UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
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ATLANTA, GEORGIA 30303-1257

May 10, 2018

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
Florida Power & Light Co.
Mail Stop: EX/JB
700 Universe Blvd.
Juno Beach, FL 33408

SUBJECT: TURKEY POINT NUCLEAR GENERATING STATION – NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 05000250/2018001 AND 05000251/2018001

Dear Mr. Nazar:

On March 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Turkey Point Nuclear Generating Station, Units 3 and 4. On April 10, 2018, the NRC inspectors discussed the results of this inspection with Mr. Robert Coffey, Southern Regional Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors documented two findings of very low safety significance (Green) in this report. The findings involved violations of NRC requirements. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violations or significance of the NCVs, 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 II; the Director, Office of Enforcement; and the NRC resident inspector at the Turkey Point Nuclear Generating Station.

If you disagree with a cross-cutting aspect assignment 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 II; and the NRC resident inspector at the Turkey Point Nuclear Generating Station.

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/

Randall A. Musser, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Docket Nos.: 50-250, 50-251
License Nos.: DPR-31, DPR-41

Enclosure:
IR 05000250/2018001 and 05000251/2018001

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-250, 50-251
License Nos:	DPR-31, DPR-41
Report Nos:	05000250/2018001, 05000251/2018001
Enterprise Identifier:	I-2018-001-0066
Licensee:	Florida Power & Light Company (FPL)
Facility:	Turkey Point Nuclear Generating Station, Units 3 and 4
Location:	9760 SW 344th Street Homestead, FL 33035
Dates:	January 1, 2018 through March 31, 2018
Inspectors:	D. Orr, Senior Resident Inspector R. Reyes, Resident Inspector M. Riley, Reactor Inspector, (Section 1R21) S. Sanchez, Senior Emergency Preparedness Inspector, (Sections 71114.04 and 05 C. Fontana, Emergency Preparedness Inspector, (Sections 71114.02 and 03) J. Rivera, Health Physicist, (Section 71124.06) J. Panfel, Health Physicist, (Section 71124.07)
Approved by:	Randall A. Musser, Chief Reactor Projects Branch 3 Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring licensee's performance by conducting a baseline inspection at Turkey Point Nuclear Generating Station Units 3 and 4 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. NRC and self-revealed findings, violations, and additional items are summarized in the table below.

List of Findings and Violations

Failure to conduct post maintenance testing in accordance with ASME OM code			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000251/2018001-01 Closed	H.8 – Human Performance, Procedure Adherence	71111.19 Post Maintenance Testing
A Green NRC-identified NCV of 10 CFR 50.55a, "Codes and Standards," was identified for the failure to adequately perform post maintenance testing on valve CV-4-2906, 4B emergency containment cooler (ECC) air-operated outlet valve, in accordance with the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code, Subsection ISTC, Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants.			

Failure of radiation workers to notify Radiation Protection upon a spill of radioactively contaminated water.			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000250,251/2018001-02 Closed	H.8 – Human Performance, Procedure Adherence	71124.01 Radiological Hazard Assessment and Exposure Control
A self-revealing Green NCV of Technical Specification (TS) 6.8.1, "Procedures and Programs", was identified for failure of radiation workers to notify Radiation Protection (RP), in accordance with procedure RP-AA-100-1002, "Radiation Worker Instruction and Responsibilities", step 4.13.4, "Spills and Observed Leaks", when a spill of radioactively contaminated water occurred. Specifically, on January 22, 2018, during a line-up of the 4D demineralizer resin fill isolation valve on the auxiliary building roof, two radiation workers (non-licensed operators) removed the weather-protective enclosure over the valve to verify its position. Upon removal of the enclosure, approximately half a gallon of highly contaminated water spilled onto the auxiliary building roof. The workers then attempted to clean up and decontaminate the area on their own with a water hose, rather than notify RP. This action spread the contamination into a larger area and into the site storm drain system.			

Additional Tracking Items

Type	Issue number	Title	Report Section	Status
URI	05000250,251/2017007-01	Potential Failure of 125 Vdc Bus 3B Class 1E	71111.21M Design Basis Assurance Inspection	Closed

PLANT STATUS

Unit 3 operated at or near rated thermal power for the entire inspection period.

Unit 4 operated at or near rated thermal power for the entire 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

Seasonal Extreme Weather (1 Sample)

The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures.

Impending Severe Weather (1 Sample)

The inspectors evaluated readiness for impending adverse weather conditions for cold weather on January 19, 2018.

71111.04 - Equipment Alignment

Partial Walkdown (4 Samples)

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

(1) Unit 3 auxiliary feedwater train 2 after restoration from surveillance testing on January 5, 2018
(2) 4B emergency diesel generator (EDG) after returning to service from a 24-hour endurance surveillance test on January 18, 2018
(3) 4A residual heat removal (RHR) train while the 4B RHR train was out of service for maintenance on January 18, 2018

(4) 3A containment spray (CS) pump while the 3B CS pump was out of service for maintenance on February 8, 2018

Complete Walkdown (1 Sample)

The inspectors evaluated system configurations during a complete walkdown of the Unit 3 and Unit 4 high head safety injection (HHSI) systems.

71111.05AQ - Fire Protection Annual/Quarterly

Quarterly Inspection (7 Samples)

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

(1) 4A and 4B EDG building, fire zones (FZs) 133 – 142, on January 9, 2018
(2) Unit 3 condensate storage tank and auxiliary feedwater pumps areas, FZs 84 and 89, on January 9, 2018
(3) Auxiliary building north/south hallway and fan room, FZs 28 and 79A, on January 19, 2018
(4) Unit 4 condensate storage tank area, FZ 77, on February 7, 2018
(5) Units 3 and 4 DC equipment rooms, FZs 108A and 108B, on February 16, 2018
(6) Units 3 and 4 CS pump and HHSI injection pump rooms, FZs 31, 38, 52 and 53, on February 18, 2018
(7) Units 3 and 4 boric acid storage tanks and pump room, FZ 41 on March 16, 2018

71111.07 - Heat Sink Performance

Heat Sink (1 Sample)

The inspectors evaluated the 4C component cooling water (CCW) heat exchanger performance on February 13 and 21, 2018.

71111.11 - Licensed Operator Requalification Program and Licensed Operator Performance

Operator Requalification (1 Sample)

The inspectors observed and evaluated a simulator scenario administered to an operating crew on January 16, 2018.

Operator Performance (1 Sample)

The inspectors observed and evaluated a Unit 3 reactor coolant system boron dilution using primary water to maintain $T_{average}$ matched to $T_{reference}$ at steady state full power on February 18, 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) Action request (AR) 02235461, intake cooling water (ICW) maintenance rule (a)(1) status evaluation not timely
(2) ARs 2091819 and 2127607, maintenance rule functional failure evaluations for HHSI hot-leg manual bypass valve 4-990
(3) AR 2234772, Unit 4 downpower to 50 percent to repair leak on 4A steam generator feedwater pump recirculation line

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

The inspectors evaluated the Unit 3 and Unit 4 risk assessments for the following planned and emergent work activities:

(1) 4C charging pump, 4B RHR pump, and 3C CCW heat exchanger out of services (OOSs) on January 18, 2018
(2) 3A2 and 3B2 125Vdc battery chargers, Unit 3 480V load center and 4kV switchgear rooms train A air conditioning, 4C CCW heat exchanger, C and D service water pumps, and V76/ E232 electrical equipment room air conditioning unit OOSs on February 13, 2018
(3) 4C steam supply motor operated valve to the A auxiliary feedwater (AFW) pump turbine OOS on February 27, 2018
(4) 3CM instrument air compressor, Unit 3 480V load center and 4kV switchgear rooms chiller 1A, 3B charging pump, 3B HHSI pump, and Unit 4 480V load center and 4kV switchgear rooms chiller 2B OOSs on March 7, 2018
(5) 3CM instrument air compressor, 3A CCW HX, and 4B CCW pump OOSs on March 13 and 14, 2018

71111.15 - Operability Determinations and Functionality Assessments (7 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) ARs 0467862, 0469002, 0469703, 0476824, 053993, 01653729, 1789387, 1790103, containment radiation monitors R11 and R12 pedestal fan cooling not required
(2) ARs 2006-34499 and 2245531, 3A EDG low engine lube oil sump level
(3) AR 2247382, ICW piping upstream of POV-3-4882 corroded at ground penetration
(4) AR 2245442, 4B charging pump speed controller actuator regulator blowing air
(5) AR 2250478, 3A EDG north fan high vibrations
(6) AR 2251538, Unit 4 AFW train 1 operability with 4C steam supply MOV-4-1405 OOS
(7) AR 2253866, 4B EDG radiator expansion tank low level

71111.18 - Plant Modifications (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

(1) Engineering Change (EC) 290310, substitute 4C steam generator level transmitter LT-4-494 for LT-4-498 to control 4C steam generator water level in automatic control
(2) EC 290403, temporary pumping station to add borated water to the 3A reactor coolant system low head safety injection accumulator

71111.19 - Post Maintenance Testing (7 Samples)

The inspectors evaluated the following post maintenance tests (PMTs):

(1) Work order (WO) 40583737, Unit 4 Eagle 21 process protection system channel 1 repair on January 26
(2) WOs 40161908 and 40518624, 4B emergency containment cooler inlet air operated valve, 4-2906, repairs on January 31 and February 5, 2018
(3) WO 40519976, calibrate the 4B charging pump pneumatic control loop on February 15, 2018
(4) WO 40471182, 4C steam generator steam supply MOV to AFW pump turbines DC starter inspection on March 1, 2018
(5) WO 40489175, 3AB22 4kV breaker, 3B 4kV bus to 3A or 3C 4kV bus feeder, inspection on March 8
(6) WO 40588477, 4B CCW pump shaft seal and bearings replacements on March 19, 2018
(7) WO 40466867, 4A ICW pump replacement on March 22, 2018

71111.21M – Design Basis Assurance Inspection

The inspectors evaluated the corrective action taken for closure of URI 05000250, 251/2017007-01.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (5 Samples)

(1) 4-OSP-023.2, 4B Diesel Generator 24 Hour Full Load Test on January 16, 2018
(2) 4-OSP-075.2, Auxiliary Feedwater Train 2 Operability Verification on January 17, 2018
(3) 3-OSP-023.1, 3A Diesel Generator Operability Test on January 22, 2018
(4) 3-SMI-072.05A, P-3-447, F-3-475 and F-3-495 Analog Channel Operating Test on January 31, 2018
(5) 0-OSP-202.3, Safety Injection Pump and Piping Venting (Unit 3 and Unit 4) on February 16 and March 15 2018, respectively

In-service (1 Sample)

(1) 4-OSP-062.2A, Safety Injection Pump 4A Group B Pump Test on March 2, 2018

71114.02 - Alert and Notification System Testing (1 Sample)

The inspectors evaluated the maintenance and testing of the alert and notification system.

71114.03 - Emergency Response Organization Staffing and Augmentation System (1 Sample)

The inspectors evaluated the readiness of the Emergency Response Organization.

71114.04 - Emergency Action Level and Emergency Plan Changes (1 Sample)

The inspectors evaluated submitted Emergency Action Level and Emergency Plan changes. This evaluation does not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness (1 Sample)

The inspectors evaluated the maintenance of the emergency preparedness program.

71114.06 - Drill Evaluation

Emergency Planning Drill (1 Sample)

The inspectors evaluated an emergency planning drill from the main control room simulator, the technical support center, and the emergency operations facility on March 1, 2018.

Drill/Training Evolution (1 Sample)

The inspectors evaluated classification and notification opportunities during an operating crew simulator scenario on January 16, 2018.

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Control

Baseline inspection not completed. This section documents a self-revealing Green NCV in the area of Radiological Hazards Assessment and Exposure Control.

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walk Downs and Observations (1 Sample)

The inspectors evaluated the licensee's radioactive gaseous and liquid effluent treatment systems during plant walk downs.

Calibration and Testing Program (Process and Effluent Monitors) (1 Sample)

The inspectors evaluated the licensee's gaseous and liquid effluent monitor instrument calibration and testing.

Sampling and Analyses (1 Sample)

The inspectors evaluated radioactive effluent sampling and analysis activities.

Instrumentation and Equipment (1 Sample)

The inspectors evaluated radioactive effluent instrumentation and equipment.

Dose Calculations (1 Sample)

The inspectors evaluated dose calculations.

71124.07 - Radiological Environmental Monitoring Program

Site Inspection (1 Sample)

The inspectors evaluated the licensee's radiological environmental monitoring program.

Groundwater Protection Initiative Implementation (1 Sample)

The inspectors evaluated the licensee's groundwater monitoring program.

OTHER BASELINE ACTIVITIES

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below for the period from January 2017, through December, 2017. (9 Samples)

(1) Unit 3 Unplanned Scrams per 7000 Critical Hours
(2) Unit 4 Unplanned Scrams per 7000 Critical Hours
(3) Unit 3 Unplanned Scrams with Complications
(4) Unit 4 Unplanned Scrams with Complications
(5) Unit 3 Unplanned Power Changes per 7000 Critical Hours
(6) Unit 4 Unplanned Power Changes per 7000 Critical Hours
(7) Drill & Exercise Performance
(8) Emergency Response Organization Drill Participation
(9) Alert & Notification System Reliability

INSPECTION RESULTS

Failure To Conduct Post Maintenance Testing in Accordance With ASME OM Code			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000251/2018001-01 Closed	[H.8] – Human Perfomance, Procedure Adherence	71111.19 Post Maintenance Testing

A Green NRC-identified NCV of 10 CFR 50.55a, "Codes and Standards," was identified for failure to adequately perform post maintenance testing on valve CV-4-2906, 4B emergency containment cooler (ECC) air-operated outlet valve, in accordance with the ASME OM Code, Subsection ISTC, Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants.

Description: On December 07, 2017, CV-4-2906, 4B ECC air-operated outlet valve, underwent a 3-year preventive maintenance task to replace the pilot operated lock up valve (POLV). After the maintenance, the valve's first open stroke test measured at 4.88 seconds which fell outside the acceptable range of 1.32 to 3.94 seconds but was less than the required action time of 5.25 seconds. Additional maintenance was completed to adjust the control system and a second stroke test measured 4.45 seconds. AR 2239644 was initiated to address the failure of the stroke test within the acceptable range. The immediate operability assessment determined that since the required action criteria was not exceeded, no further actions were required except for engineers to establish a new baseline stroke time. On December 18, 2017, AR 2241062 was initiated by an IST engineer and a WR was requested to re-baseline the valve. That WR was again subsequently cancelled and the AR was dispositioned by the corporate ASME Code group which determined the re-baseline could be completed at the next quarterly IST.

On January 29, 2018, during the regularly scheduled quarterly IST on valve CV-4-2906, the open stroke time exceeded the required action time of less than or equal to 5.25 seconds. The test plan also included obtaining four open stroke times to re-baseline the valve's IST acceptance criteria. However, no maintenance was completed that required a re-baseline. The four strokes were required to complete the IST post maintenance testing for preventive maintenance that was performed on December 07, 2017, that replaced the pilot operated lock-up valve (POLV). The four stroke times in the order obtained were: 6.951; 4.227; 8.826; and 8.521 seconds. Consequently, on January 29, 2018, Unit 4 entered the 72-hour TS shutdown action statement for an inoperable 4B ECC and the licensee initiated its failure investigation process to identify the cause of the stroke time failure.

The inspectors determined that the licensee had not taken actions in compliance with the ASME OM code requirements, for both the PMT after changing the POLV, and after the failure of the valve stroke acceptance criteria. Specifically, as a result of the maintenance that was completed on the valve's POLV, the ASME OM code Section ISTC-3310, Effects of Valve Repair, Replacement, or Maintenance on Reference Values, required that when a valve or its control system has been replaced, repaired, or has undergone maintenance that could affect the valve's performance, a new reference value shall be determined or the previous value reconfirmed by an inservice test run before it is returned to service or immediately if not removed from service. This test is required to demonstrate that

performance parameters that could be affected by the replacement, repair, or maintenance were within acceptable limits. Deviations between the previous and new reference values are required to be identified and analyzed. Verification that the new values represent acceptable operation are required to be documented in the record of tests. Additionally, on December 07, 2017, after the stroke test failed the IST acceptance criteria, Section ISTC-5133, Stroke Test Corrective Actions, provided the actions that were required to address the failure. Specifically, failure to meet the acceptance criteria when testing the valve requires the valve to be immediately retested or declared inoperable. If the valve was retested and the second set of data also does not meet the acceptance criteria, the data shall be analyzed within 96 hours to verify that the new stroke time represents acceptable valve operation, or the valve shall be declared inoperable.

The inspectors questioned the licensee on past operability of CV-4-2906 from December 07, 2017 through January 29, 2018, as the licensee had not completed the ASME OM code section ISTC-3310 and ISTC-5133 requirements. The licensee initiated a past operability review (POR) AR 2246906 to address this issue. Additionally, AR 2248895 was initiated to investigate the failure to comply with the ASME OM code requirements on valve CV-4-2906. The POR investigation described that CV-4-2906 had not exceeded its design basis stroke time of 8.5 seconds on either of the two valve strokes (4.88 and 4.45 seconds) on December 07, 2017, and similarly had not exceeded the design basis stroke time on the first and second valve strokes (6.951 and 4.227 seconds) on January 29, 2018. The POR concluded that if there was any actuator O-ring leakage during the period of concern, it was not severe enough to cause a failure of the valve to fulfill its design basis function during an accident. The valve exceeded the design basis stroke time on the third and fourth strokes (8.826; and 8.521 seconds) on January 29, 2018, and the POR stated that it was likely the act of stroking the actuator twice that aggravated the condition to the point of failure during the third and fourth strokes. Further, the licensee determined that the O-ring seal failure was not related to the maintenance of the POLV that was completed on December 07, 2017, and that the adjustment that was made to the POLV fitting on January 29, 2018, was inconsequential and did not contribute to the valve stroke acceptance failures. The licensee assessed the date of discovery for the valve failure was January 29, 2018. Taking into consideration the non-compliance with the ASME OM code, the licensee concluded that for the period of concern, December 07, 2017, through January 29, 2018, the 4B ECC was operable but non-conforming.

The licensee determined that the work order that specified the valve PMT for the maintenance of the POLV did not specify the correct ASME OM post maintenance testing as required by the licensee's 0-ADM-502, "In-Service Testing Program," Section 5.3.4, "Post Maintenance," section 5.3.4.2 and 5.3.4.3. Additionally, procedure 4-OSP-055.1, "Emergency Containment Cooler Operability Test," Section 4.3.1, "4B Emergency Containment Cooler Test," steps 17 thru 18F specified the additional test instructions were to be completed if CV-4-2906 had an opening stroke time that was not within acceptable range and the opening stroke time was not greater than the required action time. These steps were not completed.

Corrective Actions: Immediate corrective actions included repairing valve CV-4-2906, completing post maintenance testing on the valve in accordance with the ASME OM code and documenting a formal basis for past operability in the corrective action program (CAP). Long term corrective actions included revising procedure 04-OSP-055.1, Emergency Containment Cooler Operability Test, to remove ambiguity.

Corrective Action References: The licensee placed this issue in their CAP as ARs 2246906, 2239644, 2241062, and 2248895

Performance Assessment:

Performance Deficiency: The failure to test the 4B ECC outlet valve CV-4-2906 in accordance with the ASME OM code was a performance deficiency that was within the licensee's ability to foresee and correct and should have been prevented. Specifically, the work order that specified the post maintenance tests did not specify an IST re-baseline to obtain new reference values or confirmation of previous values, and after the initial open stroke time exceeded the acceptance criteria, CV-4-2906, was not immediately retested or declared inoperable as required by the IST program.

Screening: The inspectors determined that the performance deficiency was more than minor per IMC 0612, Appendix B, "Issue Screening," because the inadequate IST adversely affected the SSC and Barrier Performance attribute of the Barrier Integrity Cornerstone objective to provide reasonable assurance that the physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, by not performing the required testing, the licensee did not maintain the requisite level of assurance of the valve's capability of performing its intended function.

Significance: Using Inspection Manual Chapter 0609 Appendix A, Exhibit 3, "Barrier Integrity Screening Questions," the inspectors determined that the finding was of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment (valves, airlocks, etc.), containment isolation system (logic and instrumentation), and heat removal components.

Cross-cutting Aspect: The inspectors reviewed this performance deficiency for cross-cutting aspects as required by IMC 0310, "Aspects Within the Cross-Cutting Areas," dated December 4, 2014. The finding was determined to be reflective of present licensee performance from December 2017 through January 2018, in that the licensee did not effectively evaluate and appropriately implement the IST requirements in the PMT plan for CV-4-2906 and did not take the required IST corrective actions after the valve exceeded the stroke time acceptance criteria, which were reiterated in the licensee administrative procedure 0-ADM-502, In-Service Testing Program, and surveillance procedure 4-OSP-055.1, Emergency Containment Cooler Operability Test. This finding was assigned a cross-cutting aspect in the Procedure Adherence component of the Human Performance cross-cutting area, in that it states individuals follow processes, procedures, and work instructions (H.8).

Enforcement:

Violation: 10 CFR 50.55a(f)(4) required, in part, that throughout the service life of a boiling or pressurized water-cooled nuclear power facility, pumps and valves that were classified as ASME Code Class 1, Class 2, and Class 3 must meet the inservice test requirements set forth in the ASME OM Code. The ASME OM Code of record for Turkey Point Unit 4 was 2004 Edition through the 2006 Addenda. IST for valves were specified in ASME OM Code Subsection ISTC, Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants.

OM Code Section ISTC-3310, Effects of Valve Repair, Replacement, or Maintenance on Reference Values, provided post maintenance valve testing requirements. OM Code Section ISTC-5133, Stroke Test Corrective Actions, provided the specific testing requirements to address a failure when exercising a pneumatic valve. Turkey Point procedures: 0-ADM-502, In-Service Testing Program, Section 5.3.4, Post Maintenance, and Section 5.3.5, Corrective Action; and 4-OSP-055.1, Emergency Containment Cooler Operability Test, Section 4.3, 4B Emergency Containment Cooler Test, implemented those requirements for valve CV-4-2906.

Contrary to the above, from the period of December 07, 2017 through January 29, 2018, after completing maintenance on CV-4-2906 and identifying, during post maintenance testing, that the open stroke time failed above the acceptable range, the required actions specified by the ASME OM Code sections ISTC 3310 and ISTC-5133 were not completed. Specifically, a new reference value was not established prior to returning the valve to service; deviations between the old value and the new were not identified and analyzed for acceptability; verification that the new values represented acceptable operation were not documented; CV-4-2906 was not immediately retested or declared inoperable; a second set of data was not analyzed within 96 hours to verify the new stroke time represented acceptable valve operation; and, CV-4-2906 was not retested until January 29, 2018.

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

Failure of Radiation Workers to Notify Radiation Protection Upon a Spill of Radioactively Contaminated Water.

Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000250,251/2018001-02 Closed	[H.8] – Human Performance, Procedure Adherence	71124.01 Radiological Hazard Assessment and Exposure Control

A Green self-revealing NCV of TS 6.8.1, “Procedures and Programs”, was identified for failure of radiation workers to notify RP, in accordance with procedure RP-AA-100-1002, “Radiation Worker Instruction and Responsibilities”, step 4.13.4, “Spills and Observed Leaks”, when a spill of radioactively contaminated water occurred. Specifically, on January 22, 2018, during a line-up of the 4D demineralizer resin fill isolation valve on the auxiliary building roof, two radiation workers (non-licensed operators) removed the weather-protective enclosure over the valve to verify the valve position. Upon removal of the enclosure, approximately half a gallon of highly contaminated water spilled onto the auxiliary building roof. The workers then attempted to clean up and decontaminate the area on their own with a water hose, rather than notify RP. This action spread the contamination into a larger area and into the site storm drain system.

Description: On January 22, 2018, during night shift, two radiation workers (non-licensed operators) were performing a line-up of the 4D demineralizer resin fill isolation valve on the auxiliary building roof. This valve was housed in a see-through plexiglass enclosure that was used to contain leakage from the valve. The workers were briefed and logged onto a general radiation work permit for operator routine activities inside the radiologically controlled area

(RCA). The workers proceeded to lift the enclosure to verify the valve position. Upon removal of the enclosure, approximately half a gallon of highly contaminated water spilled onto the auxiliary building roof. The workers then attempted to clean up and decontaminate the area on their own with a water hose, rather than notify RP. This action spread the contamination into a larger area and into the site storm drain system. The workers did not notify RP of the spill until they exited the RCA. Sampling of the 4D demineralizer water after the event indicated a level of radioactivity that would have created the potential existence of a high contamination area of greater than 100,000 dpm/100 cm^2 where the spill occurred, before it was washed down by the workers. Site radiation safety procedure RP-AA-100-1002, "Radiation Worker Instruction and Responsibilities", step 4.13.4, "Spills and Observed Leaks", states, in part, that the required actions when a spill occurs is to stop or contain the spill, warn others in the area of the spill, isolate the area, minimize exposure, and notify RP. In addition, RP-AA-100-1002 states not to attempt to stop the spill if not wearing adequate protective clothing.

Corrective actions: Immediate corrective actions taken by the licensee included an Operations Department Clock Reset with site-wide communication of the event, revoking access of the workers into the RCA, and a complete replacement of the demineralizer rubber-diaphragm valve with a new ball valve with stainless steel internals in order to eliminate valve leakage. Longer term actions include a Radiation Worker Practices Recovery Plan and shift managers briefing crews on the expectations of a questioning attitude and thresholds to stop work when unsure of a situation.

Corrective Action Reference: The licensee placed this issue in their CAP program under AR 2245523.

Performance Assessment:

Performance Deficiency: The radiation workers failure to notify RP, in accordance with procedure RP-AA-100-1002, "Radiation Worker Instruction and Responsibilities", step 4.13.4, "Spills and Observed Leaks," when a spill of radioactively contaminated water occurred is a performance deficiency. This failure was foreseeable and preventable by the workers when they realized a spill of radioactively contaminated water had occurred.

Screening: This performance deficiency is more-than-minor because it adversely affected the Occupational Radiation Safety Cornerstone objective to ensure the adequate protection of worker health and safety from exposure to radiation from radioactive material; specifically, the potential for a more significant personnel contamination event existed due to the highly contaminated water that spilled and the workers not wearing the appropriate protective clothing for that level of contamination.

Significance: Using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process", the inspectors determined that this issue was of very low safety significance (Green) because the finding did not involve an As Low As Reasonably Achievable (ALARA) issue, was not an overexposure, did not result in a substantial potential for an overexposure, and did not compromise the ability to assess dose. In addition, the calculated dose to the public based on the contamination spreading into the storm drain system was negligible.

Cross Cutting Aspect: The inspectors determined this finding has a cross-cutting aspect in the area of Human Performance, Procedure Adherence (H.8), since the individuals did not follow procedural guidance for stopping work and notifying RP upon noticing the spill.

Enforcement

Violation: TS 6.8.1, "Procedures and Programs" requires, in part, that written procedures be implemented and maintained covering the applicable procedures required by the Quality Assurance Topical Report, which includes Radiation Control Procedures. Site radiation safety procedure RP-AA-100-1002, "Radiation Worker Instruction and Responsibilities", step 4.13.4, "Spills and Observed Leaks", states, in part, that the required actions when a spill occurs is to stop or contain the spill, warn others in the area of the spill, isolate the area, minimize exposure, and notify RP. Contrary to this, on January 22, 2018, during a line-up of the 4D demineralizer resin fill isolation valve on the auxiliary building roof, two radiation workers failed to notify RP, in accordance with procedure RP-AA-100-1002, "Radiation Worker Instruction and Responsibilities", step 4.13.4, "Spills and Observed Leaks", when a spill of radioactively contaminated water occurred on the auxiliary building roof upon removal of the demineralizer resin fill isolation valve enclosure.

Enforcement Action: This violation is being treated as a Non-Cited Violation, consistent with Section 2.3.2 of the Enforcement Policy.

Unresolved Item (Closed)	"Potential Failure of 125 Vdc Bus 3B Class 1E Components" URI 05000250, 251/2017007-01	71111.21M, Design Bases Assurance Inspection (Teams)

Description: This URI was opened on October 2, 2017, in NRC Design Bases Assurance Inspection Report 05000250/2017007-01 and 05000251/2017007-01 to determine if a performance deficiency of Section 4.5 of IEEE 279-1968, "Channel Integrity," existed. During the review of calculation 5177-265-EG-22, "Circuit Breaker/Fuse Coordination Study," Rev. 8, the team questioned if there were instances where class 1E cables associated with DC Bus 3B (3D23) would not be adequately protected given a postulated short circuit on the load side of the breakers and if this would result in additional loss of Class 1E equipment.

The team reviewed the licensee's evaluation of this issue contained in action report (AR) 2337983. The licensee's evaluation concluded that cable damage from a postulated short circuit on DC Bus 3B would not result in additional loss of Class 1E equipment or the redundant channel needed for the system to perform its intended safety function. Based on the reviewed evaluation, the team determined that no performance deficiency was identified.

Corrective Action Reference: AR 2337983

EXIT MEETINGS AND DEBRIEFS

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

On February 2, 2018, the inspectors presented the emergency preparedness inspection results to Mr. Brian Stamp, Plant General Manager, and other members of the licensee staff.

On February 16, 2018, the inspectors presented the radiation protection inspection results to Mr. Grant Melin, acting Plant General Manager, and other members of the licensee staff.

On April 10, 2018, the resident inspectors presented the inspection results to Mr. Robert Coffey, Southern Regional Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

71114.21M: Design Basis Assurance Inspection
Condition Reports
CR 2337983, Evaluation of URI 05000250, 251/2017007-01, 1/8/2018

71114.02: Alert and Notification System Evaluation
Procedures and Reports
Turkey Point Radiological Emergency Plan, Rev. 63
EP-SR-102-1000, Nuclear Division Florida Alert & Notification System Guideline, Rev. 9
Siren Maintenance Procedure No. 6.80.02, Rev. I
WPS-4000 Series High Power Voice & Siren System Operating & Troubleshooting Manual
Public Alert & Notification System for the Turkey Point Plant (FEMA-43 Report), Dec. 1984
Booklet – Important Emergency Information for Neighbors, Turkey Point Nuclear Power Plant, 2018, effective 12/15/17

Records and Data
Documentation of quarterly siren maintenance checks sheets for 2016 & 2017
Documentation of bi-weekly siren test summaries & maintenance records for 2016 & 2017
Maintenance records for 1Q16 – 1Q17
FPL 2015 Annual Siren Letter to FEMA, dated 1/31/17

Corrective Action Program Documents (Action Requests)
AR 2102936, NRC EP inspection
AR 2135915, EP siren testing GAPs with informing local law enforcement
AR 2142934, Adjust 1st quarter siren data
AR 2188834, ANS siren PTN-S-25 failed bi-weekly test
AR 2198434, ANS siren PTN-S-23 failed bi-weekly test
AR 2198617, Level 1 assessment – siren 23 failure
AR 2228318, ANS siren PTN-S-49 test failure
AR 2246216, Level 1 assessment – siren 49 failure

71114.03: Emergency Response Organization Staffing and Augmentation System
Procedures
Turkey Point Plant Radiological Emergency Plan, Rev. 63
EP-AA-01, Emergency Preparedness Expectations, Rev. 1
EP-AA-100-1001, Guidelines for Maintaining Emergency Preparedness, Rev. 7
EP-AA-107, Fleet Emergency Response Organization (ERO) Training Program, Rev. 6
EP-AA-200, FPL/NextEra Nuclear Division Emergency Preparedness Process, Rev. 5
0-EPIP-20201, Maintaining Emergency Preparedness – Radiological Emergency Plan Training, Rev. 4

Records and Data
Turkey Point Nuclear Generating Station Units 3 & 4 NEI 12-01 On-Shift Staffing Analysis Report, dated 4/26/13
2016 & 2017 ERO Team Staff Assignments
Quarterly off-hour augmentation auto-dialer test reports: dated 3/7/16, 6/27/16, 9/28/16, 3/15/17, 6/28/17, 9/28/17, & 12/13/17
Various ERO Training Records

Corrective Action Program Documents
AR 1926742, ERO on-call members did not respond
AR 1927342, EP Drill 4QTR2013 OPS support in OSC/TSC
AR 2031325, Tracking AR for EP staffing credentials
AR 2057235, EP drill 2nd Qtr. 2015 ERO Teams not familiar with ERFs
AR 2116040, Comments on quarterly test
AR 2227563, 3rd quarter after hours call in test satisfactory with comments
AR 2228662, Level 1 Assessment – auto-dialer malfunction 9/28/17

71114.04: Emergency Action Level and Emergency Plan Changes
Procedures
0-EPIP-1302, Core Damage Assessment, Rev. 4 & 5
0-EPIP-20101, Duties of Emergency Coordinator, Rev. 23, 24, & 25
0-EPIP-20126, Off-Site Dose Calculations –Manual Method, Rev. 8 & 9
0-EPIP-20134, Offsite Notifications and Protective Action Recommendations, Rev. 6 & 7
0-EPIP-20201, Maintaining Emergency Preparedness – REP Training, Rev. 4
EP-AA-100-1007, Evaluation of Changes to the Emergency Plan, Supporting Documents, & Equipment (10 CFR 50.54(q)), Rev. 5
Turkey Point Radiological Emergency Plan, Rev. 63 & 64

Change Packages
10 CFR 50.54(q) Screening Form for 0-EPIP-1302 Rev. 5, 0-EPIP-20101 Rev. 23, 0-EPIP-20126 Rev. 9, & 0-EPIP-20134 Rev. 7, dated 7/17/17
10 CFR 50.54(q) Evaluation Form for 0-EPIP-1302 Rev. 5, 0-EPIP-20101 Rev. 23, 0-EPIP-20126 Rev. 9, & 0-EPIP-20134 Rev. 7, dated 7/18/17
10 CFR 50.54(q) Screening Form for 0-EPIP-20101 Rev. 24, dated 10/11/17
10 CFR 50.54(q) Screening Form for PTN Emergency Plan Rev. 63 & 0-EPIP-20101 Rev. 25, dated 12/5/17
10 CFR 50.54(q) Evaluation Form for PTN Emergency Plan Rev. 63 & 0-EPIP-20101 Rev. 25, dated 12/5/17

Corrective Action Program Documents
AR 2095291, 0-EPIP-20134 – Offsite Notifications and Protective Action
AR 2123052, 0-EPIP-20134 - Offsite Notifications and Protective Action Recommendations
AR 2153930, 0-EPIP-20201 – Maintaining EP-Rad.
AR 2192154, (P) 0-EPIP-20132 – TSC activation
AR 2194122, PTN RM EAL DBD – Rad. Monitors EAL value determination
AR 2210188, (P) 0-EPIP-1302, 0-EPIP-20101, 0-EPIP-20126, 0-EPIP-20134
AR 2247083, Procedure 0-EPIP-20101 still had previous revision bars (NRC-identified)
AR 2247391, Attention to detail errors in most recent revision of the E-Plan (NRC-identified)

71114.05: Maintenance of Emergency Preparedness
Procedures
0-ADM-117, Equipment Important to Emergency Response, Rev. 13
0-ADM-118, Emergency Response Facilities & Equipment Surveillances, Rev. 9
0-EPIP-1102, Duties of the Recovery Manager, Rev. No. 6
0-EPIP-1212, Emergency Operations Facility Activation and Operation, Rev. 13
0-EPIP-1302, Core Damage Assessment, Rev. 5
0-EPIP-20101, Duties of the Emergency Coordinator, Rev. 24

0-EPIP-20111, Re-Entry, Rev. No. 3B
0-EPIP-20125, Off-Site Dose Assessment Using the Unified RASCAL Interface (URI), Rev. 1
0-EPIP-20126, Off-Site Dose Calculations –Manual Method, Rev. 9
0-EPIP-20129, Emergency Response Team – Radiological Monitoring, Rev. 1B
0-EPIP-20132, Technical Support Center Activation, Rev. 13
0-EPIP-20134, Offsite Notifications and Protective Action Recommendations, Rev. 7
PI-AA-101, Assessment & Improvement Programs, Rev. 23
PI-AA-104-1000, Condition Reporting, Rev. 16
PI-AA-203, Action Tracking Management, Rev. 10
Turkey Point Plant Radiological Emergency Plan, Rev. 63

Records and Data
2016 1st Quarter EP Drill Report, dated 3/15/16
2016 3rd Quarter EP Drill Report, dated 9/20/16
2017 Practice Drill Report, dated 1/18/17
2017 Graded Exercise Report, dated 2/22/17
2017 4th Quarter EP Drill Report, dated 11/16/17
2016 Population Update Analysis, dated 11/15/16
2017 Population Update Analysis, dated 11/14/17
Development of Evacuation Time Estimates, dated 11/6/15
Level 1 Assessment – Event Declaration Time, dated 9/13/16
Level 1 Assessment – 8-Year Drill Cycle, dated 10/7/16
Level 1 Assessment – TSC Ventilation Review, dated 10/19/16
Level 1 Assessment – ERO Communicator Travel Times, dated 1/26/17
Level 1 Assessment – DEP Failures 2013 to 2017, dated 3/7/17
Level 1 Assessment – EAL Thresholds Without Specific Values, dated 3/13/17
Level 1 Assessment – TSC Ventilation Review, dated 12/18/17
Level 1 Assessment – 2018 NRC Inspection Readiness, dated 12/19/17
PTN-16-006 Turkey Point Nuclear Oversight Report, dated 9/29/16
PTN-17-006 Turkey Point Nuclear Oversight Report, dated 9/28/17
PTN NOUE Declared 9/7/17 Final report, dated 9/20/17
PTN Unit 3 Alert Declared 3/18/17 Final Report, dated 3/22/17

Corrective Action Documents
AR 2040978, LOCT simulator not reflective of realistic/professional CR
AR 2074662, Internal OE-NEI guidance for equipment related to the E-Plan
AR 2106260, NRC notification following E-Plan declaration training
AR 2116336, Using the CR or CSR as alternate to the TSC
AR 2148776, Change indicator used for logged TSC room temperature
AR 2187392, 2017 graded exercise issue – GE classification
AR 2187393, 2017 graded exercise issue – simulation performance delta
AR 2188363, 2017 graded exercise – NRC notification
AR 2189594, Level 1 Assessment – February EP drill
AR 2189626, Level 1 Assessment – January EP drill
AR 2191601, Level 1 Assessment – TSC transfer switch test frequency
AR 2192503, Unit 3 Alert 3/18/17 – EOF rollup
AR 2192505, Unit 3 Alert 3/18/17 – TSC rollup
AR 2202210, Level 1 Assessment – TSC ARS
AR 2230608, HOT ringdown phone is not working

AR 2247549, Controlled copy of the Emergency Response Directory in the TSC was out of date (NRC-identified)

71124.01 - Radiological Hazard Assessment and Exposure Control

Procedures, Guidance Documents, and Manuals

0-ADM-605, Control of Radioactive Material, Rev. 5A
ODI-CO-044, Operations Pre-Job Briefs and Peer Check Flow Chart (no revision no.)
RP-AA-100-1002, Radiation Worker Instruction and Responsibilities, Rev. 6
RP-AA-103-1001, Posting Requirements for Radiological Hazards, Rev. 4
RP-AA-107, Radioactive Material Control Program, Rev. 1

Records and Data Reviewed

Final Activity Report, Sample No. 465508, 1/24/18
RWP No. 18-0001, Task 2, Operations Department Routine Activities, Rev. 0
Survey No. PTN-M-20171005-26, Aux Roof, Leaking IX Filler, 10/5/17
Survey No. PTN-M-20171223-5, Aux Roof, U4 Demin Resin Fill Header - Post Coating / Decon Survey, 12/22/17
Survey No. PTN-M-20171227-4, Aux Roof, Aux Roof Survey (Quarterly), 12/27/17
Survey No. PTN-M-20180121-9, Aux Roof, Leak from Vlv. 4-421, 1/21/18
Survey No. PTN-M-20180122-2, Aux Roof, Leak from Vlv. 4-421, 1/22/18

Corrective Action Documents

AR 02245523

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Procedures, Guidance Documents, and Manuals

0-NCOP-003, Preparation of Liquid Release Permits, Rev. 5B
0-NCOP-004, Preparation of Gas Release Permits, Rev. 4A
0-NCOP-006, Preparation of Radioactive Effluent Release Reports, 4A
0-NCZP-051.3, Obtaining Plant Effluent Samples Via the SPING Monitors during Non-Accident Conditions, Rev. 7
PI-AA-104-1000, Corrective Action, Rev. 16
Offsite Dose Calculation Manual for Gaseous and Liquid Effluents from the Turkey Point Plant Units 3 and 4, Rev. 23
Turkey Point EAL Classification Tables, Cold Conditions, Attachment 2 - F669, Rev. 6
Turkey Point EAL Classification Tables, Hot Conditions, Attachment 1 - F668, Rev. 13

Records and Data Reviewed

10CFR61 Analysis for 2016 DAW, 04/13/2016
2016 Annual Radioactive Effluent Release Report, Turkey Point Units 3 and 4, 2/28/17
0-NCOP-003, Attachment 3, Liquid Release Permit Worksheets, 1/23/18 and 10/8/17
0-NCZP-051.3, Attachment 1, Independent Verification of Sample Valves, 2/13/18
Final Activity Report, SE Storm Drain R, 11/30/17
OpenEMS Gas Permit No. G-2017-169, Plant Vent, 12/2/17
OpenEMS Gas Permit No. G-2018-001, Plant Vent, 1/6/18
OpenEMS Liquid Permit No. L-2018-001, R-18 Liquid Effluent Monitor, 1/4/18
OpenEMS Liquid Permit No. L-2018-002, R-18 Liquid Effluent Monitor, 1/6/18

PTN NEI-99-01, Radiation Monitor EAL Value Determination, Basis for Radiation Monitor Values Used in Recognition Categories R, F, and C, 6/8/17
WO 40404874 01, T.S. Cal Liquid Waste Monitor R-18, 9/6/16
WO 40444700 01, T.S. RD-14 Plant Vent Gas Monitor, 2/1/17
WO 40478418 01, T.S. PLT Vent SPING RAD-6304, 11/13/17
WO 40400517 01, T.S. RAD-3-6418 SFP Vent Stack Cal, 12/5/16
WO 40499199 01, "B" Aux Bldg Exhaust Fan Qtrly Filter & Fan Inspect, 8/3/17
WO 40499269 01, "A" Aux Bldg Exh Fan Inspect / Lube / Fltr Chng, 8/31/17
WO 40513446 01, "B" Aux Bldg Exhaust Fan Qtrly Filter & Fan Inspect, 11/9/17
WO 40515930 01, "A" Aux Bldg Exh Fan Inspect / Lube / Fltr Chng, 11/22/17

Corrective Acion Documents
AR 02173056
AR 02192935
AR 02219818
AR 02228680
AR 02236222
PTN-16-008, Turkey Point Nuclear Assurance Report, Chemistry, Effluents & Environmental Monitoring, 12/13/16

71124.07 - Radiological Environmental Monitoring Program (REMP)
Procedures, Guidance Documents, and Manuals
0-ADM-654, Ground Water Protection Program, Rev. 1A
0-NCAP-103, Secondary System and Groundwater Chemistry, Rev. 9
0-PMI-103.04, South Dade Met Tower Instrument Calibration, Rev. 2
0-PMI-103.05, Land Utilization Met Tower Instrument Calibration, Rev. 2
Calibration Procedure 7 (Florida DOH Nuclear Power Surveillance Program), Calibration of Gas Meters and Flowrators, Rev. 9
EV-AA-100-1000, Ground Water Protection Program Communications/Notification Plan, Rev. 7
EV-AA-100-1001, Fleet Ground Water Protection Program Implementing Procedure, Rev. 4
Offsite Dose Calculation Manual for Gaseous and Liquid Effluents from the Turkey Point Plant Units 3 and 4, Rev. 22 and 23
PI-AA-104-1000, Corrective Action, Rev. 16
Sampling Procedure 1 (Florida DOH Nuclear Power Surveillance Program), Collection of Air Particulates and Radioiodines, Rev. 12
Sampling Procedure 4 (Florida DOH Nuclear Power Surveillance Program), Collection of Surface Water, Rev. 7
Sampling Procedure 5 (Florida DOH Nuclear Power Surveillance Program), Collection of Broadleaf Vegetation, Rev. 4
Sampling Procedure 12 (Florida DOH Nuclear Power Surveillance Program), Annual Land Use Census, Rev. 2

Records and Data Reviewed
10CFR61 Analysis for 2016 DAW, 04/13/2016
2016 Annual Radioactive Effluent Release Report, Turkey Point Units 3 and 4, 02/28/2017
2016 Annual Radiological Environmental Operating Report, Turkey Point Units 3 and 4, 05/11/2017
Engineering Assessment of System, Structures, and Components for Elevated Leak Risk to Ground, 01/09/2018

EC (Engineering Change) 250363 Attachment 8, PTN Meteorological Tower Sensor Accuracy Evaluation, Rev. 0
Groundwater Monitoring Results, 1st Quarter – 4th Quarter 2017
Environmental Surveillance Air Sample Data (Collection Sheet), 02/14/2018
HP QA-3000 File, 2017 10CFR50.75(g) Decommissioning Summary, 01/10/2018
Mixed Analyte Performance Evaluation Program, Laboratory Results for MAPEP Series 36, FDHE01 Florida Dept of Health Environmental Laboratory, 06/28/2017
Mixed Analyte Performance Evaluation Program, Laboratory Results for MAPEP Series 37, FDHE01 Florida Dept of Health Environmental Laboratory, 12/11/2017
PTN Gas Meter Calibration Data (Spreadsheet), 2016-2017
Site Conceptual Model, Turkey Point Facility, Ref No. 051293, 11/2009
Site Conceptual Model, Review – FPL Turkey Point Plan, 06/2013
Turkey Point Monthly Samples (Collection Sheet) for Surface Water and Broadleaf Vegetation, 02/14/2018
WO 40485249 01, Semi-Annual Met Tower Test, 06/16/2017
WO 40519731 01, Semi-Annual Met Tower Test, 12/04/2017

Corrective Action Documents
AR 02146539
AR 02170843
AR 02170847
AR 02170857
AR 02170858
AR 02216406
AR 02208939
AR 02224234
AR 02225845
AR 02228680
AR 02235918
AR 02239855
AR 02249614
AR 02249854

71151: Performance Indicator Verification
Procedures
0-ADM-032, NRC Performance Indicators Turkey Point, Rev. 8

Records and Data
DEP opportunities documentation for 1st, 2nd, 3rd, & 4th quarters 2017
Siren test data for 1st, 2nd, 3rd, & 4th quarters 2017
Drill & exercise participation records of ERO personnel for 1st, 2nd, 3rd, & 4th quarters 2017

Corrective Action Documents
AR 2117723, March 15th 2016 EP Drill –DEP issue
AR 2131004, F662 – DEP evaluation form
AR 2154608, F662 – DEP evaluation form
AR 2164333, Missed E-Plan drill and exercise performance (DEP)
AR 2180634, 2017 January 18th ERO drill – late notification of PAR
AR 2180974, 2017 January 18th ERO drill – incorrect classification

71124.01 - Radiological Hazard Assessment and Exposure Control

Procedures, Guidance Documents, and Manuals

0-ADM-605, Control of Radioactive Material, Rev. 5A
ODI-CO-044, Operations Pre-Job Briefs and Peer Check Flow Chart (no revision no.)
RP-AA-100-1002, Radiation Worker Instruction and Responsibilities, Rev. 6
RP-AA-103-1001, Posting Requirements for Radiological Hazards, Rev. 4
RP-AA-107, Radioactive Material Control Program, Rev. 1

Records and Data Reviewed

Final Activity Report, Sample No. 465508, 1/24/18
RWP No. 18-0001, Task 2, Operations Department Routine Activities, Rev. 0
Survey No. PTN-M-20171005-26, Aux Roof, Leaking IX Filler, 10/5/17
Survey No. PTN-M-20171223-5, Aux Roof, U4 Demin Resin Fill Header - Post Coating / Decon Survey, 12/22/17
Survey No. PTN-M-20171227-4, Aux Roof, Aux Roof Survey (Quarterly), 12/27/17
Survey No. PTN-M-20180121-9, Aux Roof, Leak from Vlv. 4-421, 1/21/18
Survey No. PTN-M-20180122-2, Aux Roof, Leak from Vlv. 4-421, 1/22/18

Corrective Action Documents

AR 02245523