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

August 9, 2019

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

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000277/2019002 AND 05000278/2019002

Dear Mr. Hanson:

On June 30, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Peach Bottom Atomic Power Station, Units 2 and 3. On July 16, 2019, the NRC inspectors discussed the results of this inspection with Mr. Pat Navin, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

One severity level IV violation, without an associated finding, is documented in this report. We are 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 or severity of the violation documented in this inspection report, 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 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 at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Jonathan E. Greives, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos. 05000277 and 05000278
License Nos. DPR-44 and DPR-56

Enclosure:
As stated

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000277 and 05000278
License Numbers:	DPR-44 and DPR-56
Report Numbers:	05000277/2019002 and 05000278/2019002
Enterprise Identifier:	I-2019-002-0038
Licensee:	Exelon Generation Company, LLC
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Location:	Delta, Pennsylvania
Inspection Dates:	April 1, 2019 to June 30, 2019
Inspectors:	J. Heinly, Senior Resident Inspector B. Smith, Resident Inspector D. Beacon, Resident Inspector J. Brand, Reactor Inspector J. Cassata, Technical Assistant M. Orr, Reactor Inspector
Approved By:	Jonathan E. Greives, Chief Reactor Projects Branch 4 Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Peach Bottom Atomic Power Station, Units 2 and 3 in accordance with the Reactor Oversight Process. The Reactor Oversight Process 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.

List of Findings and Violations

Failure to Satisfy 10 CFR 50.72 Reporting Requirements for Loss of Unit 3 Core Spray (CS) Safety Function			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000277,05000278/2019002-01 Open/Closed	Not Applicable	71153
The inspectors identified a Severity Level IV non-cited violation (NCV) of 10 *Code of Federal Regulations* (CFR) 50.72(b)(3)(v)(D) for not reporting an event or condition to the NRC within eight hours that, at the time of the discovery, could have prevented the fulfillment of a safety function. Specifically, on February 12, 2019, Exelon did not recognize and, therefore, did not report that both 'A' and 'B' trains of the Unit 3 CS systems were inoperable which resulted in a loss of safety function (LOSF).			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000277,05000278/ 2019-001-00	LER 2019-001-00 for Peach Bottom Atomic Power Station, Unit 2, Regarding Emergency Bus Breaker Relay Failure Results in Loss of Safety Function	71153	Closed

PLANT STATUS

Unit 2 began the inspection period at rated thermal power. On May 31, 2019, the unit was down powered to 70 percent for preplanned maintenance and remained at that power level at the end of the inspection period.

Unit 3 began the inspection period at rated thermal power and remained at or near there 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 licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Summer Readiness Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated summer readiness of the following:

(1) The inspectors evaluated summer readiness of offsite and alternate alternating current (AC) power systems, including walkdown of the north substation switchyard during #1 transformer replacement project on May 1, 2019

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

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

(1) Unit 2 'B' residual heat removal (RHR) with 'A' RHR out of service on April 2, 2019
(2) Unit 3 'B' and 'D' RHR during E-3 emergency diesel generator (EDG) overhaul on May 15 and May 16, 2019
(3) Unit 3 reactor core isolation cooling (RCIC) with high-pressure coolant injection (HPCI) out of service on June 25, 2019

71111.04S - Equipment Alignment

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated system configurations during a complete walkdown of the Unit 2 and Unit 3 high-pressure service water (HPSW) systems between June 12 and June 14, 2019

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (5 Samples)

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

(1) Unit 3 switchgear rooms, elevation 135' on April 17, 2019
(2) Unit 2 battery rooms on April 22, 2019
(3) Unit 3 turbine building, elevation 116' on May 16, 2019
(4) Unit 2 RCIC on June 28, 2019
(5) Unit 3 RCIC on June 28, 2019

71111.07A - Heat Sink Performance

Annual Review (IP Section 02.01) (1 Sample)

The inspectors evaluated readiness and performance of the following:

(1) E-1, E-2, and E-4 EDG emergency service water (ESW) heat exchanger inspections on May 23, 2019

71111.07T - Heat Sink Performance

Triennial Review (IP Section 02.02) (5 Samples)

The inspectors evaluated heat exchanger/heat sink performance on the following components from May 13 to May 17, 2019, per Section 02.02b:

(1) E-3 EDG jacket coolant cooler (0CE376), cooled by ESW
(2) E-3 EDG lube oil cooler (0CE377), cooled by ESW
(3) E-3 EDG air coolant cooler (0CE378), cooled by ESW
(4) 3AP037 CS pump motor oil cooler (3AE133), cooled by service water and ESW
(5) 3CP037 CS pump motor oil cooler (3CE133), cooled by service water and ESW

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

(1) The inspectors observed and evaluated licensed operator performance in the control room during a planned down power and control rod testing on April 12, 2019

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

(1) The inspectors observed and evaluated an anticipated transient without scram and leak in the drywell training scenario on June 3, 2019

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (2 Samples)

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

(1) E-434 480V electrical bus breaker failure on April 16, 2019
(2) Unit 2 and Unit 3 ESW system review on June 17 through June 21, 2019

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

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

(1) Unit 2 and Unit 3 E-3 EDG overhaul on May 14, 2019
(2) Unit 3 HPCI inoperable on May 23, 2019
(3) Unit 2 and Unit 3 E-1 EDG emergent unavailability on May 31, 2019
(4) Unit 2 and Unit 3 ESW booster pump ventilation out of service on June 7, 2019
(5) Unit 3 RCIC oil flush on June 12, 2019

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 02.02) (7 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) Main steam temperature element on April 5, 2019
(2) Unit 3 control rod drive charging air pressure on April 8, 2019
(3) Unit 3 HPCI drain line level switch failure on April 15, 2019
(4) Unit 3 control rod blade depletion on April 25, 2019
(5) Plastic in intake structure on May 15, 2019
(6) Unit 2 and Unit 3 E-3 jacket water pump leak on May 17 through May 20, 2019
(7) Unit 2 and Unit 3 E-1 EDG on May 29, 2019

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modification:

(1) Permanent modification to the main control room lighting on May 16, 2019

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the following post-maintenance tests:

(1) Unit 3 hydraulic control unit 54-19 accumulator replacement on April 13, 2019
(2) Unit 2 and Unit 3 E-3 EDG overhaul on May 17, 2019
(3) Unit 3 'D' side 2 battery charger on May 29, 2019
(4) Unit 2 and Unit 3 E-1 EDG cable abandonment on May 31 and June 1, 2019
(5) Unit 3 HPCI condensate pump replacement on June 26, 2019

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

FLEX Testing (IP Section 03.02) (1 Sample)

(1) FLEX generator operational testing on May 1, 2019

Inservice Testing (IP Section 03.01) (1 Sample)

(1) Unit 3 HPSW inservice testing on June 28, 2019

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

(1) Unit 2 automatic depressurization system logic system functional test on April 9, 2019
(2) Unit 2 RCIC alternate/remote panel testing on April 22, 2019
(3) Unit 2 and Unit 3 E-1 EDG surveillance on May 30 and June 1, 2019

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

(1) Alert declared for leak in drywell scenario on June 3, 2019

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Contamination and Radioactive Material Control (IP Section 02.03) (1 Sample)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material.

(1) The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material. The inspectors verified the following sealed sources are accounted for and are intact:
    - J.L. Shepard and Associates, Cs-137, Type 6810 Capsule Sealed Source, Serial No. 107, Assay Activity 400 Ci

- J.L. Shepard and Associates, Cs-137, Type KR Sealed Source, Serial No. KR2721, Assay Activity 130 mCi
- Isotope Products Laboratories, Cs137, Serial No. 486-63-1, 9.72 uCi
- Amersham Buchler, Co-60, Serial No. FX913, 1.116 uCi

High Radiation Area and Very High Radiation Area Controls (IP Section 02.05) (1 Sample)

(1) The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Radiological Hazard Assessment (IP Section 02.01) (1 Sample)

(1) The inspectors evaluated radiological hazards assessments and controls. The inspectors reviewed the following:

Radiological surveys
- 2A Jet Compressor Room - Steam Leak - Survey Number 2018-002726
- LHRA Baseline Surveys for TB Steam Dependent Areas - Survey Number 2018-009566
- HPCI Pump Room - Steam Leak - Survey Number 2019-042615

Risk significant radiological work activities
- An observation of a transfer of condensate liner from High Integrity Container to LLRW Storage (HIC – Dunk operation performed in a LHRA inside the LLRW building)
- An observation of Reactor Water Clean Up (RWCU) dewatering; preparation for shipping.
- Repair of steam leak in flange from HPCI steam line drain outer

Air sample survey records
- Survey Number 2018-002726
- Survey Number 2018-009566
- Survey Number 2019-042615

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Calibration and Testing Program (Process & Effluent Monitors) (IP Section 02.02) (1 Sample)

(1) The inspectors reviewed the following gaseous and liquid effluent monitor instrument calibrations and tests:
- SI2R-63E-2979- B1FQ, SI2R-63E-2979-B1CE
- ST-O-63M-810-2, SI24-63M-350-XXC1

Dose Calculations (IP Section 02.05) (1 Sample)

The inspectors reviewed the following to assess public dose:

(1) The inspectors reviewed the following liquid and gaseous discharge permits to evaluate public dose calculations:

- Reviewed all permits for normal liquid and gaseous releases since July 2016, with no issues.

The inspectors also reviewed the following annual radiological effluent release reports:

- 2016 PB Annual Radioactive Effluent Release Report 59
- 2017 PB Annual Radioactive Effluent Release Report 60

Abnormal gaseous or liquid tank discharges:

- There were two abnormal liquid releases recorded due to a known issue with bypass leakage around the floating tube sheet in the HPSW and RHR heat exchanger. Repairs have been made on the other heat exchangers and those remaining with this issue are planned to be address in conjunction with future outages. The amount of liquid effluent released was properly quantified and was not significant. There were no abnormal gas releases.

Instrumentation and Equipment (IP Section 02.04) (1 Sample)

(1) The inspectors reviewed the following radioactive effluent discharge system surveillance test results:

- ST-0-63 M-801-2, ST-I-63A-800-2
- ST-I-63A-801-3, ST-I-63A-800-3

Inspectors walked down main control room ventilation and filtration systems with systems engineer and reviewed test and maintenance records since July 2016.

Inspectors observed electronic and radiation calibration of the high-range effluent monitoring instrumentation.

Sampling and Analysis (IP Section 02.03) (1 Sample)

(1) The inspectors reviewed the following radioactive effluent sampling and analysis activities:

- ST-C-095-859-2 Determination of Total Noble Gas Release Rate for Unit 2, 3, and Main Stack

Effluent discharges

- ST-I-63H-101-2, Unit 2 HPSW
- ST-I-63H-100-3, Unit 3 HPSW

Walk Downs and Observations (IP Section 02.01) (1 Sample)

(1) The inspectors walked down the following gaseous and liquid radioactive effluent monitoring and filtered ventilation systems to assess the material condition and verify proper alignment according to plant design:

- Liquid Radioactive Waste
- Unit 2 and Unit 3 Service Water
- Unit 2 and Unit 2 Building Vent Stack
- Main Vent Stack

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicator submittals listed below:

BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (2 Samples)

(1) Unit 2 RCS activity (2Q 2018 through 1Q 2019)
(2) Unit 3 RCS activity (2Q 2018 through 1Q 2019)

BI02: RCS Leak Rate Sample (IP Section 02.11) (2 Samples)

(1) Unit 2 RCS leakage (2Q 2018 through 1Q 2019)
(2) Unit 3 RCS leakage (2Q 2018 through 1Q 2019)

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program (CAP) related to the following issues:

(1) U-3, Static O-Ring Pressure Switch Failure

Semiannual Trend Review (IP Section 02.02) (1 Sample)

(1) The inspectors reviewed the licensee's CAP for potential adverse trends that might be indicative of a more significant safety issue

71153 - Followup of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (2 Samples)

The inspectors evaluated the following licensee event reports (LERs) which can be accessed at https://lersearch.inl.gov/LERSearchCriteria.aspx:

(1) LER 05000277, 05000278/2019-001-00, Unit 2 Emergency Bus Breaker Relay Failure Results in Loss of Safety Function (ADAMS Accession No. ML19109A097)

(2) LER 05000277, 0500278/2018-002-01, Unit 2 EDG Air Inlet Check Valve Failure Results in a Condition Prohibited by Technical Specifications (TSs) (ADAMS Accession No. ML19064B342)

The circumstances surrounding this LER and its closure were previously documented in Inspection Report 05000277/2019040 and 05000278/2019040.

INSPECTION RESULTS

Observation: U-3 RCIC Pressure Switch Failure	71152

The inspectors reviewed Condition Report CR 4129583 that documents Exelon's evaluation, extent of condition reviews, and corrective actions associated with failure of RCIC system pressure switch PS-3-13-72B on April 22, 2018, during a surveillance test. The inspectors focused on Exelon's planned and/or implemented corrective actions to ensure they were commensurate with the significance of the problem. The enforcement aspects of this equipment issue were previously addressed in NRC Inspection Report 05000277/2018003 and 05000278/2018003 (ML18317A003).

Exelon's evaluation determined the pressure switch failed due to a flaw in the sensing diaphragm or O-Ring that allowed water to leak into the body of the pressure switch. Exelon's evaluation documented two contributing causes involving their preventive maintenance strategy focused on condition monitoring and a single point vulnerability that a failure of the pressure switch could result in a RCIC or HPCI turbine trip.

In review of the extent of condition, Exelon staff identified eleven static O-Ring pressure switches in both units (eight of these switches are associated with HPCI and RCIC) and 36 other switches classified in the Exelon PM program as "critical components" that had been periodically tested but not replaced since original installation. The inspectors determined Exelon staff conducted an appropriate review of the issue, including an adequate extent of condition review and a safety system vulnerability review. Regarding corrective actions, the inspectors determined Exelon staff replaced the failed RCIC pump exhaust pressure switch; performed a visual examination of the seven remaining "critical" static O-Ring pressure switches (RCIC, HPCI) to verify no indications of water intrusion; developed a new replacement PM template for safety components identified as not having a replacement schedule; and developed two separate activities that would either remove the trip function for "critical" instruments to provide alarm only (plant modification) or replace the switches in the next four years. In review of the modification or replacement options, the inspectors noted that replacement of the seven remaining HPCI/RCIC switches is currently scheduled for 2023 and questioned whether this timeframe was commensurate with the potential significance of the issue as these were original components. The inspectors also noted the modification had not yet been developed. In consideration to the inspector's questions, Exelon staff initiated a corrective action under CR 4129583, to create a new PM to open and inspect the HPCI and RCIC static O-Ring pressure switches on a six-month frequency to verify no water intrusion has occurred, until the switches are replaced or modified. The inspectors concluded this interim corrective action appeared commensurate with the safety significance of the potential water intrusion problem with these original HPCI and RCIC pressure switches.

Observation: Semi-Annual Trend Review	71152

The inspectors evaluated a sample of issues and events that occurred over the course of the first and second quarters of 2019 to determine whether issues were appropriately considered as emerging or adverse trends. The inspectors verified that these issues were addressed within the scope of the CAP or through department review.

Previously, Exelon had identified an adverse trend in equipment reliability in 2018 related to a relatively high number of equipment performance challenges and documented the condition in the CAP under issue report (IR) 4155200. Recently, the frequency of equipment performance challenges has decreased. However, equipment performance remains one of

the top three focus areas for the stations improvement. The inspectors have noted some improvement in the technical rigor involved in station decision making, which was one of the causes that lead to the equipment performance challenges. The inspectors will continue to focus on the station's performance in this area and implementation of corrective actions from IR 4155200.

Exelon performed a CAP self-assessment in the spring of 2019, and determined that weaknesses existed in the closure quality of corrective action assignments associated with equipment performance. The potential trend was documented in IRs 4217536 and 4239374. The station performed an evaluation and detailed extent of condition review across all major site departments and identified numerous examples of CAP closure deficiencies. The station determined that individuals lacked an adequate questioning attitude and accountability, which directly led to inadequate assignment closure. A CAP get-well plan was developed and implemented to realign the standards of the station on the CAP requirements and establish measures to provide additional CAP oversight. Furthermore, a site supervisor and above stand down was held to review the potential trend and address the issues with the site leadership team. The inspectors reviewed the IRs and determined that Exelon had performed an adequate evaluation and the corrective actions were commensurate with the safety significance of the issue. No additional issues of concern were identified.

Failure to Satisfy 10 CFR 50.72 Reporting Requirements for Loss of Unit 3 CS Safety Function

Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000277,05000278/2019002-01 Open/Closed	Not Applicable	71153

The inspectors identified a Severity Level IV non-cited violation (NCV) of 10 *Code of Federal Regulations* (CFR) 50.72(b)(3)(v)(D) for not reporting an event or condition to the NRC within eight hours that, at the time of the discovery, could have prevented the fulfillment of a safety function. Specifically, on February 12, 2019, Exelon did not recognize and, therefore, did not report that both 'A' and 'B' trains of the Unit 3 CS systems were inoperable which resulted in a loss of safety function (LOSF).

Description: On February 11, 2019, at 2232 hours, an off-site power source (220-08 line) was lost due to a malfunction of a lightning arrestor located at an off-site substation. Peach Bottom's Unit 3 'A' CS train was already inoperable due to planned maintenance at the time of event. Per Peach Bottom's design, six of the site's eight commonly-shared 4kV emergency buses transferred power to their alternate off-site source. During this automatic transfer, a breaker that supplies power to the 480 volt load center (E-434) fed from the E43 emergency 4kV electrical bus failed to automatically re-close due to a failed relay. The E434 load center provides, in part, 480 volt supply power to Unit 3 'B' CS train equipment. Specifically, it provides power to the Unit 3 'D' CS minimum flow and torus suction valves. TS 3.8.7 Condition 'C' was entered for Unit 3, which states, in part, "One Unit 3 AC electrical power distribution subsystem inoperable, restore to operable status within eight hours." At 2250 hours, the E434 breaker was manually closed from the main control room to re-energize the emergency load center and TS 3.8.7 was exited.

On February 12, 2019, at 0430 hours, Exelon recognized that TS Surveillance Requirement 3.8.1.11.c.2 and Surveillance Requirement 3.8.1.19.c.2, which require the E434 breaker to

have the capability to automatically close in order for the E-4 EDG to remain operable, were not met. Exelon subsequently entered TS 3.8.1 Condition E, which requires the off-site source or the EDG to be restored to operable within 12 hours. The E-4 EDG was returned to operable on February 12 at 1559 hours when a replacement relay was installed and tested in E434.

Following the event, the inspectors engaged Exelon staff and challenged that both the 'A' and 'B' CS trains were inoperable during the event and, thus, a LOSF occurred. Specifically, between 2232 and 2250 hours with the E434 electrical bus de-energized, both CS trains would not have met their specified safety function. In addition, a LOSF occurred when both the E-4 EDG and the 'A' CS loop were determined to be inoperable. Furthermore, TS 3.0.6 states, in part, "If a LOSF is determined to exist by this program, the appropriate conditions and required actions of the limiting condition for operation (LCO) in which the LOSF exists are required to be entered." The inspectors concluded that TS 3.0.3 should have been entered for the CS system LOSF during the event. Since Exelon did not recognize that a LOSF had occurred, Exelon therefore did not report the LOSF condition within eight hours to the NRC in accordance with 10 CFR 50.72(b)(3)(v)(D).

Corrective Actions: Exelon reported the LOSF in a subsequent LER 05000277, 05000278/2019-001-00 under 10 CFR 50.73(a)(2)(v)(D) within the required sixty days. Exelon also entered the event into the CAP and conducted an evaluation of the event to address the underlying causes of the missed eight-hour report to the NRC. Exelon conducted training to improve operations crew on-shift proficiency in operability and reportability evaluations.

Corrective Action References: IR 4246432

Performance Assessment: The inspectors determined this violation was associated with a minor performance deficiency. The inspectors determined that not recognizing that both Unit 3 CS loops were inoperable and, thus, not reporting the LOSF event within eight hours to the NRC under 10 CFR 50.72(b)(3)(v)(D) was reasonably within Exelon's ability to foresee and correct and should have been prevented and, therefore, was a performance deficiency.

Screening: The inspectors reviewed this issue in accordance with IMC 0612 and determined that no more-than-minor ROP finding was identified. Specifically, inspectors determined that the failure to recognize that an LOSF occurred resulted in Exelon not tracking the appropriate TS actions statements. However, inspectors determined that Exelon's actions to restore the system to an operable status were commensurate with the safety significance and entering the appropriate action statement would not have required any additional actions to reduce power or alter plant mode. As such, inspectors determined that the performance deficiency did not adversely affect the mitigating systems cornerstone objective.

Enforcement: The ROP's significance determination process does not specifically consider the regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which impedes the NRC's ability to regulate using traditional enforcement to adequately deter non-compliance.

Severity: The inspectors reviewed Section 6.9.d.9 of the NRC Enforcement Policy and determined this violation was a Severity Level IV violation because the licensee's failure to make the report, as required by 10 CFR 50.72, did not cause the NRC to reconsider a regulatory position or undertake substantial further inquiry. Specifically, this violation is similar to Example 9 in the Enforcement Manual, "The licensee fails to make a report required by 10 CFR 50.72 or 10 CFR 50.73."

Violation: 10 CFR 50.72(b)(3)(v)(D) requires, in part, that the licensee shall notify the NRC Operations Center via the Emergency Notification System of any event or condition that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. Contrary to the above, on February 12, 2019, Exelon did not notify the NRC Operations Center via the Emergency Notification System within eight hours of the occurrence of a condition that could have prevented the fulfillment of the safety function of the Unit 3 CS systems that are needed to mitigate the consequences of an accident as required by 10 CFR 50.72(b)(3)(v)(D).

The disposition of this violation closes LER 05000277, 05000278/2019-001-00.

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

EXIT MEETINGS AND DEBRIEFS

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

- On July 16, 2019, the inspectors presented the integrated inspection results to Mr. Pat Navin, Site Vice President, and other members of the licensee staff.
- On April 12, 2019, the inspectors presented the U-3 RCIC Static O-Ring Pressure Switch Failure to Mr. Larry Nace, Acting Engineering Supervisor, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.05Q	Fire Plans	PF-117	Unit 3 Turbine Building, Emergency Battery SWGR Rooms-Elevation 135'-0"	Revision 10
71111.06	Procedures	ER-AA-300-150	Cable Condition Monitoring Program	Revision 5
		OP-AA-102-105-1001	Peach Bottom Priority Work List - Priority 2, Addendum - Manhole Alarms	4/16/2019
71111.07T	Corrective Action Documents	2675896 2676095 3817117 3948121 3950747 4248438 4248472		
	Procedures	M-052-002	Diesel Engine Maintenance	49
	Work Orders	4279039 4279046 4280178 4715551 4715549 4715548 R1304235		
71111.15	Corrective Action Documents	2646101 3957138 4122576 4220504 4234905 4235348		
	Drawings	6280-M-352	Nuclear Boiler Vessel Instrumentation	Revision 55
		6280-M-353	Reactor Recirculation Pump system	Revision 65
		6280-M-353	Reactor Recirculation Pump System	Revision 65
		6280-M-356	Control Rod Drive Hydraulic System Part A	Revision 76
		6280-M-356	Control Rod Drive Hydraulic System Part A	Revision 76

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		6280-M-357	Control Rod Drive Hydraulic System - Part B	Revision 36
		6280-M-357	Control Rod Drive Hydraulic System - Part B	Revision 36
		6280-M-365, Sheet 2	HPCI System	Revision 66
	Fire Plans	PF-63	Unit 3 RX Building; RCIC Room, Elevation 88'-0", Fire Zone 2/63	
	Miscellaneous		PEA MRC Agenda	03/18/2019
			Daily Plant Status Meeting Agenda	04/08/2019
		PRO-3-23-0001	PBAPS Tag-out Tag List, Protected Equipment	05/22/2019
	Procedures	NF-AB-135-1410	BWR Control Blade Lifetime Management	Revision 15
		OP-AA-102-105-1001	Peach Bottom Priority Work List	04/15/2019
		OP-AA-108-115, Attachment 1	Main Steam Line C Leak Detection	Revision 21
		ST-O-003-430-2	CRD Accumulator Charging Header Check Valve Test	Revision 11
71111.22	Corrective Action Documents	4136738, 4230489		
	Engineering Changes	EC-0628415	Returning E-1 EDG to Service with Tan-Delta "Action Required" Condition	Revision 0
	Procedures	IP-ENG-001, Form 2	Spare E-1 Diesel Failed Cables	Revision 0
		OP-AA-108-115, Attachment 1	Operability Evaluation	Revision 21
		ST-O-052-311-2	E-1 Diesel Generator Slow Start Full Load and IST Test	Revision 22
71152	Corrective Action Documents	04027062		
		04129583		
		04162057		
		04208278		
		04238576*		
		4217536 4239374 4245790 4259684		
	Drawings	M-1-S-42, Sht. 22	Electric Schematic Diagram, RCIC System	Revision 76

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous		Peach Bottom Atomic Power Station, RCIC Critical Component PM Review	03/05/2019
			Peach Bottom Atomic Power Station, ECCS Focused Vulnerability Reviews	01/09/2019
		NRC EA-18-108	Traditional Enforcement Panel Worksheet	10/09/2018
		PCM-18-115078	Peach Bottom 2 and 3, Implement Template Changes for Critical Displacement/Float Switches	Revision 0
		PCM-18-115138	Peach Bottom 2 and 3, Implement Template Changes for Critical Force Balance Switches	Revision 0
		PCM-18-115162	Peach Bottom 2 and 3, Implement Template Changes for Special Application Switches	03/05/2019
71153	Corrective Action Documents	4219405 4219461 4219524		
	Miscellaneous		PEA MRC Agenda for April 15, 2019, "2019 CAP Focus Area: Evaluation Quality with Timely Corrective Actions"	
			Event Report Guidelines: 10 CFR 50.72 and 50.73 (NUREG-1022)	
	Procedures	SO 53.7.Q	Response to a Loss of #2 Off-Site Startup Source	Revision 17