



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

May 14, 2019

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  
05000250/2019001 AND 05000251/2019001

Dear Mr. Nazar:

On March 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Turkey Point Nuclear Generating Station, Units 3 and 4. On April 25, 2019, the NRC inspectors discussed the results of this inspection with Mr. Grant Melin, acting Site Director, and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented three findings of very low safety significance (Green) in this report. These findings involved violations of NRC requirements. Additionally, NRC inspectors documented one Severity Level IV violation with no associated finding. 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 or severity of the violations 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 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 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

Docket Nos.: 05000250 and 05000251  
License Nos.: DPR-31 and DPR-41

Enclosure:  
Inspection Report 05000250/2019001 and 05000251/2019001

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REGULATORY COMMISSION INTEGRATED INSPECTION REPORT  
05000250/2019001 AND 05000251/2019001

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ADAMS ACCESSION NUMBER: **ML19134A371**

OFFICE						
NAME	P. Cooper	A. Wilson	J. Walker	R. Carrion	R. Reyes	S. Downey
DATE	5/8/2019	5/7/2019	5/6/2019	5/3/2019	5/8/2019	5/7/2019
OFFICE					DRP	DRP
NAME	C. Fontana	A. Butcavage	L. Wade	S. Sanchez	R. Taylor	R. Musser
DATE	5/6/2019	5/2/2019	5/2/2019	5/2/2019	5/10/2019	05/14/2019

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number(s): 05000250 and 05000251

License Number(s): DPR-31 and DPR-41

Report Number(s): 05000250/2019001 and 05000251/2019001

Enterprise Identifier: I-2019-001-0018

Licensee: Florida Power & Light Company (FPL)

Facility: Turkey Point Nuclear Generating Station, Units 3 and 4

Location: 9760 SW 344th Street  
Homestead, FL 33035

Inspection Dates: January 01, 2019 to March 31, 2019

Inspectors: A. Butcavage, Reactor Inspector  
R. Carrion, Senior Reactor Inspector  
P. Cooper, Senior Reactor Inspector  
S. Downey, Senior Reactor Inspector  
C. Fontana, Emergency Preparedness Inspector  
J. Gavula, Mechanical Engineer  
W. Loo, Senior Health Physicist  
J. Orr, Senior Resident Inspector  
J. Reyes, Resident Inspector  
S. Sanchez, Senior Emergency Preparedness Insp  
J. Walker, Emergency Response Inspector

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 the licensee’s performance by conducting a Quarterly inspection at Turkey Point Nuclear Generating Station 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. Findings and violations being considered in the NRC’s assessment are summarized in the table below.

### List of Findings and Violations

Failure to Maintain Quality Records in Accordance with License Renewal Commitments			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-01 Open/Closed	[H.7] - Documentation	71003
The NRC identified a finding of very low safety significance (Green) and an NCV of 10 CFR Part 50, Appendix B, Criterion XVII, “Quality Assurance Records,” for the licensee’s failure to maintain quality records in accordance with established requirements.			

Failure to Perform Structures Monitoring Program Inspections in Accordance with License Renewal Commitments			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-02 Open/Closed	[H.14] - Conservative Bias	71003
The NRC identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for multiple examples of the licensee’s failure to inspect several safety related structures in accordance with license renewal commitments.			

Failure to Correctly Reset the 'C' AFW Pump T&T Lever			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-03 Open/Closed	[H.8] - Procedure Adherence	71111.12
A self-revealing, Green, Non-cited violation (NCV) of procedure 3-NOP-075, Auxiliary Feedwater System, was identified when the licensee failed to use the procedure to reset the mechanical trip lever on the ‘C’ auxiliary feedwater pump trip and throttle (T&T) valve. The trip lever was not correctly reset rendering the C auxiliary feedwater (AFW) pump inoperable.			

Main Steam Safety Valve Test Failures			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Not Applicable	NCV 05000250/2019001-04 Open/Closed	Not Applicable	71153
A self-revealed Severity Level IV Non-cited Violation (NCV) of Technical Specification (TS) 3.7.1.1 was identified when the licensee operated the plant with main steam safety valves (MSSVs) which were found to have lift pressure setpoints that were not within TS lift setting tolerance.			

### Additional Tracking Items

Type	Issue number	Title	Report Section	Status
LER	05000250/2018-001-00	LER 2018-001-00 for Turkey Point Unit 3, Inoperable Containment Purge Exhaust Penetration	71153	Closed
LER	05000250/2018-002-00	LER-2018-002-00 for Turkey Point, Unit 3, As-Found Cycle 29 Main Steam Safety Valve Setpoints Outside Technical Specification Limits	71153	Closed

## PLANT STATUS

Unit 3 began the inspection period at rated thermal power. On January 21, 2019, the unit was down powered to 75 percent due to the 3A steam generator feed pump recirculation valve, CV-3-1413, failing open and subsequent 3C steam generator water level lowering. The unit was returned to rated thermal power on January 22, 2019, and remained there for the remainder of the inspection period.

Unit 4 began the inspection period at rated thermal power. On March 11, 2019, the unit was shutdown to start refueling outage 4PTN31. The unit remained in 4PTN31 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

#### Seasonal Extreme Weather Sample (IP Section 03.02) (1 Sample)

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

1. Unit 3 and Unit 4 emergency diesel generators (EDGs) on January 17 and 18, 2019
2. Unit 3 and Unit 4 chemical, volume, and control system on January 24, 2019

### 71111.04 - Equipment Alignment

#### Partial Walkdown (IP Section 02.01) (4 Samples)

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

- (1) 3A emergency diesel generator while the 3B EDG was out of service (OOS) on January 29, 2019
- (2) 3A intake cooling water (ICW) header while the 3B ICW header was OOS on February 13, 2019
- (3) 3B containment spray (CS) pump while the 3A CS pump was OOS on March 5, 2019
- (4) Unit 4 residual heat removal system with reactor coolant system level established 1.5 feet below the reactor vessel head flange on March 14, 2019

#### 71111.05A - Fire Protection (Annual)

##### Annual Inspection (IP Section 03.02) (1 Sample)

The inspectors evaluated fire brigade performance on January 16, 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) 4A EDG starting air compressors (Fire zone FZ 138), 4B EDG starting air compressors (FZ 133), 3D 4kV switchgear room (FZ 134), 4D 4kV switchgear room (FZ 139), 4A EDG control room (FZ 140), and 4B EDG control room (FZ 135) on January 10, 2019
- (2) 4A EDG diesel oil transfer pump room (FZ 141) and 4B EDG diesel oil transfer pump room (FZ 136) on January 10, 2019
- (3) Unit 3 reactor control rod equipment room (FZ 63), Unit 3 condensate storage tank area (FZ 89), Unit 3 and Unit 4 computer room (FZ 62), and Unit 4 reactor control rod equipment room (FZ 61) on January 14, 2019
- (4) Unit 4 condensate storage tank area (FZ 113) on January 11 and 24, 2019
- (5) Unit 3 charging pump room (FZ 55) and Unit 4 charging pump room (FZ 45) on February 9, 2019

#### 71111.06 - Flood Protection Measures

##### Inspection Activities - Underground Cables (IP Section 02.02c.) (1 Sample)

The inspectors evaluated cable submergence protection in:

Manholes 714 and 715 for cables associated with the 3D and 4D safety-related 4kV switchgear busses on March 7 and 27, 2019

#### 71111.07A - Heat Sink Performance

##### Annual Review (IP Section 02.01) (2 Samples)

The inspectors evaluated readiness and performance of:

- (1) 4B component cooling water (CCW) heat exchanger on February 6, 8, and 22, 2019.
- (2) 4E208A and 4E208B spent fuel pool heat exchangers on March 18, 27 and 29, 2019.

#### 71111.08P - Inservice Inspection Activities (PWR)



PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

The inspectors verified that the reactor coolant system boundary, steam generator tubes, reactor vessel internals, risk-significant piping system boundaries, and containment boundary are appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined and accepted by reviewing the following activities from March 18, 2019 to March 22, 2019:

03.01.a - Nondestructive Examination and Welding Activities.

1. PTN4-UT-19-013, Ultrasonic Inspection Summary No. PTN4-084301, Component ID: 2"-RC-1401-3, Elbow to Pipe Weld, ASME Class 1, (Reviewed)
2. PTN4-UT-19-014, Ultrasonic Inspection Summary No. PTN4-082901, Component ID 2"-RC-1403-3, Elbow to Pipe Weld, ASME Class 1, (Reviewed)
3. PTN4-UT-UT-19-015 Ultrasonic Inspection Summary No. PTN4-083701 Component ID: 2"-RC-1402-3, Elbow to Pipe Weld, ASME Class 1, (Reviewed)
4. Ultrasonic Examination Report 19-045, System 068/P-19A Containment Spray Piping, Unit-4, WO 40570432-06 and 40586078-01, 3/19/19 (Observed)
5. Work Order 40151541, Radiographic (RT) Inspection Report, Welds FW-2 and FW-3, Containment Spray Pipe, ASME Class 2 (Reviewed)

03.01.b - Pressurized-Water Reactor Vessel Closure Head (RVCH) Penetration Examination Activities.

1. Penetration No. 55, 59, 62, 64, 65, 66, 67, 68, 69 (Video File Review)
2. Bare Metal Head Surface, Examination by Remote Camera (Observed in Field)

03.01.c – Pressurized-Water Reactor Boric Acid Corrosion Control Activities.

1. Action Report 02305654, Boric Acid Residue Discovered on Lower Reactor Vessel Head
2. NRC independent walk-down (w/d) inspection of RCS loop "B" cubicle, primary system shield wall penetrations
3. NRC independent w/d inspection of accessible reactor vessel upper head Surfaces and for leakage from above
4. NRC independent w/d inspection of random valves and piping: primary system sampling lines, seal table area, safety injection accumulators, including associated tap-off instrument lines and associated valves

03.01.d – Pressurized-Water Reactor Steam Generator Tube Examination Activities

1. Steam generators 4A, 4B and 4C, were subjected to Eddy Current examinations
2. Steam generators 4A, 4B and 4C, were subjected to secondary side visual examinations

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (7 Samples)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during entry into 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channel, which resulted from an anomaly for the 4A steam generator high steam flow instrument on January 10, 2019.

- (2) The inspectors evaluated licensed operator performance in the control room after the 3A steam generator feedwater pump recirculation valve failed open on January 21, 2019.
- (3) The inspectors observed and evaluated licensed operator performance in the control room during Unit 3 power ascension on January 22, 2019.
- (4) The inspectors observed and evaluated licensed operator performance in the control room during Unit 4 reactor operator and senior reactor operator turnover board walkdowns and crew relief meeting on February 5, 2019.
- (5) The inspectors observed and evaluated licensed operator performance in the control room after a leak repair in containment to reduce Unit 4 unidentified reactor coolant system leakrate from sample line fittings on February 9, 2019.
- (6) The inspectors observed and evaluated licensed operator performance in the control room during a start of the 4A containment spray pump for surveillance testing on February 12, 2019.
- (7) The inspectors observed and evaluated licensed operator performance in the control room during a transfer of the Unit 3 main feedwater regulating valves to manual and back to automatic control for instrument and controls surveillance test conditions on February 20, 2019.

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

The inspectors observed and evaluated a simulator scenario administered to an operating crew on February 11, 2019.

71111.12 - Maintenance Effectiveness

Quality Control (IP Section 02.02) (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance activities:

Work order (WO) 40549688, high head safety injection to reactor coolant system cold legs motor-operated valve, MOV-4-843A, overhaul on March 20 and 21, 2019.

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (1 Sample)

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

Action Request (AR) 2286774, C auxiliary feedwater pump turbine trip throttle valve mechanically tripped (October 19, 2018) on February 7, March 26 and 27, 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 3 and Unit 4 online risk with Unit 3 2B load center and switchgear rooms air conditioning, Unit 4 1A load center and switchgear rooms air conditioning, 4B CCW

heat exchanger, 4B ICW pump, ICW header B to CCW basket strainer BS-3-1403, and electric equipment room air handling unit V77 out of services (OOSs) on February 5 and 6, 2019

- (2) Unit 3 online risk with 2B load center and switchgear rooms air conditioning and 3B steam dump to atmosphere control valve CV-3-1607 OOSs on February 20, 2019
- (3) Unit 3 and Unit 4 online risk with Unit 3 2A load center and switchgear rooms air conditioning, 4CD diesel driven instrument air compressor, 4A and 4B charging pumps, and Unit 4 emergency boration valve MOV-4-350 OOSs on March 6, 2019
- (4) Unit 3 online risk and Unit 4 shutdown risk with 4B 4kV switchgear, 4C transformer, Unit 4 refuel water storage tank, 4B motor control center, and the Unit 3 2A load center and switchgear rooms air conditioning OOSs and the 4C load center cross-tied to the 4D load center on March 18 and 19, 2019
- (5) Unit 3 online risk and Unit 4 shutdown risk with 3A2 and 3B2 battery chargers, Unit 3 2A load center and switchgear rooms air conditioning, 4CM instrument air compressor, Unit 4 1A and 1B load center and switchgear rooms air conditioning, Unit 4 refuel water storage tank, 4C transformer, and the E234 electric equipment room chiller OOSs on March 25, 2019

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Sample Selection (IP Section 02.01) (5 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) AR 2296174, pressurizer relief tank primary water makeup containment isolation valve failed inservice testing stroke time on January 16 and 18, 2019
- (2) AR 2299806, 3B EDG high axial vibration on January 30, 2019
- (3) AR 2299687, prompt operability determination for corrosion identified on Unit 3 auxiliary feedwater (AFW) pipe on January 30 and 31, 2019
- (4) ARs 2296550 and 2297199, B and C AFW pump differential pressure increases on February 14 and 15, 2019
- (5) AR 2307450, charging to reactor coolant loop A check valve, 4-312A, has excessive back leakage on March 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 permanent modification:

Engineering Change 289580 Unit 3 Replacement of the Auxiliary Feedwater Electro Pneumatic (I/P) Transducers on March 12, 18, and 29, 2019

#### 71111.19 - Post Maintenance Testing

##### Post Maintenance Test Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) 4-OSP-075.1, Auxiliary Feedwater Train Operability Verification after disassembly and inspection of AFW-3-017, lube water return check valve on January 23, 2019
- (2) 4-OSP-019.1, Intake Cooling Water (ICW) Inservice Test after replacement of the 4B ICW pump discharge check valve on February 8, 2019
- (3) WO 40528767, AFW B CR3 Relay: 3yr Replacement Functional Testing, after replacement of the AFW pump B CR3 relay on February 7, 2019
- (4) MA-AA-203-1000, Maintenance Testing, after replacement of HIC-3-1607-1, Unit 3B main steam line steam to atmosphere dump valve hand indicating controller replacement at the alternate shutdown panel on February 20, 2019

#### 71111.20 - Refueling and Other Outage Activities

##### Refueling/Other Outage Sample (IP Section 03.01) (1 Partial)

The inspectors evaluated refueling outage 4PTN31 which began on March 11, 2019. Unit 4 continued in its thirty-first refueling outage at the end of the inspection period.

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Containment Isolation Valve (ISO) (IP Section 03.01) (1 Sample)

4-OSP-051.5, Local Leak Rate Tests for the containment equipment hatch o-ring seals on March 11, 2019

##### FLEX Testing (IP Section 03.02) (1 Sample)

0-OSP-083.42, Periodic Testing of the 20kW Diesel Generator MMG25IF4-DG25T-2 on January 24, 2019

##### In Service Testing (IST) (IP Section 03.01) (2 Samples)

- (1) 3-OSP-030.1, Component Cooling Water (CCW) Pump Inservice Test (3B and 3C CCW pumps) on January 4, 2019
- (2) 3-OSP-068.5A, 3A Containment Spray Pump Inservice Test on March 5, 2019

##### Reactor Coolant System (RCS) Leak Detection (IP Section 03.01) (1 Sample)

4-OSP-041.1, Reactor Coolant System Leak Rate Calculation on February 11 - 13, 2019

##### Surveillance Testing (IP Section 03.01) (4 Samples)

- (1) 3-OSP-050.2A, Residual Heat Removal Train A Test - Standby Alignment on January 16 -17, 2019
- (2) 4-OSP-023.1, Diesel Generator Operability Test (4A EDG normal start test) on January 22, 2019
- (3) 3-OSP-023.1, Diesel Generator Operability Test (3A EDG local rapid start test) on March 8, 2019

- (4) 4-OSP-203.2, Train B Engineered Safeguards Integrated Test, Section 7.2, Safety Injection with Offsite Power Available, and Section 7.3, Loss of Offsite Power Coincident with Safety Injection on March 27, 2019

#### 71114.01 - Exercise Evaluation

##### Inspection Review (IP Section 02.01-02.11) (1 Sample)

The inspectors evaluated the biennial emergency plan exercise during the week of February 18, 2019. The exercise scenario simulated a loose part in the lower part of the reactor area that caused damage to the fuel cladding and a corresponding rise in the letdown radiation monitor. The radiation rise resulted in the declaration of an Unusual Event and a short time later, declaration of an Alert. A reactor coolant system leak developed and increased to 800 gallons per minute, which caused a safety injection and reactor trip with three control rods not inserting, resulting in more fuel damage. A Site Area Emergency was then declared. Lastly, a containment penetration failed, creating an offsite radiological release that led to a General Emergency simulated classification and allowed the Offsite Response Organizations to demonstrate their ability to implement emergency actions.

#### 71114.04 - Emergency Action Level and Emergency Plan Changes

##### Inspection Review (IP Section 02.01-02.03) (1 Sample)

The inspectors evaluated submitted Emergency Action Level, Emergency Plan, and Emergency Plan Implementing Procedure changes during the week of February 18, 2019. This evaluation does not constitute NRC approval.

#### 71114.06 - Drill Evaluation

##### Emergency Preparedness (EP) Drill (IP Section 02.01) (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 January 23, 2019.

#### 71114.08 - Exercise Evaluation Scenario Review

##### Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

The inspectors reviewed and evaluated in-office, the proposed scenario for the biennial emergency plan exercise at least 30 days prior to the day of the exercise.

### **OTHER ACTIVITIES – BASELINE**

#### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

##### Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

January 2018 through December 2018

Drill/Exercise Performance (IP Section 02.12) (1 Sample)

January 2018 through December 2018

ERO Drill Participation (IP Section 02.13) (1 Sample)

January 2018 through December 2018

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (2 Samples)

- (1) Unit 3 January 2018 through December 2018.
- (2) Unit 4 January 2018 through December 2018.

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (2 Samples)

- (1) Unit 3 January 2018 through December 2018.
- (2) Unit 4 January 2018 through December 2018.

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (2 Samples)

- (1) Unit 3 January 2018 through December 2018.
- (2) Unit 4 January 2018 through December 2018.

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

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

- (1) AR 2239727, Major Gaps to Effectiveness - Structures Monitoring, initiated December 8, 2017, was selected to verify that FPL was appropriately addressing licensee identified gaps in implementing its aging management program for structures monitoring. The structures monitoring gaps were identified through an FPL self-assessment of all Turkey Point aging management programs. Implementation of the structures monitoring program is a requirement of the renewed operating license during the period of extended operation to manage the effects of aging on structures in scope and ensures the effects of aging will be adequately managed so that the intended functions will be maintained consistent with the current licensing basis for the period of extended operation.
- (2) AR 1743066, Through Wall Leak in Containment Spray Pipe 4-2922, initiated March 9, 2012, was selected to verify that FPL was appropriately resolving carbon steel corrosion issues in the Unit 4 containment spray header inside containment as well as an extent of condition review for potential similar conditions in the Unit 3 containment spray header.

## 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 which can be accessed at <https://lersearch.inl.gov/LERSearchCriteria.aspx>:

- (1) LER 05000250/2018-001-00, Containment Purge Exhaust Penetration Fails Leak Rate Test (ADAMS accession: ML18325A209)

The circumstances surrounding this LER are documented in the Results section.

- (2) LER 05000250/2018-002-00, As-Found Cycle 29 Main Steam Safety Valve Setpoints Outside Technical Specification Limits (ADAMS accession: ML18325A208)

The circumstances surrounding this LER are documented in the Results section.

## **OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL**

### 71003 - Post-Approval Site Inspection for License Renewal

The NRC continued monitoring FPL's performance at Turkey Point by conducting a Post-Approval Site Inspection for License Renewal - Phase 4 in accordance with the license renewal inspection program (LRIP). The LRIP is the process used by NRC staff to verify the adequacy of aging management programs (AMPs) and other activities associated with an applicant's request to renew an operating license of a commercial nuclear power plant beyond the initial licensing period under 10 CFR Part 54, "Requirements for the Renewal of Operating Licenses for Nuclear Power Plants."

### Post-Approval Site Inspection for License Renewal (1 Sample)

For the following components, the inspectors interviewed plant personnel, reviewed completed work orders, and reviewed the acceptability of inspection results to verify that there is reasonable assurance that the effects of aging are being adequately managed so that the intended function(s) are being maintained consistent with the current licensing basis.

1. Field Erected Tanks Internal Inspection Program (Updated Final Safety Analysis Report (UFSAR) Section 16.1.4)
  - a. Refueling Water Storage Tank
  - b. Demineralized Water Storage Tank
  - c. Condensate Storage Tank
2. Galvanic Susceptibility Inspection Program (UFSAR Section 16.1.5)
  - a. Standby Steam Generator Feedwater Pump A & B (P82A & P82B)
  - b. Unit 3 Diesel Driven Instrument Air Compressor (3CD)
  - c. Diesel Fire Pump (P101)
  - d. Unit 4 Instrument Air Receiver Tank (4T10)
  - e. Auxiliary Feedwater Pumps B & C (P2B & P2C)
  - f. Unit 3 CCW Surge Tank (3T218)

3. Reactor Vessel Internals Aging Management Program (UFSAR Section 16.1.6)
  - a. Reactor Vessel, Equipment No. AC-3T237
    - i. Baffle Former Bolts
    - ii. Baffle Plate Edge Bolts
    - iii. Upper Flange Weld
    - iv. Thermal Shield Flexures
    - v. Guide Plates
    - vi. Hold-down Spring
  - b. Reactor Vessel, Equipment No. AC-4T237
    - i. Baffle Former Bolts
    - ii. Baffle Plate Edge Bolts
    - iii. Upper Flange Weld
    - iv. Thermal Shield Flexures
    - v. Guide Plates
    - vi. Hold-down Spring
4. Containment Spray System Piping (UFSAR Section 16.2.5)
  - a. Containment Spray to Emergency Containment Filter B Check Valve 4-2922
  - b. 6" Pipe Elbow I-CSA-E-1
  - c. 6" Pipe Elbow I-CSA-E-7
  - d. 6" Pipe Elbow I-CSA-E-9
  - e. 6" Pipe Elbow I-CSB-E-1
  - f. 6" Pipe Elbow I-CSB-E-2
5. Flow-Accelerated Corrosion ((UFSAR Section 16.2.9)
  - a. Feedwater Heater 5A, E5A-E-2
  - b. Feedwater Heater 5B, E5B-E-2
6. Periodic Surveillance and Preventative Maintenance Program (UFSAR Section 16.2.11)
  - a. Emergency Diesel Generator 3B (3K4B)
  - b. Unit 3 Diesel Oil Storage Tank (3T36)
  - c. Diesel Oil Storage Tank 4A & 4B (4T259A & 4T259B)
  - d. Intake Cooling Water Pump 3A (3P9A)
  - e. Cable Spreading Room Air Handling Unit (S75B)
  - f. Unit 3 Residual Heat Removal Room B Area Sump Pumps (P326A & P326B)
  - g. Unit 4 Normal Containment Cooler B (4V1B)
  - h. Residual Heat Removal Pump Discharge Check Valve (3-753A)
7. Systems and Structures Monitoring (UFSAR Section 16.2.15)
  - a. U3 & U4 RHR Heat Exchanger Shell (System 050)
  - b. CCW Pump (System 030)
  - c. CRDM Coolers (System 027A)
  - d. U3 & U4 Polar Crane
  - e. U3 & U4 Containment Building
  - f. North and South Pipe Headwall
  - g. Intake Structure
  - h. U4 EDG Building
  - i. U3 Tendons
8. Thimble Tube Inspection Program (UFSAR Section 16.2.16)
  - a. Unit 3 Thimble Tubes
  - b. Unit 4 Thimble Tubes



## INSPECTION RESULTS

Observation	71152
<p>No findings were identified. The inspectors reviewed AR 1743066, "through wall leak in containment spray pipe 4-2922," which was an issue associated with boric acid corrosion and corrosion product build up in the containment spray system and was originated on March 9, 2012. The corrosion was known to exist since 1986 and was periodically monitored.</p> <p>The licensee identified that borated water had been leaking past containment isolation valves MOV-4-880A and MOV-4-880B. This containment isolation valve separates the stainless steel piping from the carbon steel piping of the containment spray system. This leakage results in borated water filling the carbon steel riser piping in the containment spray system to a level that corresponds to the water level in the refueling water storage tank (RWST). This leakage also results in long term exposure of the carbon steel piping to a borated water environment.</p> <p>Previously, the licensee had identified and evaluated this condition in nonconformance report No. 86-344 and 86-345 and found the corrosion to be acceptable. Subsequent inspections of the areas deemed most susceptible were ultrasonically tested and a corrosion rate was established under CR 00-1803 and 01-1984. These condition reports established a specific location and frequency for continued surveillance. However, a leak subsequently occurred at dissimilar weld location in an area that was not considered as one of the most susceptible locations in that evaluation.</p> <p>During the ten year flow test, one of the spray nozzles also became blocked. Actions were taken during the test to dislodge the material, however, the material was not recovered or examined. Reducing the number of nozzles available due to blockage has a potential to impact the safety related function of the containment spray system due to the quantity of flow required to be delivered during accidents such as a loss of coolant accident or main steam line break.</p> <p>During the 4PTN31 Unit 4 outage, under WO 40650811, the licensee replaced a portion of the carbon steel piping with stainless steel. Additionally, the licensee had the corrosion products evaluated and the removed section of pipe ultrasonically tested. Furthermore, visual exams and cleaning activities were performed on the existing piping, including an 85ft horizontal run, that was not being replaced.</p> <p>The licensee performed a prompt operability determination for the Unit 4 containment spray system which included the results of a technical evaluation performed by Westinghouse on the Unit 3 containment spray system for the potential clogging due to pipe corrosion and particle transport. The prompt operability determination evaluated the following potential impacts; (1) spray nozzle clogging, (2) reduced spray flow delivery, (3) pipe wall thinning, (4) decreased fission product scrubbing capabilities, and (5) downstream effect on sump performance (GSI-191 evaluation). The licensee determined that based on the conditions described for each potential impact that the Unit 4 containment spray system will be classified as operable but degraded. Consequently, Unit 3 will also be classified as operable but degraded.</p> <p>The inspectors concluded that the licensee was making adequate decisions to address the degradation issues in the containment spray system piping and that system operability was appropriately evaluated.</p>	

Failure to Maintain Quality Records in Accordance with License Renewal Commitments			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-01 Open/Closed	[H.7] - Documentation	71003
<p>The NRC identified a finding of very low safety significance (Green) and an NCV of 10 CFR Part 50, Appendix B, Criterion XVII, "Quality Assurance Records," for the licensee's failure to maintain quality records in accordance with established requirements.</p>			
<p><u>Description:</u> Procedure, 0-ADM-561, "Structures Monitoring Program," implements the requirements for the Structures Monitoring Program. Section 5.0 "Records" states that hard copies of all approved/signed structural deficiency reports shall be retained. Structural deficiency reports for initial discoveries are recorded on Form 2 (or equivalent), and follow-up inspections are recorded on Form 4 (or equivalent). Additionally, Section 4.1.1 "General Considerations and Limitations" states that concrete structures shall be inspected, assessed and accepted using the guidance in ACI 201.1R, Guide for Making a Condition Survey of Concrete in Service, and ACI 349.3R, Evaluation of Existing Nuclear Safety- Related concrete Structures.</p> <p>The PTN-ENG-SECS-17-019, 2017 PTN Structures Monitoring Program Report is the quality record for the structures monitoring program. ACI 201.1R, Guide for Making a Condition Survey of Concrete in Service, specifies that the inspection results document the present condition of the structure. Specifically, deficiencies such as cracking are to specify the location and frequency, crack map, width and pattern, leaching, and working versus nonworking. In the Structures Monitoring Program Report, the details of the 2017 inspections were documented in a tabulated format. The table included the date of the inspection, operability concern, potential for prompt repair, requirement for an engineering evaluation, probable cause, the recommended action, and notes qualitatively describing the progression of the degraded condition. The quality record, however, did not provide the inspection results, specifically identified in ACI 201.1R which would document the present condition of the structures.</p> <p>Corrective Action(s): FPL entered these issues into its CAP as AR 02306492 to address the trending of deficiencies associated with the components in scope of license renewal.</p> <p>Corrective Action Reference(s): AR 02306492</p>			
<p><u>Performance Assessment:</u></p> <p>Performance Deficiency: The inspectors determined that the failure to create the structural deficiency reports as required by 0-ADM-561, "Structures Monitoring Program," and in accordance with the guidelines committed to in ACI 201.1R, Guide for Making a Condition Survey of Concrete in Service, was a performance deficiency.</p> <p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. It affected the cornerstone objective in that records of activities</p>			

affecting quality (e.g., inspection results) must be maintained in order to provide auditable assurance of system operability.

Additionally, the inspectors determined that this finding was more than minor because it was similar to IMC 0612, Appendix E, "Examples of Minor Issues," Example 1b, which states that record keeping issues would be more than minor if required records were irretrievably lost. In this case, the inspectors identified that the inspection results required to be documented in the structural deficiency reports were unable to be reproduced and thus were irretrievably lost.

Significance: The inspectors assessed the significance of the finding using Appendix A, "Significance Determination of Reactor Inspection Findings for At - Power Situations". The inspectors determined the finding was of very low safety significance because it did not result in a loss of system safety function, was not an actual loss of safety function for greater than the TS allowed outage time, and did not screen as a potentially significant seismic, flooding, or severe weather issue.

Cross-cutting Aspect: H.7 - Documentation: The organization creates and maintains complete, accurate and up-to-date documentation.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion XVII, "Quality Assurance Records," requires, in part, that sufficient records be maintained to furnish evidence of activities affecting quality. Quality records requirements state that, at a minimum, inspection and test records shall identify the type of observation, the results, the acceptability and the action taken in connection with the deficiencies noted. Procedure 0-ADM-561, "Structures Monitoring Program," Revision 7, established requirements for the classification and retention of records.

Contrary to the above, the licensee, as documented in the 2017 PTN Structures Monitoring Report, dated March 8, 2019, failed to furnish evidence of activities affecting quality in that the inspection results of the report were not documented in accordance with ACI 201.1 R, as committed in 0-ADM-561, as the present condition of the structures were not recorded to support the acceptability of the safety related concrete structures. As a result, the inspection results were determined to be irretrievably lost and unable to be reproduced.

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

Failure to Perform Structures Monitoring Program Inspections in Accordance with License Renewal Commitments			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-02 Open/Closed	[H.14] - Conservative Bias	71003

The NRC identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for multiple examples of the licensee's failure to inspect several safety related structures in accordance with license renewal commitments.

Description: The inspector identified the first example, during the review of the Structures Monitoring Program, that the inspection of the submerged portion of the intake cooling structures (below the -2ft elevation) was not being performed. Procedure 0-ADM-561, 'Structures Monitoring Program' attachment 1, "License Renewal Scope: Structural System/Components," states that reinforced concrete foundations, columns, walls, beams and floors exposed to ground water and/or saltwater required a visual inspection of exposed surfaces. Additionally, the licensee committed in 0-ADM-561, Section 4.1.1 "General Considerations and Limitations" to inspect, assess and accept concrete structures using the guidance in ACI 201.1R, Guide for Making a Condition Survey of Concrete in Service, and ACI 349.3R, Evaluation of Existing Nuclear Safety-Related concrete Structures. ACI 349.3R specifies, per table 6.1- Frequency of Inspection that continuous fluid-exposed structures shall be inspected every 5 years, and that below-grade structures shall be inspected every 10 years.

The second example was identified by the resident inspector as a result of the review associated with AR2239727. The licensee generated AR 2239727 on December 8, 2017, when it was identified that several Unit 3 structural inspections were not completed within 5 years. 0-ADM-561, Structures Monitoring Program required that all plant structures within scope of the license renewal program be inspected at a frequency no greater than 5 years. 0-ADM-561 also stated that this was a commitment to the NRC within the license renewal program. The licensee took actions in response to AR 2239727 and expedited the identified late structural inspections for Unit 3 and ensured the Unit 4 structural inspections were completed within 5 years of the previous structural inspections. After the inspections and corrective actions were completed, the licensee closed AR 2239727 on June 1, 2018. The licensee documented the completed structures monitoring walkdowns in Form 1 of PTN-ENG-SECS-17-019, 2017 PTN Structures Monitoring Program Report. The inspectors reviewed Form 1 of PTN-ENG-SECS-17-019 and identified that several structures were not walked down and were deferred for more opportune times because of safety, ALARA, or inaccessible conditions. The inspectors also noted that the licensee was yet to schedule or determine when a more opportune time would occur to perform the deferred structural inspections. Lastly, the inspectors noted that several of the deferred structures were relatively simple to access with appropriate precautions such as the vital 125Vdc battery rooms or trenches in the auxiliary and emergency diesel generator buildings. Other deferred areas required routine access for maintenance purposes or other inspection programs such as the auxiliary building 10' radioactive pipeway and areas of the containment buildings. 0-ADM-561, Section 4.5.1, required the structures monitoring program owner to provide documented rationale for not conducting inspections and/or deferral. The inspectors identified that the rationale was not documented and for some locations that were relatively simple to access with appropriate precautions, such as the vital 125Vdc battery rooms, deferral was not appropriate. The licensee generated AR 2304913 on March 8, 2019, to expedite the structural inspections and for some challenging locations to schedule the inspections at the next available opportunity.

Additionally, in 0-ADM-561, "Structures Monitoring Program," the licensee committed in Section 4.1.1 "General Considerations and Limitations" to inspect, assess and accept concrete structures using the guidance in ACI 201.1R, Guide for Making a Condition Survey of Concrete in Service, and ACI 349.3R, Evaluation of Existing Nuclear Safety- Related concrete Structures. ACI 349.3R Chapter 6 states that the inspection frequency should be

defined by the plant owner based on the aggressiveness of environmental conditions and physical conditions of the plant structures. The established frequencies should also ensure that any age-related degradation is detected at an early stage of degradation and that appropriate mitigative actions can be implemented. 0-ADM-561, Section 4.2, 'Frequency of Structures Monitoring,' states that the frequency may be adjusted as necessary based on future inspection results and industry experience but can NOT (emphasis added) exceed the frequencies show in the table. This table reflects a 5 year inspection frequency for all plants structures in scope of license renewal as a license renewal commitment. The inspector identified that follow-up inspections were not rescheduled and evaluations were not performed to show that the increased inspection frequency would be acceptable.

Corrective Action(s): FPL entered these issues into its CAP as AR 2305563, AR2306492, and AR 2304913 to evaluate the condition of the submerged portion of the intake structure, to review the need for appropriate procedural changes, to expedite the structural inspections, and for some challenging locations to schedule the inspections at the next available opportunity.

Corrective Action Reference(s): ARs 2305563, 2306492, and 2304913

Performance Assessment:

Performance Deficiency: The inspector determined that the failure to perform structures monitoring program inspections in accordance with License Renewal Commitments as described in 0-ADM-561 'Structures Monitoring Program' and ACI 349.3R 'Evaluation of Existing Nuclear Safety- Related concrete Structures' was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. In that it adversely affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, unmonitored concrete degradation of the intake structure, for example, affects the reliability of the ICW systems.

Significance: The inspectors assessed the significance of the finding using Appendix A, "Significance Determination of Reactor Inspection Findings for At - Power Situations". The inspector determined the finding to be of very low safety significance (Green) because it did not represent an actual loss of function of one or more non-tech spec trains of equipment designated as high safety- significant in accordance with the licensee's maintenance rule program for greater than 24 hours.

Cross-cutting Aspect: H.14 - Conservative Bias: Individuals use decision making-practices that emphasize prudent choices over those that are simply allowable. A proposed action is determined to be safe in order to proceed, rather than unsafe in order to stop. Specifically, FPL did not document rationale for deferring several structures monitoring inspections and for some locations that were relatively simple to access with appropriate precautions, such as the vital 125Vdc battery rooms, deferral was not appropriate.

Enforcement:

Violation: Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions and procedures and shall be accomplished in accordance with these instructions

and procedures. 0-ADM-561, 'Structures Monitoring Program,' Section 4.2, 'Frequency of Structures Monitoring,' states that the inspection frequency for structures in-scope of license renewal maybe adjusted as necessary based on future inspection results and industry experience but can NOT (emphasis added) exceed the frequencies show in the table. This table reflects a 5 year inspection frequency as a license renewal commitment.

Contrary to the above, for the 5 year inspection frequency coinciding with 2017, the licensee failed to accomplish prescribed activities affecting quality in accordance with ACI 349.3R, 'Evaluation of Existing Nuclear Safety- Related Concrete Structures,' as committed in 0-ADM-561, 'Structures Monitoring Program,' in that the inspection of the submerged portion of the intake structure, and several other plant structures in scope for license renewal such as the vital 125Vdc battery room, trenches in the auxiliary and emergency diesel generator buildings, the auxiliary building pipeway at the 10' elevation, and areas of the containment building were not performed in accordance with license renewal commitments.

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

Failure to Correctly Reset the 'C' AFW Pump T&T Lever			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250,05000251/2019001-03 Open/Closed	[H.8] - Procedure Adherence	71111.12
A self-revealing, Green, Non-cited violation (NCV) of procedure 3-NOP-075, Auxiliary Feedwater System, was identified when the licensee failed to use the procedure to reset the mechanical trip lever on the 'C' auxiliary feedwater pump trip and throttle (T&T) valve. The trip lever was not correctly reset rendering the C auxiliary feedwater (AFW) pump inoperable.			
<u>Description:</u>			
<p>On October 19, 2018, while aligning the AFW system in preparation for testing, the C AFW T&amp;T valve, MOV 6459C, mechanically tripped when control room operators operated the MOV control switch to the 'close' position. At the time of the T&amp;T valve trip, Unit 3 was in Mode 6 and Unit 4 was in Mode 1 operating at rated thermal power. Unit 4 entered an unplanned 30-day technical specification shutdown action statement.</p> <p>AFW is a shared system between Units 3 and 4 and consists of two independent redundant trains. The A AFW pump is aligned to train 1, and normally the B and C AFW pumps are aligned to train 2. In this configuration if the C pump becomes inoperable, a 30-day shutdown action statement is applicable and each unit maintains two separate and operable trains.</p> <p>Trouble shooting and inspection of the T&amp;T valve and trip lever mechanism did not identify any worn parts or any physical anomalies that could explain why the valve mechanically tripped. As such, no maintenance was completed prior to returning the C AFW pump back to service. The T&amp;T valve lever was reset and the valve was electrically opened and closed several times from the control room in an attempt to repeat the mechanical trip, but the valve</p>			

was reliable and no additional trips occurred.

FPL concluded that the cause of the mechanical trip on October 19, 2018, was due to improper engagement of the T&T valve linkage tappet nut and head lever caused by operators inadequately resetting the mechanical over speed trip lever mechanism. Prior to this incident the last reset occurred on October 16, 2018, after completion of system maintenance. Equipment clearance order (ECO) 3-003-3D23-16 was written to perform maintenance on an AFW system breaker that required the C pump T&T valve to be mechanically tripped. On October 16, 2018, after the maintenance was completed, the ECO release instructed that the tripped T&T valve lever be reset. FPL concluded that on this date the T&T valve lever was not adequately reset and was the cause for the subsequent mechanical trip on October 19, 2018. Specifically, since the lever was not correctly reset, the normal operational vibration of MOV-6459C during the electrical close demand from the control room provided sufficient mechanical vibration for the lever to slip and trip the valve. The T&T valve was in this vulnerable condition from the time the valve was incorrectly reset. A past operability review determined the C AFW pump was inoperable for 65.6 hours.

The pre-job briefing for the ECO release, which required resetting the T&T valve trip lever, included reviewing the AFW system procedural instructions to correctly reset the trip lever, however, the operators completed the procedural steps in the field from memory to reset the lever. Specifically, during the briefing operators reviewed procedure 3-NOP-075, Auxiliary Feedwater System, step 5.9.12 entitled "RESET MOV-6459C, AFW PUMP C T&T VALVE." In addition, step 5.9.12.C instructs the user to "REFER TO Attachment 9, Mechanical Overspeed Latching Scribe Mark Location," and provides the user instructions to "ENSURE tappet nut is contacting the head lever below the scribe mark." Attachment 9 provides a detailed schematic emphasizing the correct position that the trip head lever should be left relative to the scribe mark. The attachment also provides a detailed schematic illustrating an incorrectly set trip head lever. FPL concluded the head lever was incorrectly set as warned in the attachment. FPL previously developed these instructions as a result of fleet and industry operating experience (OE) that identified issues with inadequately resetting AFW T&T trip levers. The inspectors reviewed procedure 3-NOP-075 section 5.9.12 and determined the procedure provided adequate instructions to properly reset the T&T trip lever, but was inappropriately completed from memory in the field on October 19, 2018.

Corrective Action(s):

- A past operability review was completed for the C AFW pump and concluded the pump was inoperable for 65.6 hours.
- ECOs will require all T&T valve resetting be completed in the field using 3/4-NOP-075, Auxiliary Feedwater System as a continuous use where each step of the procedure will be read prior to performing the steps.
- Procedure 3/4-NOP-075, AFW Feedwater System, was revised to include additional instructions to remotely cycle from the control room all T&T valves after resetting the trip lever.
- An extent of condition was completed on the AFW pump A and B T&T valve trip levers and verified that the engagement between the tappet nut and head lever was in the correct position on both valves.

Corrective Action Reference(s): AR 2286774

Performance Assessment:

**Performance Deficiency:** The licensee's failure to correctly reset the 'C' AFW pump T&T valve lever as instructed in procedure 3-NOP-075, Auxiliary Feedwater System, was a performance deficiency.

**Screening:** The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. More specifically, it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, after performing maintenance on the AFW system, the C AFW pump T&T valve trip lever on MOV-6459C was incorrectly reset and caused the pump to become inoperable for 65.6 hours preventing the pump from being able to automatically actuate and supply AFW flow to the Unit 4 steam generators.

**Significance:** The inspectors assessed the significance of the finding using Appendix A, "Significance Determination of Reactor Inspection Findings for At - Power Situations". The inspectors screened this finding using IMC 0609, Attachment 4, "Initial Characterization of Findings," issued October 7, 2016, for Mitigating Systems, and IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012, and determined the finding to be of very low safety significance (Green) because the finding did not represent an actual loss of function of one or more non-Technical Specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. Specifically, with the C AFW pump inoperable, the AFW A and B pumps maintained two independent trains of AFW flow operable.

**Cross-cutting Aspect:** H.8 - Procedure Adherence: Individuals follow processes, procedures, and work instructions. The inspectors reviewed this performance deficiency for cross-cutting aspects as required by IMC 0310, "Aspects Within the Cross-Cutting Areas," dated February 25, 2019. The finding was determined to be reflective of present licensee performance in that during the pre-job briefing on October 16, 2018, operators identified and reviewed the procedure that was to be used for resetting the T&T valve on the C AFW pump. However, the operators failed to use the procedure as continuous use in the field and consequently the T&T valve was not correctly reset. 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 Part 50, Appendix B, Criterion V, requires in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Procedure with detailed instructions for resetting a tripped T&T valve lever on safety-related AFW C T&T valve, MOV-6459C, are provided in procedure 3-NOP-075, Auxiliary Feedwater System, step 5.9.12 entitled "RESET MOV-6459C, AFW PUMP C T&T VALVE." Additionally step 5.9.12.C instructs the procedure user to refer to Attachment 9, "Mechanical Overspeed Latching Scribe Mark Location" and instructs to "ENSURE tappet nut is contacting the head lever below the scribe mark." Attachment 9 provides a detailed schematic showing the correct position that the trip head lever should be relative to the scribe mark. Attachment 9 also provides a schematic illustrating an incorrectly set trip head lever

Contrary to the above, on October 16, 2018 during an ECO release that required resetting the AFW C T&T valve lever, operators did not correctly accomplish resetting the MOV-6459C trip head lever in accordance with 3-NOP-075, Auxiliary Feedwater System, Step 5.9.12 and attachment 9. This violation was corrected on October 19, 2018, when the T&T valve lever was correctly reset as described in procedure 3-NOP-075.

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

Main Steam Safety Valve Test Failures			
Cornerstone	Severity	Cross-cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000250/2019001-04 Open/Closed	Not Applicable	71153
A self-revealed Severity Level IV Non-cited Violation (NCV) of Technical Specification (TS) 3.7.1.1 was identified when the licensee operated the plant with main steam safety valves (MSSVs) which were found to have lift pressure setpoints that were not within TS lift setting tolerance.			
<u>Description:</u> On September 30, 2018, FPL determined that during TS surveillance testing of the MSSVs, as found lift setpoints of two valves exceeded the TS allowable limit of +/- 3% of design pressure. The as-found setpoint pressure of MSSV RV-3-1406 was 1054.8 psig which was 4.11% below the design pressure of 1100 psig. The as-found setpoint pressure of MSSV RV-3-1410 was 1049 psig which was 3.32% below the design pressure of 1085 psig. As a result of the test failures, FPL was required to expand the testing scope to include all MSSVs. Additional testing found that three MSSVs exceeded the +/- 3% TS allowable limit. The as-found setpoint pressure of MSSV RV-3-1407 was 4.98% above the design pressure of 1105 psig. The as-found setpoint pressure of MSSV RV-3-1408 was 3.35% above the design pressure of 1105 psig. The as-found setpoint pressure of MSSV RV-3-1412 was 3.80% above the design pressure of 1105 psig.			

FPL did not identify a definitive deficiency or equipment related cause associated with the low lift setpoints for MSSVs RV-3-1406 and RV-3-1410. The cause was attributable to setpoint drift, possibly associated with minor spring relaxation. The valves associated with high lift setpoints were sent offsite for as-found testing and reported no definitive reason for the high lifts. The cause was attributed to a possible form of friction or binding, but there was no evidence of corrosion or galled parts to give that indication.

Based on a review of the surveillance test results of previous MSSV setpoint tests, the inspectors concluded that an MSSV lifting slightly outside the acceptance tolerance did not indicate a problem with the valve, as-left testing, or surveillance test errors. Specifically, the inspectors found that MSSV performance had been within tolerance in previous years and there was no indication of valve degradation or testing errors. Therefore, the inspectors determined that the existence of an inoperable MSSV was not reasonably within FPL's ability to foresee and correct, and therefore, was not a performance deficiency.

Corrective Action(s): MSSV RV-3-1410 and RV-3-1406 were adjusted to +/- 1% design pressure and returned to operable status. RV-3-1407, RV-3-1408, and RV-3-1412, were replaced with spares with as-left setpoints verified to be within the +/- 1% of design pressure as required by TS 3.7.1.1.

Corrective Action Reference(s): AR 2284896 and AR 2282911

Performance Assessment: The NRC determined this violation was not reasonably foreseeable and preventable by the licensee and therefore is not a performance deficiency.

Enforcement:

This issue is considered within the traditional enforcement process because there was no performance deficiency associated with the violation of NRC requirements. The NRC Enforcement Manual, Section 1.2.8.E.3 states, in part, that, traditional enforcement is used for violations with no associated performance deficiencies.

Severity: The NRC determined the issue to be more than minor because the issue affected multiple MSSVs and a detailed engineering analysis was required to determine the significance of the issue. The NRC Enforcement Policy, Section 2.2.1 states, in part, that, whenever possible, the NRC uses risk information in assessing the safety significance of violations and assigning severity levels. To determine the significance of the issue, the inspectors screened the condition using IMC 0609, Appendix A, "The Significance Determination Process For Findings At Power," and determined that the condition was of very low safety significance (Green) because in the as-found condition, the MSSVs still could have performed their intended safety function in mitigating the consequences of a postulated accident. The average of the as-found test pressures of all MSSVs was below the design pressure analysis limit. Accordingly, after considering that the condition represented very low safety significance, the inspectors concluded that the violation would be best characterized as Severity Level IV under the traditional enforcement process.

Violation: TS 3.7.1.1 requires main steam line code safety valves to be operable in Modes 1, 2, and 3 with lift settings as specified in TS. With one or more valves inoperable, action is required to restore the valve(s) to operable status within four hours, otherwise reduce reactor power in accordance with TS or be in Hot Standby within 6 hours and in Hot Shutdown within the next 12 hours.

Contrary to the above, during the period of Cycle 29 plant operation the licensee operated with inoperable main steam safety valves and failed to take the action required by TS 3.7.1.1. Similar discrepancies in multiple valves is an indication that the discrepancies may have arisen over a period of time; therefore it is reasonable to conclude the condition existed during Cycle 29 plant operation.

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

Minor Violation	71153
<p>Minor Violation: On September 30, 2018, the Unit 3 containment purge exhaust penetration failed its as found local leak rate test (LLRT) with a measured leakage of 21,000 scc/min and was declared inoperable. The penetration has an established acceptance criterion of 13,860 scc/min for allowable leakage in compliance with Technical Specification (TS) 4.6.1.7.2. TS 3.6.1.7, Action B, requires containment purge isolation valves determined to be inoperable to be restored to operable status or the penetration to be isolated within 24 hours, otherwise be in at least Mode 3 within the next 6 hours and in Mode 5 within the following 30 hours. Contrary to the above, the containment purge exhaust penetration was inoperable and not isolated within 24 hours. A past operability evaluation determined the period of inoperability began September 28, 2018, at 0630 when the LLRT was started. That test was aborted due to a scheduling conflict and resumed on September 30, 2018, when the condition was discovered. The condition lasted until Unit 3 entered Mode 5 at 1425 on October 1, 2018 for a planned refueling outage. Therefore, the time requirements of TS 3.6.1.7, Action B, were not met. The containment purge exhaust isolation valves had not been cycled or had work performed on them since the last successful leak test on February 8, 2018. The licensee entered the issue into the corrective action program as AR 2282866. The licensee completed valve inspection and seat adjustment for the outside containment purge isolation valve and successfully completed the final as-left LLRT with acceptable leakage.</p> <p>Screening: The inspectors determined the performance deficiency was minor. The inspectors screened the issue in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," and determined that the violation did not meet the criteria in Block 3 to be a More-than-Minor issue. The inspectors determined that although the containment purge exhaust penetration failed its LLRT, the overall total containment leakage during the time of inoperability was well below the 0.6La leakage limits allowed by TS.</p> <p>Enforcement: This failure to comply with TS 3.6.1.7, Action B, for an inoperable containment purge isolation valve, constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.</p>	

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors confirmed that proprietary information was controlled to protect from public disclosure.

- On March 22, 2019, the inspector presented the Unit-4 Inservice Inspection and Steam Generator Inservice Inspection results to Mr. Grant Melin and other members of the licensee staff.
- On April 25, 2019, the inspector presented the quarterly resident inspector and post approval license renewal inspection results to Mr. Grant Melin and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71003	Calculations	PTN-3FSM-90-0018	Unit 3 Thimble Tube Wear Prediction	Rev. 2
		PTN-4FSM-90-0062	Unit 4 Thimble Tube Wear, Prediction	Rev. 1
		PTN-ENG-LRAM-00-0029	Containment Spray System Piping Inspection Program – License Renewal Basis Document	Rev. 5
		PTN-ENG-LRAM-00-0030	Thimble Tube Inspection Program – License Renewal Basis Document	Rev. 3
		PTN-ENG-LRAM-00-0033	Flow-Accelerated Corrosion Program – License Renewal Basis Document	Rev. 4
		PTN-ENG-LRAM-00-0042	Systems and Structures Monitoring Program – License Renewal Basis Document	Rev. 12
		PTN-ENG-LRAM-00-0043	Periodic Surveillance and Preventative Maintenance Program – License Renewal Basis Document	Rev. 9
		PTN-ENG-LRAM-00-0054	Galvanic Corrosion Susceptibility Inspection Program License Renewal Basis Document	Rev. 6
	Corrective Action Documents	1638881		
		1709832		
		1709832		
		1731382		
		1742068		
		1743066		
		1747433		
		1748641		
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		1766910		
		1766970		
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		1768139		
		1768154		
		1768157		
		1778539		
		1778613		
		1778629		
		1787982		
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		1788007		
		1788020		
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		1818947		
		1818952		
		1831010		
		1836586		
		1843890		
		1843907		
		1915328		
		1951163		
		1951878		
		1953095		
		1988655		
		1994942		
		2124311		
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		2231145		
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		2239743		
		2239743		
		2245034		
		2253333		
		2278333		
		2284866		
		2285104		
		2286555		
		2293595		
		2296161		
		2296553		
	Corrective Action Documents Resulting from Inspection	2294709	Increase Monitoring and Attention Required at Intake	
		2299717	Minor Leak at U3 CST overflow	
		2299803	Blocked Floor Drain at Raw Water Tank II	
		2299942	Missing Insulation at 3B Main Steam	
		2300048	Gravel Obscuring Raw Water Tank Foundation	
		2300116	Revise INPO ICES Search Query	
		2300233	Resolution of NRC Observations on FAC Program	
		2300626	OE Review for INPO OE 444436 – FAC Program	
		2305543	Follow-up Inspections Not Performed per ADM-561 Requirements	
		2305563	OE Review Needed for Submerged Portion of Intake Structure	
		2306492	Supporting Documents not Maintained as QA Records	
	2306711	Overly Conservative Classification for Structural Deficiency		
	Drawings	5610-C-62	Intake Structure Sections & Det. Sheet 2	Rev. 12
		5614-C-1597	Diesel Generator Building Fuel Oil Tank Liner	Rev. 0
		5614-M-725	Emergency Diesel Generators 4A & 4B Piping Plans	Rev. 0
		5614-M-731	Emergency Diesel Generators 4A & 4B Piping Sections	Rev. 0
	Engineering Evaluations	NCR 86-344		
		NCR-86-345		

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		NCR-91-508		
	Miscellaneous	180-9230236-000	Turkey Point 4, PTN4-28, Refueling Outage Reactor Vessel 10 Year ISI and MRP Internals Visual Examination Summary, VT-3 of Core Barrel Thermal Shield Flexure Welds, EVT-1 of Core Barrel Upper Flange Weld	12/17/2014
		180-9255777-000	NDE Services Final Report, Turkey Point 4R29 MRP Internals Visual Examinations, Control Rod Guide Tube, Guide Plates VT-3 Examination,	6/7/16
		180-9277742-000	Turkey Point PTN4-30 MRP Baffle Edge Bolt VT-3 Visual Examination	1/22/18
		180-9278111-000	Turkey Point 4, PTN4-30, Baffle to Former Bolt MRP-227 UT Examination, NDE Services Final Report	1/22/18
		180-9290753-000	Turkey Point 3, PTN3-30, Baffle to Former Bolt MRP-227 UT Examination, NDE Services Final Report	12/11/18
		4-GMI-059.04	FPL, Turkey Point – Unit 4, General Maintenance Procedure, Flux Thimble Tube Eddy Current Test (ECT),	9/15/17
		51-9221777-000	Turkey Point 3, PTN3-27, Reactor Vessel, 10 Year ISI, Reactor Vessel MRP Internals Visual Examination Final Report, VT-3 of Core Barrel Thermal Shield Flexure Welds, EVT-1 of Core Barrel Upper Flange Weld Hold Down Spring Measurements	6/25/14
		51-9244793-004	Technical Justification for Slotted External Hex © and Round Head (DS/DL) Baffle Bolts	9/20/18
		BMI-FTT-IP	Bottom Mounted Instrumentation (BMI) Flux Thimble Tubing (FTT) Inspection Program (IP) for Turkey Point Unit 3 and Unit 4	Rev. 6
		BMI-FTT-IP	Operating Experience, Reference 2.12.6, Thimble Tube Leakage Results in Down Power	8/31/06
		EC-286646	Evaluation Form Rev. 8 for Turkey Point Units 3 & 4, License Renewal Aging Management, Reactor Vessel Internals Inspection Program, License Renewal Basis Document	Rev. 0
		EC-292067	3P9C ICW Base Mounting Bolt Replacement	Rev. 0
		JPN-PTN-SEMS-	Florida Power and light, Evaluation of BMI Thimble Tube	Rev. 0



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		91-091	Wear, Turkey Point Unit-3 and Unit-4	
		LTR-AMLR-17-37	Turkey Point Unit 4, Baffle Former Bolt Predictive Evaluation	1/22/17
		PE-481968	Procurement Engineering Evaluation Record	
		PTN-4FSM-05-006	Incore Flux Thimble Tubing Wear Evaluation	11/20/06
		PTN-ENG-SECS-17-019	2017 PTN Structures Monitoring Program Report	Rev. 4
		PTN-ENG-SEES-02-0002	Extend the Maintenance Interval of the Unit 3 Emergency Diesel Generators from 24 Months to 36 Months	Rev. 8
		PTN-RE-90-063	FPL Interoffice Correspondence, NRC Bulletin 88-09 Special Report	4/18/90
		Q1-2019	Program Health Report, Flow-Accelerated Corrosion	
		SPEC-M-078	Galvanic Corrosion Susceptibility Program	Rev. 2
		SSMP-WKDN-001A	Structures Monitoring Program U3 & Common	2012
		SSMP-WKDN-001B	Structures Monitoring Program U4 & Some U3	2012
		Turkey Point Unit-4	Baffle Former Ultrasonic Examination Results Transmittal Letter	10/18/17
		Turkey Point Units 3 and 4	Aging Management Program (AMP) Reactor Vessel Internals (RVI) Program, Effectiveness Review and Assessment Worksheet	1/16/17
		Unit 3	Walkdown of 050 RHR	4/17/17
		Unit 3	Walkdown of 050 RHR	5/12/12
		Unit 3	Walkdown of 030 CCW	5/28/17
		Unit 3	Walkdown of 030 CCW	5/3/12
		Unit 3	Walkdown of 057 Containment Coolers	10/22/15
		Unit 3	Walkdown of 27A CRDM Cooling	10/18/18
		Unit 3	Walkdown of 27A CRDM Cooling	10/19/15
		Unit 3	Walkdown of 27A CRDM Cooling	5/2/12
		Unit 4	Walkdown of 27A CRDM Cooling	4/23/16
		Unit 4	Walkdown of 27A CRDM Cooling	12/13/12
		Unit 4	Walkdown of 057 Containment Coolers	4/1/16

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		Unit 4	Walkdown of 030 CCW	11/12/14
		Unit 4	Walkdown of 030 CCW	5/3/12
		Unit 4	Walkdown of 050 RHR	2/15/17
		Unit 4	Walkdown of 050 RHR	5/9/12
		WCAP-12866	Westinghouse Owners Group Program Final Report, Bottom Mounted Instrumentation Flux Thimble Wear	January, 1991
		WCAP-17887-P	Determination of Acceptable Baffle-Former-Barrel Bolting for Turkey Point Units 3 and 4	Rev. 1
	Procedures	0-ADM-561	Structures Monitoring Program	Rev. 7
		0-ADM-563	Reactor Vessel Internals Aging Management Program	Rev. 4
		0-ADM-564	Systems/Program Monitoring	Rev. 5
		0-ADM-710	Control of Preventative Maintenance	Rev. 7
		3-GMI-059.04	FPL, Turkey Point - Unit 3, General Maintenance Procedure, Flux Thimble Tube Eddy Current Test (ECT),	1/19/18
		EN-AA-206	Renewed License Process	Rev. 9
		ER-AA-111	Flow-Accelerated Corrosion Program	Rev. 1
		ER-AA-111-1000	Flow-Accelerated Corrosion Activities	Rev. 2
		PI-AA-102	Operating Experience Program	Rev. 15
	VP-17-06	Ultrasonic Examination of Slotted Hex (Type C) and Round Head (Type D) Baffle Bolts	Rev. 2	
	Work Orders	39016000		
		40007523		
		40070454		
		40098121		
40130167				
40130415				
40133970				
40134315				
40272178				
40317102				

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		40352334		
		40390273		
		40422803		
		40422806		
		40462806		
		40462808		
		40470301		
		40486405		
		40523977		
		40530537		
		40542402		
		40550272		
		40560904		
		40591685		
		40591685		
40593848				
71111.08P	Calibration Records	AREVA Cert No. 54699	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 036	07/26/2018
		AREVA Cert No. 54703	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 050	07/27/2018
		AREVA Cert No. 54704	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 052	07/25/2018
		AREVA Cert No. 54705	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 066	08/01/2018
		AREVA Cert No. 54706	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 069	07/25/2018
		AREVA Cert No. 54755	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 046	08/13/2018
		AREVA Cert No. 54764	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 085	08/09/2018
		AREVA Cert No. 54525	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 025	07/09/2018
		AREVA Cert No.	AREVA Certificate of Calibration for Eddy Current Tester	07/30/2018

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		54697	MIZ-80, serial number 038	
		AREVA Cert No. 54700	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 019	08/08/2018
		AREVA Cert No. 54702	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 043	07/31/2018
		AREVA Cert No. 54754	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 045	08/08/2018
		AREVA Cert No. 54758	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 059	08/22/2018
		AREVA Cert No. 54761	AREVA Certificate of Calibration for Eddy Current Tester MIZ-80, serial number 072	08/16/2018
		Zetec, Shipment ID #27383, Purchase Order 1018056699, Certificate of Authenticity for Eddy Current Probes	Probe Serial Numbers 740673, 740674, 764100, 764101, 764102, 764103, 764104, and 764105	1/25/19
	Corrective Action Documents	AR 02306419	Turkey Point Unit 4, Containment Spray Piping Inspection Results	3/21/19
		AR 02306734	ASME Section XI, IWE Recordable Liner Observations	3/21/19
	Drawings	02-8068689B	Turkey Point Unit 4, RVCH Penetration Map	Rev. 000
	Engineering Evaluations	51-9257493-000	AREVA Engineering Information Record, Florida Power and Light Turkey Point 4R29, Secondary Side Visual Inspection and FOSAR Final Report	Revision 000
		CMOA End of TP-4, Cycle 28	Condition Monitoring and Operational Assessment for the Turkey Point Unit 4 Steam Generators Based on Eddy Current Examination End of Cycle 28	End of Cycle March 2016
		Intertek AIM 15058868-2Q-1	Structural Limit Evaluation for Steam Generator Tube Degradation at Turkey Point and St. Lucie Nuclear Plants	Revision 0
Intertek AIM		Condition Monitoring and Operational Assessment for the	March 2016,	

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		160210028-2Q-4	Turkey Point Unit 4 Steam Generators Based on Eddy Current Examination End of Cycle 28	Revision 2
		Intertek AIM 181210519-2-1	Degradation Assessment for Turkey Point Unit 4 Steam Generators for End-of-Cycle 30 (March 2019 Outage)	Revision 0
	Miscellaneous	Curtis-Wright Personnel Certification Statements (LMT-SOP-46)	G. Bratton, T. Coburn, A. Fuechtmann, T. Panther, B. Thompson, J. Timm	Revision 6
		Florida Power & Light (FPL), Quality Control Receipt Inspection Report for Purchase Order No. 02392892	Stainless Steel Pipe, ASME SA-312, TP-304, Schedule 40 Seamless	3/17/19
		FPL, Quality Control Receipt Inspection Report for Purchase Order NO. 00228570	6", Butt Weld, 90 Degree Long Radius Elbow, ASTM A-403, Grade 304/304L, Schedule 40	3/06/19
		FPL, Quality Control Receipt Inspection Report for Purchase Order No. 02328767	6" Butt Weld, 45 Degree Elbow, ASME SA-403, Grade 304, Schedule 40	2/19/19
		Framatome Inc. 51-5029214-015	Engineering Information Record, Qualified Eddy Current Techniques for Turkey Point (PTN) Units 3 & 4	Revision 15
	NDE Reports	FPL Visual Examination Record Summary	ASME Section XI, IWE Surfaces, Metallic Containment	3/21/19

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		No's. 411940, 411980, 412020, 412060, 412100, and 412140		
		NDE Report No. 19-045	System 068/P-19A, Containment Spray Piping	3/19/19
		NDE Summary No. PTN4-082901	Report No. PTN4-UT-19-014	3/21/19
		NDE Summary No. PTN4-083701	Report No. PTN4-UT-19-015	3/21/19
		NDE Summary No. PTN4-084301	Report No. PTN4-UT-19-013	3/21/19
		Radiographic (RT) Examination Report, FW-2 and FW-3	Pre-fabricated Spools for Replacement Containment Spray Piping Welds, Work Order 40151541-04	3/2/19
	Procedures	Florida Power and Light (FPL) WPS-107	Welding Procedure Specification	Rev.1
		FPL (WPS)-43	Welding Procedure Specification	Rev.12
		FPL, WPS-89	Welding Procedure Specification	Rev. 5
		Framatome Inc. Document Number, 03-9252849	Turkey Point Units 3 & 4 Eddy Current Data Analysis Guidelines	Revision 002