



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
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ATLANTA, GEORGIA 30303-8931**

July 24, 2002

EA 02-089

Florida Power & Light Company
ATTN: Mr. J. A. Stall, Senior Vice President
Nuclear and Chief Nuclear Officer
PO Box 14000
Juno Beach, FL 33408-0420

**SUBJECT: TURKEY POINT NUCLEAR PLANT - NRC INTEGRATED INSPECTION
REPORT 50-250/02-02, 50-251/02-02**

Dear Mr. Stall:

On June 29, 2002, the NRC completed an inspection at your Turkey Point Units 3 and 4. The enclosed report documents the inspection findings which were discussed on July 3, 2002, with Mr. T. Jones and other members of your 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.

No findings of significance were identified by the NRC inspectors.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). Adams is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

//RA by Son Ninh for//

Leonard D. Wert, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report 50-250/02-02, 50-251/02-02
w/Attachment - Supplemental Information
cc w/encl: (See page 2)

cc w/encl:
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Plant General Manager
Turkey Point Nuclear Plant
Florida Power and Light Company
Electronic Mail Distribution

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

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

Report Nos.: 50-250/02-02, 50-251/02-02

Licensee: Florida Power & Light Company (FPL)

Facility: Turkey Point Nuclear Plant, Units 3 & 4

Location: 9760 S. W. 344th Street
Florida City, FL 33035

Dates: March 31 - June 29, 2002

Inspectors: C. A. Patterson, Senior Resident Inspector
J. R. Reyes, Resident Inspector
S. J. Vias, Senior Reactor Inspector (Section 1R08)
R. F. Aiello, Senior Operations Engineer (Section 1R11.1)

Approved by: L. D. Wert, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000250-02-02, IR 05000251-02-02 on 03/31/2002 - 06/29/2002, Florida Power & Light, Turkey Point Nuclear Power Plant, Unit 3 & 4. Resident Integrated Inspection Report.

The inspection was conducted by resident inspectors, a senior reactor inspector, and a senior operations engineer. No findings of significance were identified by NRC inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using the significance determination process (SDP) found in Inspection Manual Chapter 0609. Findings to which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.

A. Inspector Identified Findings

None

B. Licensee Identified Violations

A violation of very low safety significance which was identified by the licensee has been reviewed by the inspectors. Corrective action taken or planned by the licensee appear reasonable. The violation is listed in Section 40A7 of this report.

Report Details

Summary of Plant Status:

Unit 3 operated at power during this inspection period.

Unit 4 returned to power operation on April 07, 2002, following completion of a 15 day refueling outage. Power was reduced to 20 percent on May 17, 2002, for less than a day to replace a control rod drive mechanism ventilation cooling fan motor.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity (Reactor-R)

1R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted partial walkdown inspections, to verify the alignment of redundant trains/systems when the other train/system was out-of-service. The inspectors reviewed the licensee's operating procedure, Updated Final Safety Analysis Report (UFSAR) system description, and system drawings to determine that the systems were correctly aligned. The following systems listed below were inspected by partial walkdown:

- Auxiliary Feed Water (AFW) 'C' pump on train 1 and AFW 'B' pump on train 2, while the 'A' pump was out of service (OOS) for the trip and throttle valve actuator stem replacement. Unit 3 was on-line and Unit 4 was off-line for a refueling outage.
- AFW 'A' pump on train 1 and AFW 'C' pump on train 2, while the 'B' pump was OOS for the trip and throttle valve actuator stem replacement. Both Unit 3 and Unit 4 were on-line.
- AFW 'A' pump on train 1 and AFW 'B' pump on train 2, while the 'C' pump was OOS for the trip and throttle valve actuator stem replacement. Both Unit 3 and Unit 4 were on-line.
- 3A, 4A, and 4B emergency diesel generators (EDG) while the 3B EDG generator was OOS for an 18-month overhaul.

b. Findings

No findings of significance were identified.

1R05 Fire Protectiona. Inspection Scope

The inspectors toured selected plant areas to evaluate conditions related to control of transient combustibles and ignitions sources, the material condition and operational status of fire protection systems, and selected fire barriers used to prevent fire damage or fire propagation. On April 24, 2002, the inspectors reviewed the documentation of five fire doors located in the cable spreading room and inverter rooms which had been assigned a fire impairment tag. The inspectors ensured these activities were consistent with the licensee's Fire Protection Plan and 10 CFR Part 50, Appendix R. The followings areas were inspected:

- Unit 3 and Unit 4 Startup Transformer
- Unit 3/4 Control Room
- Unit 3/4 Cable Spreading Room
- Unit 3 Residual Heat Removal (RHR) Pump Room and Heat Exchanger Rooms
- Unit 3 and Unit 4 DC Equipment Rooms
- Unit 3 and Unit 4 'B' Motor Control Centers

b. Findings

No findings of significance were identified.

1R08 Inservice Inspection Activitiesa. Inspection Scope

The inspectors observed in-process inservice inspection (ISI) work activities during the first outage of the 3rd interval, 3rd ISI period and reviewed selected ISI records. The observations and records were reviewed for compliance to the Technical Specifications (TS) and the applicable Code (ASME Boiler and Pressure Vessel Code, Section XI, 1989 Edition, with no Addenda).

Portions of the following Unit 4 ISI examinations were observed:

Ultrasonic (UT)	-	14" FW Pipe-Location 35, 1FA-T-8 (FAC)
Magnetic Particle (MT)	-	Reactor vessel studs
Visual Examination (VT-3)	-	M-711A-1, SR-471 (5614-H-513)
Eddy Current (ECT)	-	4A-FWH-TPCW, 4B-FWH-TPCW

Qualification and certification records for examiners, equipment and consumables, and nondestructive examination (NDE) procedures for the above ISI examination activities were reviewed. In addition, a sample of ISI issues in the licensee's corrective action program were reviewed for adequacy. The following records/documents were reviewed:

NDE Examiner/QC Inspector Qualification Certification and Visual Acuity Records Examined

Examiner	Method-Level
WGP	MT-III, PT-III
DK	MT-I
MDR	VT-III, PT-III
WKH	ET-III, ET-IIA
JW	UT-IIR
CB	UT-IIR

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

.1 Annual Operating Test Results

a. Inspection Scope

The inspectors reviewed the overall pass/fail results of the biennial written examination, the individual JPM operating tests, and the simulator operating tests (required to be given per 10 CFR 55.59(a)(2)) administered by the licensee during calendar year 2002.

b. Findings

No findings of significance were identified.

.2 Requalification Training Observation

a. Inspection Scope

On June 24, 2002, the inspectors observed re-qualification training on the control room simulator for several abnormal plant conditions to assess licensed operator performance and effectiveness of training critique. The inspectors monitored the assessment by plant operators to analyze plant annunciators for a steam generator tube leak and loss of instrument air and apply the applicable procedures and transition into emergency operating procedures. The inspectors checked that critique items which emphasized communication were reviewed.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors assessed the effectiveness of maintenance on selected structures, systems, and components scoped into the maintenance rule, (10 CFR 50.65) and verified procedural requirements specified in procedure O-ADM 728, Maintenance Rule Implementation. The inspectors reviewed the characterization of failures, safety significance classifications, and the appropriateness of performance criteria and corrective actions for the following condition reports (CRs):

- CR 02-0739 Containment Coatings
- CR 02-0993 Drifting Rod Position Indication, C9
- CR 02-0994 Control Rod Drive Mechanism Cooling Fan Failure
- CR 02-0982 4A EDG Exciter Voltage Regulator Cabinet High Temperature
- CR 02-1175 Containment Temperature Monitor

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the following emergent items, as described in the referenced CRs. The inspectors verified that the emergent work activities were adequately planned and controlled, as described in O-ADM-068, Work Week Management and O-ADM-225, On Line Risk Assessment and Management. The inspectors verified that, as appropriate, contingencies were in place to reduce risk, minimize time spent in increased risk configurations, and to avoid initiating events. The following items were reviewed:

- CR 02 - 0938 RHR IST High Vibration Data
- CR 02 -0536 Monitoring of RHR System Temperatures During Shutdown For Refueling
- CR 02-0914 Reactor Protection System Eagle 21 Channel II Failure
- CR 02-0851 Loss Of All Unit 4 Control Room Annunciators
- CR 02-0889 Intake Cooling Water (ICW) Piping/Component Cooling Water (CCW) Scaffold Platforms
- CR 02-1114 Unit 3A EDG High Cylinder Exhaust Differential Temperature
- CR 02-1065 3B EDG Fuel Oil Transfer Pump Exceeded Criteria For Vibration

b. Findings

No findings of significance were identified.

1R15 Operability Evaluationsa. Inspection Scope

The inspectors reviewed the selected operability evaluations affecting mitigating systems and barrier integrity to determine that operability was justified and no unrecognized increase in risk had occurred. The inspectors verified procedural requirements as described in 0-ADM-518, Condition Reports. The following list of CRs and documents were reviewed:

- CR 02-0849 Diesel Driven Fire Pump Acceptance Criteria
- CR 02-0858 'C' AFW Pump Trip & Throttle Valve - Relay Failure
- CR 02-0845 3B RHR High Motor Bearing Vibration
- CR 02-0898 4B EDG High Air Box Pressure During 24 hour run
- CR 02-0812 4A High Head Safety Injection (HHSI) Pump Casing Leakage
- PTN-SECS-00-082 Safety Evaluation For The Temporary Removal Of The CCW Room Missile Barrier
- CR 02-1020 ICW Low Canal Level

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testinga. Inspection Scope

The inspectors reviewed the test procedures and either witnessed the testing and/or reviewed test records to verify that: (1) the scope of testing was adequate; (2) the work performed was correctly completed; (3) the affected equipment was returned to its operational status following the test. The inspectors verified that the requirements of procedure 0-ADM-737, Post Maintenance Testing, were incorporated into test requirements. The inspectors performed a thorough review of the diesel driven fire pump testing to determine if all notes on the test sheet were resolved. The inspectors reviewed the following list of work orders (WOs):

- WO 32006045 'B' AFW Pump Replacement Of Valve Spindle and Thrust Washer
- WO 31016316 Diesel Driven Fire Pump Overhaul
- WO 32008708 Electric Driven Fire Pump Shaft Sleeve Replacement
- WO 30022528-01 3B Diesel Fuel Oil Transfer Pump Replacement
- WO 31002665 'B' AFW Pump Replacement and Freeze Seal

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors evaluated outage activities that occurred during this report period for the Unit 4 refueling outage. The inspectors assessed the adequacy of risk reduction methodologies to control plant configuration.

Containment Closure

The inspectors reviewed containment closure capabilities in place during the time refueling activities were performed. The inspectors reviewed the licensee's completed surveillance documentation relating to inspection of the containment sumps. Prior to reactor startup, during mode 3, the inspectors entered containment to verify the sumps were free from debris which could affect performance of the sumps. The inspectors performed two walk down inspections of containment to verify that no loose equipment could impact the recirculation sump.

Decay Heat Removal System Monitoring

The inspectors reviewed activities relating to the RHR system during cool down and various mode changes throughout the outage. Emergent issues on the RHR system were followed and reviewed to verify the licensee adequately addressed operability and risk significance.

Clearance Activities

Clearances and clearance releases associated with the HHSI pumps, RHR pumps, CCW pumps, and AFW pump were reviewed. Positions of switches, breakers, and valves were verified either in the field and/or the control room to be correct.

Monitoring of Heat Up and Startup Activities

Prior to mode 4 and mode 1, the inspector performed a control room switch alignment check on a sampling basis to verify risk significant components were in the correct standby position for entering the applicable mode. The inspectors reviewed in the field the positions of breakers to verify availability of power to motor operated valves and the following components: RHR pumps, HHSI pumps, CCW pumps, ICW pumps, 4B & 4D load centers, Boric Acid Transfer pumps, and EDG breakers to supply power to the respective safety buses.

The inspectors reviewed the reactor physics testing results to verify that the core operating limit parameters were consistent with the design. On a sampling basis, the inspectors monitored startup activities from the control room and prior to mode changes. The licensee's surveillance procedures were also reviewed to verify TS surveillance requirements had been completed.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testinga. Inspection Scope

The inspectors witnessed selected surveillance tests and/or reviewed test data to verify that the tests meet the TS, the UFSAR, and licensee procedure requirements and demonstrated the systems capable of performing their intended safety functions and their operational readiness. The following surveillances were reviewed:

- 0-OSP-016.2 Diesel Driven Fire Pump Annual Surveillance Test
- 0-SMM-050.1 Containment Recirc Sump Screen Inspection
- 0-OSP-025.1 Control Room Emergency Ventilation System Operability
- 4-OSP-023.1 Diesel Generator Operability Test
- 0-NCAP-205 Reactor Coolant Activity Analysis
- 0-OSP-074.3 Diesel Standby Steam Generator Feedwater Pump Availability Test

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)1EP6 Drill Evaluationa. Inspection Scope

On June 4, 2002, the inspectors observed the site quarterly emergency preparedness drill at the Technical Support Center. The inspectors evaluated the licensee's emergency plan classifications per the Turkey Point Radiological Emergency Plan for a loss of control annunciators, a fuel handling accident, and a loss of coolant accident. The inspectors reviewed the notifications and protective action measures to assess timely and accurate completion of these actions. The inspectors attended the licensee critique and reviewed written comments to determine that drill deficiencies were addressed.

b. Findings

No findings of significance were identified.

4 OTHER ACTIVITIES4OA1 Performance Indicator Verification.1 Reactor Coolant System (RCS) Activity, RCS Leak Rate, and Safety System Functional Failure Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed the accuracy and completeness of the RCS activity and RCS leak rate performance indicator (PI) data that was reported to NRC for Unit 3 and Unit 4. The inspectors reviewed the licensee's corrective action documentation and Licensee Event Reports to verify there were no Safety System Functional Failures. The inspector reviewed PI data for all four quarters in 2001 and the first quarter of 2002 against the guidance in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline." Surveillance data and test frequency was reviewed to verify they were performed within TS surveillance requirements. Surveillance procedures were reviewed to assess adequacy and method of obtaining the data. On June 14, 2002, the inspectors observed Chemistry personnel perform O-NCAP-205, Reactor Coolant Activity Analysis, to verify the data was obtained as described in the procedure. CRs applicable to the indicators were reviewed to verify completion of corrective actions.

b. Findings

No findings of significance were identified.

4OA6 Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. T. Jones, General Plant Manager and other members of licensee management at the conclusion of the inspection on July 3, 2002. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations.

The following finding of very low significance was identified by the licensee as a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dis-positioned as a Non-Cited Violation (NCV).

If you deny this non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Turkey Point facility.

NCV Tracking Number

NCV 50-250,251/02-02-01

Requirement Licensee Failed to Meet

Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering the log entry activities in Appendix A of Regulatory Guide (RG) 1.33, Revision 2, February 1978. Procedure 0-OSP-201.4, ANPO Daily Log, requires that a tour of the Auxiliary Feedwater Cage be completed and a specified number of pumps, valves, and governor readings be observed and data recorded. Contrary to the above, on September 27, 2001, a Senior Nuclear Plant Operator, failed to comply with the above requirements when, during his rounds in the Auxiliary Feedwater Cage he spent an inadequate amount of time within the cage to accomplish the required tour. This issue was placed in the licensee's corrective action program as Condition Report 01-1883 (No color).

SUPPLEMENTAL INFORMATION**PARTIAL LIST OF PERSONS CONTACTED**Licensee

E. Avella, Maintenance Manager
 G. Hollinger, Protection Services Manager
 T. Jones, Plant General Manager
 W. Prevatt, Work Control Manager
 J. Kirkpatrick, Training Manager
 M. Laca, Operations Manager
 D. Lowens, Quality Assurance Manager
 J. McElwain, Site Vice-President
 W. Parker, Licensing Manager
 S. Wilsa, Health Physics Supervisor
 A. Zielonka, Site Engineering Manager

Other licensee employees contacted included office, operations, engineering, maintenance, chemistry/radiation, and corporate personnel.

NRC

N. Diaz, NRC Commissioner
 L. Pilsco, Division Director Division of Reactor Projects
 D. Simpkins, NRC Commissioner Assistant

ITEMS OPENED AND CLOSEDOpened and Closed

50-250, 251/02-02-01	NCV	Failure to comply with procedure for taking Operator Rounds (Section 40A7)
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List of Documents Reviewed (Section 1R08)Procedures

- NDE Manual Examination Procedure, NDE - 1.1, Eddy Current Examinations of Non Tubing Ferromagnetic Heat Exchanger Tubing with Multifrequency Techniques, Rev. 11
- NDE Manual Examination Procedure, NDE - 2.2, Magnetic Particle Examination, Rev. 8
- NDE Manual Examination Procedure, NDE - 3.3, Liquid Penetrant Examination Solvent Removable Visible Dye Technique, Rev. 8
- NDE Manual Examination Procedure, NDE - 4.3, Visual Examination VT-3, Rev. 9
- NDE Manual Examination Procedure, NDE - 5.4, Ultrasonic Examination of Austenitic Piping Welds, Rev. 15

- NDE Manual Examination Procedure, NDE - 5.8, Ultrasonic Examination of Bolts & Studs with a Straight Beam, Rev. 7
- NDE Manual Examination Procedure, NDE - 5.10, Ultrasonic Examination Nuts Two Inches in Diameter or Greater, Rev. 4
- NDE Manual Examination Procedure, NDE - 5.18, Ultrasonic Thickness Measurement, Rev. 6
- NDE Manual Calibration Procedure, CAL 2, Calibration of Magnetic Particle Equipment, Rev. 4
- NDE Manual Calibration Procedure, CAL 4, Qualification Procedure for "Black Light" Units and Light Meter Calibrations, Rev. 4
- Engineering Instruction, ENG-FAC-2.3-8, Application of Computed Radiography in the Long-Term FAC Monitoring Program, Rev. 0
- Engineering Instruction, ENG-FAC-2.3-7, Validation of Flow-Accelerated Corrosion Program Software, Rev. 6
- Engineering Instruction, ENG-FAC-2.3-6, Marking and Gridding for Flow-Accelerated Corrosion, Rev. 8
- Engineering Instruction, ENG-FAC-2.3-5, Evaluation of Worn Components, Rev. 6
- Engineering Instruction, ENG-FAC-2.3-4, Evaluation of Examination Data, Rev. 10
- Engineering Instruction, ENG-FAC-2.3-3, Selection of Locations for Examinations, Rev. 8
- Engineering Instruction, ENG-FAC-2.3-2, Performing Flow-Accelerated Corrosion Analysis, Rev. 7
- Engineering Instruction, ENG-FAC-2.3-1, Identification of Susceptible Systems and Components, Rev. 5

Other Documents

- Spring 2002 Outage Cycle 20, Flow-Accelerated Corrosion (FAC) Outage Inspection Plan, CSI-FAC-PTN-4-20P, Rev B
- Turkey Point Nuclear Power Plant Unit 4 Inservice Inspection Plan, ISI-PTN-4-Plan, Rev. 1
- Third Interval Inservice Program for TPNP Units 3/4, ISI-PTN-3/4-Program, Rev. 4
- Condition Reports: CR-01-2261, CR-01-2262, CR-01-1026, 01-2274
- Operating Procedure 0206.7, Containment Visual Leak Inspection, with inspection results from 3/23/02
- Work Order: 32005346 01

Assessments and Audits

- ISI Snubber Inspection Program Programmatic Assessment, 5/01
- Engineering Audit, QAS-ENG-01-1, "Component, Support & Inspection (CSI)", 9/16/01
- Special Processes Functional Audit, QAO-PTN-01-006, "Engineering Operations Support", 6/28/01
- PTN Nuclear Assurance Quality Report 01-0133 "Outage Inservice Inspection (ISI) and Snubbers"
- PTN Nuclear Assurance Quality Report 00-0056 "Surveillance of ASME Section XI Containment Inspection Activities"

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