



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

October 22, 2004

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

SUBJECT: TURKEY POINT NUCLEAR PLANT - INTEGRATED INSPECTION REPORT
05000250/2004004 AND 05000251/2004004

Dear Mr. Stall:

On September 25, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Turkey Point Units 3 and 4. The enclosed integrated inspection report documents the inspection findings which were discussed on October 1, 2004, 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.

Based on the results of this inspection, one finding of very low significance (Green) was identified involving a violation of NRC requirements. However, because of the very low safety significance and because the finding was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy. If you contest the NCV in this report, you should provide a response, within 30 days of the date of this inspection report, with the basis for your denial, 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.

In accordance with 10 CFR 2.390 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/

Joel T. Munday, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report 05000250/2004004 and 05000251/2004004
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-250, 50-251

License Nos: DPR-31, DPR-41

Report No: 05000250/2004004, 05000251/2004004

Licensee: Florida Power & Light Company (FP&L)

Facility: Turkey Point Nuclear Plant, Units 3 & 4

Location: 9762 S. W. 344th Street
Florida City, FL 33035

Dates: June 27, 2004 - September 25, 2004

Inspectors: K. Weaver, Senior Resident Inspector
B. Hagar, Senior Resident Inspector (H. B. Robinson)
J. Bartley, Senior Resident Inspector (Watts Bar)
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Approved by: Joel T. Munday, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000250/2004-004, 05000251/2004-004; 06/27/2004 - 09/25/2004; Turkey Point Nuclear Power Plant, Units 3 and 4; Problem Identification and Resolution

The report covered a three month period of inspection by resident inspectors, and region based project engineers. One Green non-cited violation (NCV) was identified. The significance of most findings is identified by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Overnight Process," Revision 3, dated July 2000.

A. NRC Identified & Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. A Green NCV was identified for failing to implement adequate corrective actions per 10 CFR 50, Appendix B, Criterion XVI, for issues related to the construction of scaffolding in proximity to safety related equipment or fire protection components.

This finding is more than minor because it affected the Mitigating Systems cornerstone. Improper construction of scaffolding, and lack of engineering review of scaffolding not built in accordance with the procedure, could prevent proper operation of fire protection features, limit or prevent access to components required of emergency response, or render equipment inoperable as a result of a seismic event. This finding is of very low safety significance because it did not result in an actual loss of safety function and would not render equipment inoperable due to seismic events. The finding is related to the cross-cutting element of problem identification and resolution, that being ineffective and untimely corrective actions. (Section 4OA2.2)

B. Licensee-identified Violations

None.

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REPORT DETAILS

Summary of Plant Status:

Unit 3 operated at full power during most of the inspection period. On September 25, Unit 3 reduced power to 50% in preparation for the upcoming Refueling Outage and to perform main steam safety valve testing. At the end on the inspection period, Unit 3 remained at 50% power.

Unit 4 operated at full power during most of the inspection period with the following exceptions: On July 20, power was reduced to 88% after a heater drain pump tripped on low suction pressure. On July 21, following maintenance and troubleshooting of the heater drain system, the plant was returned to full power. On August 28, power was reduced to approximately 40% for Turbine Plant Cooling Water Heat Exchanger cleaning. On August 29, following the maintenance activities the plant was returned to full power, where it remained through the inspection period.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection - Actual Weather Conditions

Hurricanes Charley, Frances, Ivan and Jeanne

a. Inspection Scope

The inspectors reviewed the licensee's preparations for severe weather conditions during Hurricanes Charley, Frances, Ivan, and Jeanne. The inspectors toured the protected area and exterior plant grounds for loose items which could pose hazards to plant equipment during high winds, paying specific attention to risk significant areas that included the electrical switch yard, startup transformers, the emergency diesel generator buildings and the intake service water systems. During approach of Hurricanes Charley, Frances, Ivan, and Jeanne to the Florida coast, the inspectors attended the hurricane and severe weather preparation status meetings, reviewed the licensee's precautionary measures and actions to remove and store loose items in the plant, and reviewed provisions for relief of plant operators, security guards, and emergency response organization personnel. During these inspections the following procedures were reviewed to verify that the licensee's actions were consistent with severe weather procedures.

- Procedure 0-ONOP-103.3, "Severe Weather Preparations"
- Procedure MCP 11.01, "Severe Weather Preparation"
- Procedure 0-EPIP-20106, "Natural Emergencies"

b. Findings

No findings of significance were identified.

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1R04 Equipment Alignment

.1 Complete Equipment Walkdowns

a. Inspection Scope

The inspectors conducted two complete alignment verifications of the safety-related systems listed below. The inspectors used the procedures and other documents listed in the Attachment, as well as applicable chapters of the UFSAR, to verify proper system alignment. The detailed review also verified electrical power requirements, labeling, hangers and support installation, and associated support systems status. Operating pumps were examined to ensure that vibration levels were not elevated, pump leakoff was not excessive, bearings were not hot to the touch, and the pumps were properly ventilated. The walkdowns also included evaluation of system piping and supports to verify that: 1) piping and pipe supports did not show evidence of water hammer; 2) oil reservoir levels indicated normal; 3) snubbers did not indicate any observable hydraulic fluid leakage; 4) hangers were within the setpoints; and 5) component foundations were not degraded. A review of outstanding maintenance work orders was performed to verify that the deficiencies did not significantly affect the system safety function. In addition, the inspectors reviewed the condition report database to verify that equipment alignment problems were being identified and appropriately resolved.

- Unit 4 Intake Cooling Water System, in accordance with Procedure 4-OP-019, "Intake Cooling Water System," Procedure 4-OSP-019.2, "Intake Cooling Water System Flowpath Verification," and Piping and Instrument Drawing (P&ID) 5613-3019, "Intake Cooling Water System," Sheets 1 and 2.
- Unit 4 Emergency Diesel Generators 4A and 4B, in accordance with Procedure 4-OSP-023.1, "Diesel Generator Operability Test," Attachment 5, "4A EDG System Flow Path Verification Data Sheet," Attachment 6, "4B EDG System Flow Path Verification Data Sheet," P&ID 56143022, Sheets 1, 2, and 3, "Emergency Diesel Generator 4A and 4B Air Starting System," Emergency Diesel Generator 4A and 4B Fuel Oil System," and "Emergency Diesel Generator 4A and 4B Lube Oil and Cooling Water," in preparation for Hurricane Frances.

b. Findings

No findings of significance were identified.

.2 Partial Equipment Walkdowns

a. Inspection Scope

The inspectors conducted four partial alignment verifications of the safety-related systems listed below. The inspectors reviewed the operability of a redundant train or backup system/train while the other trains were inoperable or out of service. These

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inspections included reviews of plant lineup procedures, operating procedures, and piping and instrumentation drawings, which were compared with observed equipment configurations to verify that the critical portions were correctly aligned and that they identified any discrepancies that could affect operability.

- Unit 4, 4A Emergency Diesel Generator (EDG) in accordance with Procedure 4-OP-023, "Emergency Diesel Generator," conducted on July 23, 2004, during the monthly surveillance test of 4B EDG.
- Unit 3, 3B EDG in accordance with Procedure 3-OP-023, "Emergency Diesel Generator," conducted on July 27, 2004 during the monthly surveillance test of 3A EDG.
- Unit 3 and 4, Standby Steam Generator Feedwater (SSGF) Pump B in accordance with Procedure 0-OSP-074.3, "Standby Steam Generator Feedwater Pumps Availability Test," conducted on July 30, during surveillance testing of the SSGF Pump A.
- Unit 4, 4A Safety Injection System in accordance with Procedure 4-OP-062, "Safety Injection," and Procedure 4-GOP-503, "Cold Shutdown to Hot Standby," Attachment 10, "Safety Injection System Alignment Requirements for Start Up with Reactor Coolant Systems (RCS) Temp Between 275 degrees F and 380 degrees F," conducted on August 3, while the 4B Safety Injection Pump was out of service for maintenance

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Fire Area Walkdowns

a. Inspection Scope

The inspectors toured the following nine plant areas during this inspection period to evaluate conditions related to control of transient combustibles and ignition sources, the material condition and operational status of fire protection systems, and selected fire barriers used to prevent fire damage or fire propagation. The inspectors reviewed these activities against provisions in the licensee's Off Normal Operating Procedure 0-ONOP-016.8, "Response to a Fire/Smoke Detection System Alarm," Administrative Procedures 0-SME-091.1, "Fire and Smoke Detection System Annual Test"; O-ADM-016.4 "Fire Watch Program"; 0-ADM-016, "Fire Protection Plan," and 10 CFR Part 50, Appendix R. In addition, the inspectors reviewed the condition report database to verify that fire protection problems were being identified and appropriately resolved. The following areas were inspected:

- Unit 4 Battery Rack B Room, Fire Zone 102
- Unit 3, Residual Heat Removal (RHR) Heat Exchanger Room, Fire Zone 11
- Unit 3, RHR Pump A Room, Fire Zone 12

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- Unit 3, RHR Pump B Room, Fire Zone 13
- Unit 4, RHR Pump A Room, Fire Zone 15
- Unit 4, RHR Pump B Room, Fire Zone 16
- Unit 3, Reactor Control Rod Equipment Room, Fire Zone 63
- Unit 4, Reactor Control Rod Equipment Room, Fire Zone 61
- Unit 3, Main & Startup Transformer Area, Fire Zone 86

b. Findings

No findings of significance were identified.

.2 Annual Fire Brigade Drill

a. Inspection Scope

On August 2, the inspectors observed a fire brigade drill for a fire in the Fire Watch Shift Supervisor's Office located in Fire Zone 079, "Outdoor Area West of Unit 4 Containment," to evaluate the readiness of the licensee's personnel to fight fires. Specific aspects evaluated were: use of protective clothing and self contained breathing apparatus; fire hose deployment and reach; approach into the fire area; effectiveness of communications among fire brigade members and the control room, sufficiency of fire fighting equipment brought to the fire scene; site security measures for fire personnel entering the site; and the drill objectives and acceptance criteria. The inspectors reviewed the fire drill activities against provisions in the licensee's Procedure 0-ADM-016.2, "Fire Brigade Program" and Procedure 0-ONOP-016.8, "Response to a Fire/Smoke Detection System Alarm."

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

.1 External Flooding

a. Inspection Scope

The inspectors completed a flood protection walkdown of the Auxiliary building, Turbine building, Safety Related Switchgear Rooms, Emergency Diesel Generator buildings, and all outside areas during the weeks of August 10 through 12, and September 1 through 3. The inspectors performed the review due to the projected landfall of Hurricane Charley and Hurricane Frances and the potential for sustained and heavy precipitation. The inspectors conducted the walkdowns to verify that the licensee had implemented

adequate protection from external flooding. This inspection included wall penetration seals, level alarms, staged sand bags and flood stop logs included in the licensee's flood protection analysis, etc. Additionally, the inspectors performed in-office reviews of the external flooding design documentation and procedures listed in the Attachment to this report.

b. Findings

No findings of significance were identified

.2 Internal Flooding

a. Inspection Scope

The inspectors toured the following two risk significant areas that could be affected by internal flooding. The inspectors reviewed the UFSAR for Internal Flooding Criteria, to identify risk significant areas that could be affected by internal flooding and to verify flood mitigation plans and equipment were consistent with the design requirements. The inspectors performed a walkdown of the risk significant areas to verify that the flood mitigation equipment for these areas was operable and available in the event of an internal flood. The inspectors reviewed past condition reports for flooding related items to ensure that discrepancies were being identified and appropriately resolved. Licensee procedures and documents reviewed are included in the Attachment to this report.

- Unit 3, 3A, 4160V Switchgear Room
- Unit 3, 3B, 4160V Switchgear Room

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

On July 22, 2004, the inspectors observed and assessed licensed operator actions on the simulator to a station blackout scenario. The inspectors specifically evaluated the following attributes related to operating crew performance. Licensee procedures and documents reviewed are included in the Attachment to this report.

- Clarity and formality of communication
- Ability to take timely action to safely control the unit
- Prioritization, interpretation, and verification of alarms
- Correct use and implementation of Off Normal and Emergency Operating Procedures and Emergency Plan Implementing Procedures
- Control board operation and manipulation, including high-risk operator actions

- Oversight and direction provided by Operations supervision, including ability to identify and implement appropriate Technical Specification actions, regulatory reporting requirements, and emergency plan actions and notifications
- Effectiveness of the post training critique.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the following three equipment problems and associated condition reports to verify the licensee's maintenance efforts met the requirements of 10 CFR 50.65 (Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants) and Procedure O-ADM-728, "Maintenance Rule Implementation." The inspectors' efforts focused on maintenance rule scoping, characterization of the failed components, risk significance, determination of (a)(1) classification, corrective actions, and the appropriateness of established performance goals and monitoring criteria. The inspectors also interviewed responsible engineers, and observed some of the corrective maintenance activities. Furthermore, the inspectors verified that equipment problems were being identified at the appropriate level and entered into the corrective action program.

- Condition Report 04-2591, 4A Steam Generator Flow Control Valve (FCV-4-478) failure
- Condition Report 04-2275, Feedwater Pump A Discharge Isolation Valve (MOV-4-1420) failed to open upon 4A Steam Generator Feedwater Pump start
- Condition Report 04-1989, P-3-476 Steam Generator 3A, steam header pressure signal difference greater than acceptable tolerance

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors completed in-office reviews and control room inspections of the licensee's risk assessment of eight emergent or planned maintenance activities. The inspectors compared the licensee's risk assessment and risk management activities against the requirements of 10 CFR 50.65(a)(4); the recommendations of Nuclear Management and Resource Council 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 3; and Procedures O-ADM-068, "Work Week Management" and O-ADM-225, "On Line Risk Assessment and

Management.” The inspectors also reviewed the effectiveness of the licensee’s contingency actions to mitigate increased risk resulting from the degraded equipment. The inspectors evaluated the following risk assessments during the inspection:

- Unit 3 and Unit 4, work week of July 11 - July 16, which included scheduled maintenance on the Unit 4 A and B charging pumps
- Unit 4, 4B Battery maintenance conducted on July 20, 2004
- Unit 4, 4B High Head Safety Injection Pump maintenance conducted on August 3
- Unit 3 and Unit 4, work week of August 9 - 13, pending landfall of Hurricane Charley, which included 4A Component Cooling Water System (CCW) heat Exchanger cleaning
- Unit 3, 3A RHR Pump maintenance conducted on August 24
- Unit 3, 3A1 Intake Well maintenance with the 3A Intake Cooling Water (ICW) Pump out of service on August 25, 2004
- Unit 3 and Unit 4, work week of August 30 - September 3, pending landfall of Hurricane Frances, which included 3B CCW heat Exchanger cleaning
- Unit 3, 3B Containment Spray Pump maintenance conducted on conducted on September 24 and 25, 2004

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events

a. Inspection Scope

This inspection evaluated operator, maintenance and engineering response and performance for the following four non-routine plant evolutions to ensure they were appropriate and in accordance with the required procedures. The inspectors also evaluated performance problems to ensure that they were entered into the corrective action program. Licensee procedures and documents reviewed are included in the Attachment to this report. The following events or evolutions were reviewed:

- C Hurricane Preparations for Hurricane Charley, August 11 - 13, 2004
- C Hurricane Preparations for Hurricane Frances, September 1 - 5, 2004
- C Notice of Unusual Event (NOUE) for Hurricane Warnings, September 2 - 5, 2004
- C Notice of Unusual Event (NOUE) for Hurricane Warnings, September 25, 2004

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed seven interim disposition and operability determinations associated with the following condition reports to ensure that Technical Specification operability was properly supported and the system, structure or component remained available to perform its safety function with no unrecognized increase in risk. The inspectors reviewed the UFSAR, applicable supporting documents and procedures, and interviewed plant personnel to assess the adequacy of the interim condition report disposition.

- Unit 3, CR 04-4423, Steam issuing from Condensate Storage Tank overflow line during Auxiliary Feed Water (AFW) testing, July 20, 2004
- Unit 3 and Unit 4, CR 04-4511, Instrument air leak on AFW CV-2-2831
- Unit 3 and Unit 4, CR 04-4648, Flux Mapper System
- Unit 3, CR 04-2994, Unit 3B Safeguards Test Switch LC-494-1-X2T
- Unit 4, CR 04-1572, Pinhole air leaks on 4B EDG air start system
- Unit 3, CR 04-6939, Inadequate clearance between scaffolding and safety related components in the Unit 3 Safety Injection Pump room
- Unit 4, CR 04-5786, Design basis ICW flow calculation error

b. Findings

No findings of significance were identified.

1R16 Operator Work Around

.1 Cumulative Effects

a. Inspection Scope

The inspectors reviewed the cumulative effects of the operator workarounds that were in place on July 20, to verify that those effects could not increase an initiating event frequency, affect multiple mitigating systems, or affect the ability of operators to respond in a correct and timely manner to plant transients and accidents. The following workarounds were reviewed:

- CR 2001-0631 - Heater drain tank and level control causes loss of heater drain pumps on second heater drain pump start.
- CR 2003-0841 - Unit 3 bearing oil lift pump requires frequent adjustment/jumpers to maintain turbine on turning gear.
- CR 2003-0880 - Pressurizer backup heaters being maintained on due to leakby of spray valve PCV-3-455A. As a result, pressure master control signal is higher than normal.

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- CR 2004-2275 - Starting the Unit 4 steam generator feed pump requires the discharge motor-operated valve to be manually throttled open prior to start. When the pump starts, the operator is then required to close the motor-operated valve breaker.
- CR 2004-2177 - Screen-wash pumps lose suction and are unable to develop sufficient head to start the traveling screens when the intake water level is too low. This results in frequent inspections of the intake and local monitoring of the components when running.

b. Findings

No findings of significance were identified.

.2 Selected Operator Work Around

a. Inspection Scope

The inspectors reviewed the following Operator Work Around (OWA), to verify that this work around did not affect either the functional capability of the related system in responding to an initiating event, or the operators' ability to implement abnormal or emergency operating procedures.

- CR 2003-0880 - Pressurizer backup heaters being maintained ON due to leaky of spray valve PCV-3-455A. As a result, pressure master control signal is higher than normal.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

For the six post maintenance tests listed below, the inspectors reviewed the test procedures and either witnessed the testing or reviewed test records to determine whether the scope of testing adequately verified that the work performed was correctly completed and demonstrated that the affected equipment was functional and operable. The inspectors verified that the requirements of Procedure 0-ADM-737, "Post Maintenance Testing," were incorporated into test requirements. The inspectors reviewed the following work orders (WO) and/or procedures:

- Unit 3 and Unit 4, 4160 Volt Load Center H post maintenance testing following undervoltage relay replacement conducted under WO 32019085, on July 21, 2004.

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- Unit 3 and Unit 4, post maintenance testing of AFW Pump C Trip and Throttle Valve MOV 3-1404 following maintenance in accordance with 3-OSP-075.7 on July 21.
- Unit 3, Recirculation Sump A to RHR Pump 3A Suction MOV-3-860A reversible starter inspection conducted under WO 33021610 on August 25, 2004.
- Unit 3, EQ-MOV-843A, HHSI to Cold Leg MOV EQ and grease inspection conducted under WO 33021502 on August 24, 2004.
- Unit 3 and Unit 4, Control Room Emergency Ventilation System (CREVS) post maintenance testing following replacement of Damper D-3, Control Room Emergency Supply damper conducted under WO(s) 34010781 tasks 1 & 2 and WO 34015549 and IAW 0-OSP-025.1 monthly and annual test on September 11.
- Unit 4, 4A Containment spray Pump post maintenance testing following maintenance in accordance with Procedure 4-OSP-068.2, "Containment Spray System Inservice Test," conducted on September 18.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors either reviewed or witnessed the following seven surveillance tests to verify that the tests met the Technical Specifications, the UFSAR, the licensee's procedural requirements and that they demonstrated that the systems were capable of performing their intended safety functions and their operational readiness. In addition, the inspectors evaluated the effect of the testing activities on the plant to ensure that conditions were adequately addressed by the licensee staff and that after completion of the testing activities, equipment was returned to the positions/status required for the Structure, Systems and Components (SSCs) to perform its safety function. The tests reviewed included two inservice tests (ISTs) and one Reactor Coolant System (RCS) leakage detection system surveillance.

- Procedure 4-OSP-050.2, Residual Heat Removal System Inservice Test (IST)
- Procedure 4-OSP-047.1, Charging Pumps/Valves Inservice Test (IST)
- Procedure 0-OSP-202.3, 4A/4B High Head Safety Injection (HHSI) Pump Monthly Run
- Procedure 0-SME-003.5, Unit 4, 4B 125 VDC Station Battery Charger 18 Month Test
- Procedure 4-OSP-023.1, Unit 4, 4B EDG Operability Test
- Procedure 3-OSP-023.1, Unit 3, 3A EDG Operability Test
- Procedure 3-OSP-067.1, Unit 3, Process Radiation Monitoring Operability Test, Section 7.1, Containment Air Particulate, Channel R-3-11 Functional Test (RCS Leakage Detection)

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modificationsa. Inspection Scope

The inspectors completed a review of the following temporary modification and the supporting safety evaluation. The inspectors compared the temporary modification package against the requirements established in Administrative 0-ADM-503, "Control and Use of Temporary System Alterations (TSA)," and system requirements contained in the UFSAR. The inspectors reviewed the rod F8 TSA to verify it was implemented as described in the exigent TS change package. The inspectors interviewed operators, reviewed procedure changes, observed operator training on the TSA, and verified the data on the trend monitor. As part of TSAs, the inspectors reviewed the 10 CFR 50.59 evaluations to verify that no new single-failure was introduced, no prior NRC approval was needed for the TSA, and that the applicable 10 CFR 50, Appendix A General Design Criteria continued to be met. In addition, the inspectors completed in-office reviews and walkdown systems restoration verifications.

- TSA 04-04-028-013, Provide a means of monitoring Control Rod F8 stationary coil current while F8 Rod Position Indication is out of service

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) VerificationReactor Safety Cornerstone Performance Indicatorsa. Inspection Scope

The inspectors sampled the licensee submittal for the eight performance indicators (PIs) listed below for the period from the 2nd quarter of 2003 through the 1st quarter of 2004, to verify the accuracy of the PI data reported. PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 2, were used to verify the basis in reporting for each data element. The inspectors also reviewed a selection of Licensee Event Reports (LER), portions of Unit 3 and Unit 4 operator log entries, daily morning reports (including the daily condition report descriptions), system health reports,

monthly operating reports, and PI data sheets to verify that the licensee had adequately identified the safety system unavailability during the previous four quarters. This number was compared to the number reported for the PI during the current quarter. In addition, the inspectors also interviewed licensee personnel associated with the PI data collection, evaluation, and distribution.

Reactor Safety Cornerstone

- Reactor Coolant System Leakage, Unit 3
- Reactor Coolant System Leakage, Unit 4
- Reactor Coolant Activity, Unit 3
- Reactor Coolant Activity, Unit 4
- Safety System Functional Failures, Unit 3
- Safety System Functional Failures, Unit 4
- Safety System Unavailability, AFW, System Unavailability, Unit 3
- Safety System Unavailability, AFW, System Unavailability, Unit 4

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution

.1 Daily Review

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This review was accomplished by reviewing daily hard copy summaries of condition reports and by reviewing the licensee's electronic condition report database.

b. Findings

No findings of significance were identified.

.2 Annual Sample Review

a. Inspection Scope

The inspectors reviewed the licensee's corrective actions for twelve condition reports (CR) associated with the failure to build scaffolds in accordance with Procedure 0-ADM-012, "Scaffold Control." The CRs identified various non-compliances with Procedure 0-ADM-012 such as inadequate clearance to fragile safety related components, inadequate seismic restraints, impairing fire protection features, and

preventing access to operate safety related components locally. The CRs were reviewed to ensure that the full extent of the conditions were identified, appropriate evaluations were performed, and appropriate corrective actions were specified, prioritized, and completed. The inspectors also evaluated the reports against the requirements of the licensee's corrective action program as specified in Quality Instruction QI 16-PTN-1, "Corrective Action," and Nuclear Administrative Procedure (NAP)-204, "Condition Reporting." The specific CRs reviewed are listed in the attachment.

b. Findings and Observations

Introduction: A Green NCV was identified for failing to implement adequate corrective actions per 10 CFR 50, Appendix B, Criterion XVI, for issues related to the construction of scaffolding in proximity to safety related equipment or fire protection components.

Description: On August 20, 2004, the inspectors identified permanent scaffolding in the Unit 3 and Unit 4 Component Cooling Water rooms that did not meet the clearance requirements identified in Procedure 0-ADM-012 for fragile components. Procedure 0-ADM-012 required that scaffold components be greater than four inches from fragile safety related components such as sensing lines, gauges, transmitters, valve operators, conduit and piping less than one inch diameter, and flex conduit. The procedure required an engineering evaluation if the scaffolds were less than four inches from fragile components. The deficiencies identified by the inspector were less than the required distance of four inches, and were in several cases touching safety related sensing lines for Intake Cooling Water (ICW) instrumentation. The licensee initiated CR 2004-6824 to address this issue and, on August 23, walked down all existing scaffolding to verify compliance with Procedure 0-ADM-012. The licensee identified an additional scaffold that did not meet the clearance requirements and that would have prevented local manual operation of a valve as required in an off normal operating procedure. Two CRs were initiated to address these issues. On August 23, the inspectors walked down a scaffold built over the 3A High Head Safety Injection Pump (HHSI), and identified five examples of scaffold components that did not meet the required clearance from fragile safety related components. The clearances identified by the inspectors were one inch or less. The scaffold was built on the night of August 22, and was missed during the licensee's scaffold walkdown that morning. The licensee initiated CR 2004-6939 and engineering evaluated the scaffold and determined the 3A HHSI pump was operable. The inspectors reviewed the operability evaluation and determined it was adequate.

The inspectors reviewed CRs written between May 2003 and August 2004 relating to conditions where scaffolding was not erected per the requirements of Procedure 0-ADM-12. The inspectors identified eight CRs related to scaffold construction not in accordance with the procedure requirements. Seven of these CRs were greater than seven months old. The eighth CR was initiated in May 2004, approximately four months ago. The inspectors determined that the licensee's corrective actions for the seven older CRs were narrowly focused on correcting the specific scaffold deficiency and did not address why the scaffold erectors were not building scaffolds in accordance with procedures or requesting engineering to evaluate discrepancies. The corrective actions were a mixture of moving the scaffold; trend; or

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perform some sort of counseling, briefing, or informal training. One of the CRs contained a corrective action to update the electronic scaffold process form. However, the inspectors determined that the electronic form was not updated correctly and that the master form provided in Procedure 0-ADM-012 was not updated at all. The licensee initiated CR 2004-7424 to resolve this issue.

Procedure 0-ADM-012 required that an evaluation be performed by engineering for scaffolds which could not be built to the procedure requirements. The inspectors interviewed the Civil Engineering supervisor, whose group would perform the evaluation, and a civil engineer to determine how often they were requested to evaluate scaffolds during the last year. Both individuals stated that they had not been asked to evaluate a scaffold by maintenance during the last year. The only scaffold evaluations they had performed were as a result of the recent CRs.

In contrast to the narrowly focused corrective actions of the older CRs, the licensee's corrective actions for a scaffold CR written in May of 2004 were thorough and addressed improving the processes and qualifications. However, the due dates for the significant corrective actions were not due until February and April 2005. No effective interim corrective actions were taken by the licensee to address scaffold construction. This resulted in the four recent examples of scaffolding not built per the requirements of Procedure 0-ADM-012.

Analysis: This finding was determined to be more than minor in that it adversely affected the mitigating system cornerstone because the improper construction of scaffolding, and lack of engineering review of scaffolding could have prevented proper operation of fire protection features, limited or averted access to components required of emergency response, or rendered equipment inoperable as a result of a seismic event. The inspectors determined that engineering was routinely not requested to evaluate scaffolding construction discrepancies as required by Procedure 0-ADM-012. In fact, engineering was not requested to evaluate any scaffolds during the last year even though there were multiple examples documented in CRs where scaffolds were not built correctly. The finding was determined to be of very low safety significance because, while it had the potential to adversely affect mitigation systems and fire protection equipment, the specific examples identified did not result in an actual loss of safety function of a mitigating system or would not render equipment inoperable due to seismic events. This finding directly involved a cross-cutting aspect of problem identification and resolution, that being ineffective and untimely corrective actions.

Enforcement: 10 CFR, Part 50, Appendix B, Criterion XVI, Corrective Action, states, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. Contrary to this, on May 25, 2004, the licensee did not promptly correct a continuing problem with scaffolds not being erected in accordance with Procedure 0-ADM-012. The licensee failed to implement adequate interim corrective actions pending completion of the planned corrective actions due in February and April 2005. As a result on August 20 and 23, 2004, the inspectors identified five scaffolds, over or adjacent to safety related components, which did not comply with the clearance from fragile safety related components specified in Procedure

0-ADM-012 and were not evaluated by engineering. Because this finding is of very low safety significance and because it has been entered into the licensee's corrective action program as CR 2004-7630, this violation is being treated as a NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000250, 251/2004004-01, Inadequate Corrective Action for Scaffold Construction Deficiencies.

4OA3 Event Follow-up

.1 Unusual Event Due to Hurricane Warning

a. Inspection Scope

At 10:55 a.m. on September 2, 2004, the site declared an Unusual Event due to the issuance of a hurricane warning for Miami Dade County and surrounding areas on the Florida coast. The inspectors reviewed Procedure EPIP-20101, "Duties of Emergency Coordinator," to verify the licensee's actions to classify and make timely notification were consistent with site emergency plan requirements. The inspectors reviewed plant status including the availability of mitigating systems and the effect of storm conditions on the plant. The inspectors assessed licensee performance with respect to the licensee's staffing of the Emergency Response Organization, provision for the relief of plant operators, and plant damage assessment. During the approach of the storm, the inspectors communicated plant status to the Region II Incident Response Center. At 5:55 a.m. on September 5, 2004, the licensee exited the Unusual Event due to the lifting of the hurricane warning for Miami Dade County. See Section 1R01 for additional inspector activities associated with adverse weather preparations.

b. Findings

No findings of significance were identified.

.2 Unusual Event Due to Hurricane Warning

a. Inspection Scope

At 5:09 p.m. on September 25, 2004, the site declared an Unusual Event due to the issuance of a hurricane warning for Miami Dade County and surrounding areas on the Florida coast. The inspectors reviewed Procedure EPIP-20101, "Duties of Emergency Coordinator," to verify the licensee's actions to classify and make timely notification were consistent with site emergency plan requirements. The inspectors reviewed plant status including the availability of mitigating systems and the effect of storm conditions on the plant. The inspectors assessed licensee performance with respect to the licensee's staffing of the Emergency Response Organization, provision for the relief of plant operators, and plant damage assessment. During the approach of the storm the inspectors communicated plant status to the Region II Incident Response Center. At 7:15 p.m. on September 26, 2004, the licensee exited the Unusual Event due to the lifting of the hurricane warning for Miami Dade County. See Section 1R01 for additional inspector activities associated with adverse weather preparations.

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b. Findings

No findings of significance were identified.

4OA5 Other Activities

(Closed) NRC Temporary Instruction (TI) 2515/153, Reactor Containment Sump Blockage (NRC Bulletin 2003-01) - Unit 3

a. Inspection Scope

On September 2, 2004, the inspectors completed the review of the licensee's implementation of compensatory measures for the Unit 3 containment recirculation sumps. The compensatory measures were delineated in the Florida Power and Light Company's response to NRC Bulletin 2003-001, Letter L-2003-201, dated August 8, 2003. A summary of the licensee's interim compensatory measures and documentation of the NRC's review of these for Unit 4 were documented in NRC Inspection Report 50-250, 251/2003-005. The previous review conducted for Unit 4 included inspector review of training for engineers and operators which is common to both units. Therefore, the inspectors did not re-verify the training for this review.

The inspectors verified that Procedures ES-1.3, "Transfer to Cold Leg Recirculation," ECA-1.1, "Loss of Emergency Coolant Recirculation," 0-SMM-050.1, "Containment Recirculation Sump Screen Inspection," and 0-SMM-051.3, "Containment Closeout Inspection," were revised consistent with the licensee commitments. As noted in NRC Inspection Report 50-250, 251/2003-005, the licensee did not make procedure changes to increase injection time. However, the licensee did revise Procedure ECA-1.1 to provide an additional three hours of injection time using a Unit 4 high head safety injection pump being supplied from the Unit 4 refueling water storage tank. The inspectors verified that the schedule for the upcoming Unit 3 outage included specific activities to quantify potential debris sources and check for gaps and degradation in the sumps' screened flowpath. This TI is closed.

b. Findings

No findings of significance were identified.

4OA6 Meetings, including ExitExit Meeting Summary

On October 1, 2004, the resident inspectors presented the inspection results to Mr. T. Jones and other members of his staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

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SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:

J. Cadogan, Engineering
O. Hanek, Licensing Engineer
J. Johns, Maintenance Rule Coordinator
W. Johns, Security Manager
T. Jones, Site Vice-President
M. Murray, Emergency Preparedness Coordinator
M. Navin, Operations Manager
K. O'Hare, Radiation Protection and Safety Manager
W. Parker, Licensing Manager
M. Pearce, Plant General Manager
W. Prevatt, Work Control Manager
B. Stamp, Operations Supervisor
T. Sweeney, Engineering Electrical Supervisor
G. Warriner, Site Quality Manager

NRC personnel:

K. Weaver, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

05000250, 251/2004004-01 NCV Inadequate Corrective Action for Scaffold Construction Deficiencies (Section 40A2.2)

Opened

None

Closed

2515/153 (Docket 50-250) TI Reactor Containment Sump Blockage (NRC Bulletin 2003-01) (Section 40A5)

Discussed:

None

LIST OF DOCUMENTS REVIEWED**1R06: Flood Protection Measures**Procedures

Procedure ED-AD-009, "Hurricane Season Preparation"

Condition Reports

CR 2004-7889

Miscellaneous

Work Order 33000087-01

5610-000-DB-001 Section VIII, "Internal Flood Criteria"

5610-000-DB-001 Section IX, "External Flooding Criteria"

UFSAR, Appendix 5F, "Internal Plant Flooding"

UFSAR, Appendix 5G, "External Flood Protection for Turkey Point"

NRC letter dated September 4, 1979 and Safety Evaluation Report Susceptibility of Safety-Related Systems to Flooding From Failure of Non-Category I Systems for Turkey Point Plant, Units 3 and 4

LER 50-250/251-88-026, "Units 3 and 4 Outside the Final Safety Analysis Report Design Basis with Regard to Hurricane Flood Protection"

JPN-PTP-90-1902, External Flood Protection Enhancement Program - Plant Drainage Evaluation

JPTB-PTP-882310, External Flooding Program Concerns

1R11: Licensed Operator RequalificationProcedures

Procedure NAP-402, "Conduct of Operations"

Procedure 3-EOP-ECA-0.0, "Loss of All AC Power"

1R12: Maintenance EffectivenessCondition Reports

CR 2004-1989, Steam generator 3A steam header pressure difference greater than acceptable tolerance

Miscellaneous

Work Order 33020939-01, S/G level periodic test

Attachment 2 of Procedure 0-ADM-724, Instrument Operability Determination Calculation, for instrument channel P-3-476, 4/21/04

Procedures

ENG-QI 4.2, Procurement Engineering Control, Rev. 13

ISC TS 7.1, Receiving Inspection, Rev. 7

1R14: Personnel Performance During Non-Routine Plant Evolutions and EventsProcedures

Procedure 0-ONOP-103.3, "Severe Weather Preparations"

Procedure MCP 11.01, "Severe Weather Preparation"

Procedure 0-EPIP-20106, "Natural Emergencies"

Procedure EPIP-20101, "Duties of Emergency Coordinator"

1R15: Operability EvaluationsCondition Reports

CR 2000-1650, Thru wall leak on 4A EDG air start system

Procedures

4-OSP-019.1, Intake Cooling Water Inservice Test performed May 2004

PTN-4FSM-04-003, Calculation of Unit 4 ICW Flow to TPCW Plate Heat Exchangers

4OA5: Other ActivitiesCondition Reports

CR 03-1150, Scaffold in 3B RHR pump room partially demobilized and not IAW 0-ADM-012

CR 03-2620, Unit 3 CCW pump room has scaffolding that impairs fire detection and suppression. No fire impairment permit

CR 03-3899, Unit 4 C bus transformer, scaffold planks block flow path of fire suppression water

CR 03-3898, Unit 3 C bus transformer, scaffold planks block flow path of fire suppression water

CR 2003-1126, Scaffolding erected on the U3 and U4 bus transformers blocked detectors and deluge spray nozzles

CR 2004-0175, Improper tagging of scaffold

CR 2004-1097, Scaffold built for maintenance had scaffold pole touching conduit

CR 2004-2831, Three scaffolds built between U4 6A and 6B feedwater heaters had no horizontal restraints

CR 2004-6824, Clearance between equipment and scaffolds in Unit 3 and Unit 4 CCW pump rooms

CR 2004-6939, Safety related scaffold built over 3A HHSI pump appears to not have sufficient clearance to sensitive equipment as defined in 0-ADM-012

CR 2004-6947, Scaffold installed at 4A TPCW HX is touching the actuator of POV-3-4882

CR 2004-6950, Scaffold installed at 4A TPCW HX prevents installation of manual operator on POV-3-4882 which is required by the loss of ICW procedure

LIST OF ACRONYMS

AFW	Auxiliary Feedwater
ANPO	Assistant Nuclear Plant Operator
CCW	Component Cooling Water System
CR	Corrective Action Condition Report
CREVS	Control Room Emergency Ventilation System
CS	Containment Spray System
CSP	Containment Spray Pump

EDG	Emergency Diesel Generator
FCV	Flow Control Valve
HHSI	High Head Safety Injection
HX	Heat Exchanger
ICW	Intermediate Cooling Water
IST	In Service Testing
LER	Licensee Event Report
MSSV	Main Steam Safety Valve
NCV	Non-cited Violation
NOUE	Notice of Unusual Event
NPSH	Net Positive Suction Head
OWA	Operator Work Around
PI	Performance Indicator
P & ID	Piping & Instrument Drawing
PM	Preventive Maintenance
PMT	Post Maintenance Test
psig	pounds per square inch
RCS	Reactor Coolant Systems
RHR	Residual Heat Removal
RPI	Rod Position Indication
SSCs	Structure, Systems & Components
SDP	Significance Determination Process
SSGF	Standby Steam Generator Feedwater
TI	Temporary Instruction
TPCW	Turbine Plant Cooling Water
TSA	Temporary System Alteration
UFSAR	Updated Final Safety Analysis Report
WO	Work Orders