by accidents or events. Specifically, SV-3-7D-3671G failed to perform its PCIV function as a result of untimely CAs.

Significance: The inspectors evaluated the significance of the finding using IMC 0609, Appendix A, “Significance Determination Process for Findings at Power,” Exhibit 3 - Barrier Integrity Screening Questions. The inspectors determined this finding was of very low safety significance (Green) because the finding did not result in an actual open pathway in the physical integrity of the reactor containment or involve an actual reduction in the function of hydrogen igniters in the reactor containment.

Cross-Cutting Aspect: The inspectors determined this finding had a cross-cutting aspect in the area of Human Performance, Design Margins, because Exelon did not maintain its containment isolation valve design margin by addressing the long-standing CAC/CAD debris issue in a timely manner. Specifically, the station had not scheduled the CA’s to restore the design margin for the degraded SV-3-7D-3671G SV due to scheduling backlogs. [H.6]

Enforcement:

Violation: 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” requires that measures shall be established to assure conditions adverse to quality are promptly identified and corrected. Contrary to this requirement, from March 31, 2017 until February 1, 2018, Exelon did not assure a CAQ associated with PCIVs was promptly identified and corrected. Specifically, Exelon did not promptly remove corrosion debris that rendered SV-3-7D-3671G inoperable for its PCIV function. As a result, SV-3-7D-3671G failed to stroke closed during its surveillance test on February 1, 2018.

Disposition: This violation is being treated as an NCV, consistent with Section 2.3.2a of the Enforcement Policy.

Observations	71152
The inspectors reviewed Exelon's evaluation of the structural monitoring program issue and the associated CAs. Exelon's response resulted in identifying five causes for the implementation variations with nine CAs. Their evaluation considered the operability implications of the NRC's observation, considered the extent of condition and cause, potential generic implications and common cause, and previous occurrences. The CAs were classified and prioritized in accordance with Exelon's CAP guidance, and contained identification of root and contributing causes of the problem. The inspectors concluded that Exelon's corrective actions were implemented commensurate with the safety impact of the cause, and were appropriately focused to correct the problem. The causes and CAs were effectively communicated to station management.	

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On April 6, 2018, the inspectors presented the quarterly resident inspector inspection results to Mr. Matthew Herr, Plant Manager, and other members of the Exelon staff.

DOCUMENTS REVIEWED

71111.01 - Adverse Weather Protection

Procedures
AO 29.2, Discharge Canal to Intake Pond Cross-Tie Gate operation, Frazil Ice Mitigation and Icing Condition Operations, Revision 26
MA-PB-1003, Winter Readiness and Storm Response Guidelines for the PB Facility, Revision 11
OP-AA-108-111-1001, Severe Weather and Natural Disaster Guidelines, Revision 16
OP-PB-108-111-1001, Preparation for Severe Weather, Revision 16
SY-AA-101-146, Severe Weather Preparation and Response, Revision 2

71111.05 - Fire Protection

Procedures
OP-MA-201-007, Fire Protection System Impairment Control, Revision 7
PF-78T, Unit 3 Turbine Building: Turbine Generator Area – Elevation 165'-0", Revision 7

71111.06 - Flood Protection Measures

Procedures
AO 20A.1, Temporary Removal and Installation of Flood Barriers in the Reactor Building Drainage System, Revision 16
CC-PB-201, Attachment 3, Barrier Breach Permit, Revision 8
RT-W-020-930-2, Survey for Flood Barriers in Reactor Building Drainage System, Revision 6

Issue Reports (*initiated in response to inspection)
4095995 4098937

71111.07 - Heat Sink Performance

Procedures
ER-AA-5400-1001, Raw Water Corrosion Program Guide, Revision 10
RT-O-010-660-2, RHR Heat Exchanger Performance Test, Revision 15
RT-X-010-661-2, RHR Heat Exchanger Performance Calculation Test, Revision 6

WRs
01526455 01526455

Issue Reports (*initiated in response to inspection)
4056936 4058345 4058360 4096239 4096267 4097435

Miscellaneous
Exelon Nuclear Calculation Sheet PM-1042, Air Coolant Cooler Sensitivity Analysis, Revision 6
GL-89-13 Program Basis Document, dated October 3, 2016
Letter from Normandeau Environmental Consultants to Susan Allen, Exelon Nuclear-PBAPS, Regarding April 2017 Macrofouling Summary Report, dated May 4, 2017
Programs Centralization – Programs Transitioning to Systems Engineering, dated October 10, 2017
The Plan by System Window, dated January 8, 2018

71111.11 - Licensed Operator Requalification Program

Procedures
RT-I-01D-900-3, Pressure Regulator Stability Test, Revision 7
RT-I-006-230-3, Feedwater Control System Stability/Response Test, Revision 7
SP-5019, Unit 3 MUR Power Ascension Test Procedure, Revision 0

71111.12 - Maintenance Effectiveness

Procedures
PI-AA-125-1003, Apparent Cause Investigation Report (Equipment), Revision 2

IRs
3987716 3990490 4118275 4118324 4099762

Miscellaneous
PEA MRC Agenda for March 7, 2018
PEA MRC Agenda for March 14, 2018

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Procedures
OP-AA-108-117, Protected Equipment Program, Revision 4
OP-PB-108-117-1000, PB Protected Equipment Program, Revision 4
OP-PB-108-117-1000, PB Protected Equipment Tracking Sheet, Attachment 1
OP-AA-201-012-1001, Operations On-Line Fire Risk Management, Revision 2
OP-AA-201-012-1001, PB Available Fire Risk Important Components (AFRIC) Area Tracking Sheet

IR
4106233

Miscellaneous
OP-PB-108-117-1000, PB Protected Equipment Tracking Sheet, Attachment 1
PB Temporary Change Control Form AD-PB-101-1003 F-01, Revision 0
PEA MRC Agenda, dated February 26, 2018
Units 2 and 3, PB Protected Equipment
Unit 3 RCIC TSA, dated February 16, 2018

71111.15 - Operability Determinations and Functionality Assessments

Procedures
ER-AA-410-1003, Air Operated Valve Tracking and Trending Requirements, Revision 3
ER-PB-321-1000, Attachment 7, Cold Shutdown Justification 07B-VCS-1, Revision 1
OP-AA-108-111, Attachment 1, Adverse Condition Monitoring and Contingency Plan, Revision 10
ST-O-007-410-3, PCIS Valves Cold Shutdown Inservice Test, Revision 31

IRs
2702529 4033575 4065552 4092733 4096366

Drawings
6280-M-117-7, Revision 8
6280-M-391, Sheet 2, Primary & Secondary Containment Isolation Control Diagram, Revision 31

Miscellaneous
Dynamic Web Page, dated February 11-15, 2018
Lube Oil Analysis Management System Sample Analysis Report, dated November 16, 2017
PCIVs B.3.6.1.3, Revision 2
50.59 Review Coversheet Form, LS-AA-104-1001, Revision 4

71111.19 - Post-Maintenance Testing

Procedures
IC-11-00342, Alignment and Tuning of Woodward Governor Controls for EDGs, Revision 11
MA-AA-716-012, Attachment 3, AOV Post-Maintenance Test Matrix, Revision 23
MA-AA-743-310, Diagnostic Testing and Evaluation of Air Operated Valves, Revision 6
RT-O-052-251-2, E-1 Diesel Generator Inspection Post-Maintenance Functional Test, Revision 33
ST-I-07D-485-2, PCIS Normally Open Indirect Indicating Valves Operability Test, Revision 20
ST-O-013-300-2, RCIC Pump, Valve, Flow, and Unit Cooler Functional and In-service Test Without Vibration Data Collection, Revision 11
ST-O-023-301-3, HPCI Pump, Valve, Flow, and Unit Cooler Functional and In-service Test with Vibration Data Collection, Revision 70
ST-O-052-121-2, E-1 Diesel Generator RHR Pump Reject Test, Revision 10
ST-O-052-411-2, E-1 Diesel Generator Fast Start and Full Load Test, Revision 23
WC-AA-101-1004, Attachment 2, Unit 2 RCIC TSA – WW1804, Revision 7
WC-AA-101-1004, Attachment 2, Unit 3 HPCI TSA, Revision 7
WC-AA-101-1004. Attachment 2, Unit 2 HPCI TSA, Revision 8
WC-AA-111 Attachment 3, E-1 Diesel Generator Inspection Post-Maintenance Functional Test, Revision 5

IRs
4094667 4094987 4111639 4111841

Miscellaneous
Log Entries Search Report, dated January 19, 2018
PB The Plan by System Window, dated January 8 through January 14, 2018
TELEDYNE Test Services, ACE Field Setup, AO-2-23-042, dated January 19, 2018
Unit 2 HPCI TSA Schedule, dated January 11, 2018

71111.22 - Surveillance Testing

Procedures
ST-O-007-420-3, PCIS – Normally Closed Valves Operability Test, Revision 24
S12P-10-122-ABCE, Calibration Check of RHR Discharge and Shutdown Suction Header High Pressure Switches PS 2-10-118 and PS 2-10-122 A/B, Revision 2

IRs (*initiated in response to inspection)
04106532
04106671

71124.05 – Radiation Monitoring Instrumentation

Procedures
CH-910, Operation of Post-Accident Sample Station, Revision 6
CH-914, Obtaining Samples from the Reactor Water Feedwater Sample Sinks Following Accident Conditions, Revision 3
RP-AA-700, Controls for Radiation Protection Instrumentation, Revision 4
RT-C-021-810-3 Routine Pass Sample Correlation, Revision 1
NISP-RP-001, Portable Survey Instruments
NISP-RP-002, Radiation and Contamination Surveys
NISP-RP-003, Radiological Air Sampling
NISP-RP-004, Radiological Posting and Labeling
NISP-RP-005, Access Controls for High Radiation Areas
NISP-RP-006, Personnel Contamination Monitoring
NISP-RP-007, Control of Radioactive Material
NISP-RP-008, Use and Control of HEPA Filtration and Vacuum Equipment
NISP-RP-009, Radiography
NISP-RP-010, Radiological Job Coverage
NISP-RP-011, RP Fundamentals
NISP-RP-012, Training and Qualification of Supplemental RP Technicians
NISP-RP-013, Radiation Protection Standard Glossary of Terms
NISP-EN-02, Standard Item Equivalency Process

ARs
AR 04014238
AR 02701330
AR 02513663

Radiation Orders/Work Permits
WO 04172458 Replace Large Volume “In-Bottle” Lever Switch
WO 01267685 Unit 2 Pass Small Vol Sample Vial Switch Bad

Self-Assessment and Action Requests
Radiation Protection Audit Report NOSA-PEA-17-06 PB June 26-30, dated July 10-14, 2017
PB 10 CFR 61, “Program Waste Stream Review and Scaling Factor Determination,” Report 37, dated January 1, 2018
RT-H-099-930-2, Revision 2, Evaluation of Plant Radioisotopes and Energies, dated May 15, 2017
RT-C-021-800-2, Revision 1, Post-Accident Sampling Station Operability Test, dated July 13, 2015
RT-C-021-800-2, Revision 1, Post-Accident Sampling Station Operability Test, dated May 29, 2017

71152 - Problem Identification and Resolution

Procedures
ER-AA-450, Structures Monitoring, Revision 6
ER-PB-450-1006, PB Structures Monitoring Program, Revision 4

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