



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

March 18, 2015

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P.O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT NUCLEAR PLANT – U.S. NUCLEAR REGULATORY
COMMISSION EMERGENCY PREPAREDNESS INSPECTION REPORT
05000250/2015502 05000251/2015502

Dear Mr. Nazar:

On February 26, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Turkey Point Nuclear Plant. The enclosed inspection report (IR) documents the inspection results that were discussed on February 26, 2015, with Mr. M. Kiley and members of the plant staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings were identified.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Rules of Practice," a copy of this letter, its Enclosure, and your response if any, will be available electronically for public inspection in the NRC Public Document Room, or from the Publicly Available Records (PARS)

component of NRC's Documents Access and Management System (ADAMS); accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by Ruben Hamilton Acting for/

Brian Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket Nos. 50-250 and 50-251
License Nos. DPR-31 and DPR-41

Enclosure:
IR 05000250 and 251/2015502
w/Attachment: Supplementary Information

cc: Distribution via Listserv

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ADAMS: ☒ Yes ACCESSION NUMBER: ML15077A090

☒ SUNSI REVIEW COMPLETE ☒ FORM 665 ATTACHED

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E-MAIL COPY	YES NO	YES NO	YES NO	YES NO	YES NO		

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 05000250 and 05000251

License Nos: DPR-31 and DPR-41

Report Nos: 05000250/2015502 and 05000251/2015502

Licensee: Florida Power and Light Company

Facility: Turkey Point Nuclear Plant, Units 3 and 4

Location: Florida City, FL

Dates: February 23 – 26, 2015

Inspectors: Steven Sanchez, Senior Emergency Preparedness Inspector
Bethany Cecere, Emergency Preparedness Specialist
Wade Loo, Senior Health Physicist Inspector
Jonathan Brown, Physical Security Inspector
Tom Morrissey, Senior Resident Inspector (St. Lucie)

Approved by: Brian Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Enclosure

SUMMARY

Inspection Report (IR) 05000250/2015502; 05000251/2015502; 2/23/2015 – 2/26/2015; Turkey Point Nuclear Plant, Units 3 and 4; Exercise and Baseline Inspection

This report covers an announced inspection by one emergency preparedness inspector, one emergency preparedness specialist, one physical security inspector, one health physicist, and one senior resident inspector. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

Since the last NRC inspection of this program area, Revision 61 was made to the Radiological Emergency Plan. The licensee determined that, in accordance with 10 CFR 50.54(q), the Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The inspectors reviewed the changes and sampled implementing procedure changes made between July 2013 and November 2014, to evaluate for potential reductions in the effectiveness of the Plan. As this review was not documented in a Safety Evaluation Report (SER), and does not constitute formal NRC approval of the changes, these changes remain subject to future NRC inspection in their entirety.

The inspection was conducted in accordance with NRC Inspection Procedure (IP) 71114 Attachment 04, Emergency Action Level and Emergency Plan Changes. The applicable planning standards of 10 CFR 50.47(b), and its related requirements in 10 CFR 50, Appendix E, were used as reference criteria.

The inspectors reviewed various documents, which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the emergency action level (EAL) and emergency plan changes on an annual basis.

b. Findings

No findings were identified.

1EP7 Exercise Evaluation – Hostile Action Event

a. Inspection Scope

Title 10 CFR 50, Appendix E, Section IV.F.2.j, requires in part that nuclear power reactor licensees, in each 8-calendar-year exercise cycle, provide the opportunity for their emergency response organization (ERO) to demonstrate proficiency in the key skills necessary to respond to a hostile action (HA) directed at the plant site. The licensee designed the February 25, 2015, exercise to satisfy that requirement, and the NRC inspected the HA event exercise to assess the licensee's ability to effectively implement their emergency plan during a HA event, and adequately protect public health and safety.

The exercise evaluation consisted of the following reviews and assessments:

- The adequacy of the licensee's performance in the biennial exercise, conducted on February 25, 2015, was reviewed and assessed regarding the implementation of the Risk-Significant Planning Standards (RSPS) in 10 CFR 50.47 (b)(4), (5), (9), and (10), which address emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of the licensee's emergency response facilities (ERF) with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the Control Room Simulator, simulated Central Alarm Station (CAS), Incident Command Post (ICP), the Alternate Facility, and the Emergency Operations Facility (EOF).
- A review of other performance areas, such as the ERO recognition of abnormal plant conditions; command and control, including interactions with site security staff, intra- and inter-facility communications; prioritization of mitigation activities; utilization of repair and field monitoring teams; interface with offsite agencies, including local law enforcement agencies; staffing and procedure adequacy; and the overall implementation of the emergency plan and its implementing procedures.
- Past performance issues from NRC inspection reports, and Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS) exercise reports, to determine the effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10 CFR 50.47(b)(14).
- The adequacy of the licensee's post-exercise critiques, to evaluate licensee self-assessment of its ERO performance during the February 25, 2015, exercise to ensure compliance with 10 CFR 50, Appendix E, Subsection IV.F.2.g.

The inspectors reviewed various documents, which are listed in the Attachment. This inspection activity satisfied one inspection sample for the exercise evaluation on a biennial basis.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review

a. Inspection Scope

Prior to the inspection activity, the inspectors conducted an in-office review of the exercise objectives and scenario submitted to the NRC using IP 71114.08, "Exercise Evaluation - Scenario Review," to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14).

The inspectors reviewed various documents, which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the exercise valuation on a biennial basis.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors sampled licensee submittals relative to the performance indicators (PIs) listed below for the period July 1, 2013, through December 31, 2014. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, was used to confirm the reporting basis for each data element.

Emergency Preparedness Cornerstone

- Emergency Response Organization Drill/Exercise Performance (DEP)
- Emergency Response Organization Readiness (ERO)
- Alert and Notification System Reliability (ANS)

For the specified review period, the inspectors examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspectors verified the accuracy of the PIs for ERO and DEP through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation, for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for ANS reliability through review of a sample of the licensee's records of periodic system tests. The inspectors also interviewed the licensee personnel who were responsible for collecting and evaluating the PI data. Licensee procedures, records, and other documents reviewed within this inspection area are listed in the Attachment. This inspection satisfied three inspection samples for PI verification on an annual basis.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On February 26, 2015, the inspection team presented the inspection results to Mr. M. Kiley and other members of the plant staff. The inspectors confirmed that no proprietary information was provided during the inspection.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

F. Banks, Nuclear Oversight Manager
B. Bazan, EP Coordinator
C. Cashwell, Training Manager
D. Dell, EP Coordinator
C. Domingos, Engineering Director
M. Downs, Senior EP Coordinator
M. Fritz, EP Manager Duane Arnold
M. Guth, Licensing Engineer
O. Hanek, Licensing Engineer
J. Jensen, Vice President Fleet Support
M. Kiley, Site Vice President
L. Nicholson, Corporate Licensing
K. O'Hare, EP Manager
P. Polfleit, Emergency Preparedness Corporate Functional Area Manager
R. Seizert, EP Manager Point Beach
D. Sluszka, Work Controls Manager
B. Stamp, Operations Manager
J. Wingate, EP Coordinator

ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

None

LIST OF DOCUMENTS REVIEWED

1EP4 EAL and Emergency Plan Changes

Procedures

Turkey Point Radiological Emergency Plan, Rev. 60
Turkey Point Radiological Emergency Plan, Rev. 61
0-EPIP-1102, Duties of the Recovery Manager, Rev. No. 6
EP-AA-100-1007, Evaluation of Changes to the Emergency Plan, Supporting Documents and Equipment (10 CFR 50.54(Q)), Rev. No. 3

Records and Data

50.54(q) Screening Form for Emergency Plan Change, dated 12/23/14
50.54(q) Evaluation Form for Emergency Plan Change, dated 12/23/14
50.54(q) Screening Form, EP-AA-100-1007, Evaluation of Changes to the Emergency Plan, Supporting Documents and Equipment (10 CFR 50.54(Q)), Rev. No. 3

Corrective Action Program Documents

AR 1927696, Provide guidance to the Recover Manager in the event of an emergency in which the plant is inaccessible
AR 1934762, 2014 NRC inspection E-Plan review needed

AR 2010319, Revise method for the determination of PARs to align with the guidance in Supplement 3 of NUREG 0654

1EP7 Exercise Evaluation

Procedures

Turkey Point Plant Radiological Emergency Plan, Rev. 61
 0-EPIP-1102, Duties of the Recovery Manager, Rev. 6
 0-EPIP-20101, Duties of Emergency Coordinator, Rev. 16
 0-EPIP-20111, Re-Entry, Rev. 2
 0-EPIP-20133, Operations Support Center (OSC) Activation and Operation, Rev. 1
 0-EPIP-20134, Offsite Notifications and Protective Action Recommendations, Rev. 4
 EP-AA-101, Nuclear Division Drill and Exercise Program, Rev. 1
 EP-AA-101-1000, Nuclear Division Drill and Exercise Procedure, Rev. 9
 EP-AA-101-1000-10001, Nuclear Division Drill and Exercise Objectives and Demonstration Criteria, Rev. 1
 PTN-SY-001, Emergency Evacuation & Accountability, Rev. 1
 PTN-SY-029, LLEA Integrated Response Plan; Miami Dade Police Department, Rev. 0
 PTN-SY-032, Access During Drills & Emergencies, Rev. 0
 SFI-2406, Operations Department Response to Land Threats, Rev. 4
 SY-AA-102-1014, Threat Assessment and Reporting, Rev. 6
 SY-AA-102-1019, Suspension / Relaxation of Safeguards, Rev. 1
 SY-AA-102-1032, Use of Force, Rev. 0

Records and Data

Turkey Point Nuclear Station, 2015 Emergency Preparedness, Hostile Action Based Exercise, Executive Debrief

Corrective Action Program Documents

AR 2028251, Threat announcement issue
 AR 2028257, ICP to CAS/SAS communications
 AR 2028309, 2015 PTN HAB – inaccurate PAR determination
 AR 2028310, 2015 EP HAB – location of alternate OSC for HAB events
 AR 2028312, 2015 EP HAB – evaluate ERO notification not timely
 AR 2028314, 2015 EP HAB – dosimeters for ORO responders
 AR 2028315, 2015 EP HAB – evaluate classification de-escalation process
 AR 2028316, 2015 EP HAB – ERO page/text notification not correct
 AR 2028318, 2015 EP HAB – SNPO sent into field during security lockdown
 AR 2028319, 2015 EP HAB – T-0 time for GE (HG1)
 AR 2028344, Ops HAB critique item – increase amount of security related training in simulator
 AR 2028347, HAB drill – response procedure enhancements
 AR 2028350, HAB – delays in initial page announcements & ERO activation
 AR 2028354, 2015 EP HAB – determine if HAB posture was terminated early
 AR 2028359, 2015 EP HAB – use of security player
 AR 2028360, 2015 EP HAB – lead controller interjection during scenario
 AR 2028361, 2015 EP HAB – field controller not reporting actions in field
 AR 2028372, 2015 EP HAB – communications between control room & OSC
 AR 2028376, 2015 EP HAB – inadequate briefs in control room during HAB
 AR 2028449, 2015 EP HAB – simulator critique detail
 AR 2028456, 2015 EP HAB – scenario validation shortfalls
 AR 2028459, 2015 EP HAB – TSC & OSC roles during a HAB

Section 4OA1: Performance Indicator Verification

Procedures

0-ADM-032, NRC Performance Indicators Turkey Point, Rev. 5

PI-AA-100, Condition Assessment and Response, Rev. 7

EP-SR-102-1000, Nuclear Division Florida Alert and Notification System, Rev. 8

Records and Data

2015 Emergency Response Organization Teams, Updated 01/31/15

DEP opportunities documentation for 3rd and 4th quarters 2013; and 1st, 2nd, 3rd, and 4th quarters 2014

Siren test data for 3rd and 4th quarters 2013; and 1st, 2nd, 3rd, and 4th quarters 2014

Drill and exercise participation records of ERO personnel for 3rd and 4th quarters 2013; and 1st, 2nd, 3rd, and 4th quarters 2014

Corrective Action Program Documents

AR 1873483, Formalize the process for providing augmented staff to the station whenever site access becomes possible following a BDBEE resulting in an extended loss of AC power on both units

AR 1888455, LOCT simulator failure

AR 1900140, Untimely classification during simulator evaluated scenario

AR 1923265, Revise scenario 750203300

AR 1942109, 021714 as found LOCT exam incorrect DEP PI implementation

AR 1971587, An incorrect EAL declaration on a LOCT simulator evaluation

AR 1983729, ANS siren failed bi-weekly test

AR 1989591, ANS siren PTN S-41 failed quarterly test

AR 2007994, ANS siren PTN S-42 rotor failure

AR 2008498, ANS siren PTN S-31 testing failure

AR 2015413, ANS siren PTN S-45 failed test

AR 2018364, EP HAB practice drill 01/13/15 Simulator critique items

AR 2018369, EP HAB practice drill 01/13/15 ICP critique items

AR 2027876, 2015 EP NRC Inspection 3rdQtr2014 DEP incorrect calculation

AR 2027883, 2015 EP NRC Inspection DEP failure not documented

AR 2028286, 2015 EP NRC Inspection 4thQtr2014 ANS data calculated incorrectly

AR 2028288, 2015 EP NRC Inspection 4thQtr2014 DEP calculated incorrectly

LIST OF ACRONYMS USED

ANS	Alert and Notification System	FEMA	Federal Emergency Mgmt
CAS	Central Alarm Station		Agency
DEP	Drill and Exercise Performance	HA	Hostile Action
DHS	Department of Homeland Security	HAB	Hostile Action Based
		ICP	Incident Command Post
EAL	Emergency Action Level	IP	Inspection Procedure
EOF	Emergency Operations Facility	NEI	Nuclear Energy Institute
ERF	Emergency Response Facility	PIs	Performance Indicators
ERO	Emergency Response Organization	RSPS	Risk-Significant Planning Standard
		SER	Safety Evaluation Report