



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

April 26, 2005

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  
05000250/2005002 AND 05000251/2005002

Dear Mr. Stall:

On March 31, 2005, 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 April 7, 2005, 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 self-revealing finding of very low safety significance (Green) was identified. The finding was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating the violation as a non-cited violation (NCV), in accordance with Section VI.A of the NRC's Enforcement Policy. Additionally, two licensee-identified violations which were determined to be very low safety significance are listed in Section 4OA7 of this report. If you contest the NCV, 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 Senior 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 05000250/2005002 and 05000251/2005002  
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

cc w/encl:

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NAME	SNinh	SRudisail	KWeaver	MBarillas	NStaples	SVias	MScott
DATE	04/15/2005	04/18/2005	04/26/2005	04/26/2005	04/18/2005	04/26/2005	04/26/2005
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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: 05000250/2005002, 05000251/2005002

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

Facility: Turkey Point Nuclear Plant, Units 3 & 4

Location: 9760 S. W. 344<sup>th</sup> Street  
Florida City, FL 33035

Dates: January 1, 2005 - March 31, 2005

Inspectors: K. Weaver, Senior Resident Inspector  
M. Barillas, Acting Resident Inspector  
S. Ninh, Senior Project Engineer  
S. Rudisail, Project Engineer  
S. Vias, Senior Reactor Inspector, Team Leader (1R02, 1R17)  
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N. Staples, Reactor Inspector (1R02, 1R17)  
A. Vargas, Reactor Inspector (1R02, 1R17)  
L. Miller, Senior Emergency Preparedness Inspector (Sections  
1EP1, 1EP4, 4OA1)  
J. Kreh, Emergency Preparedness Inspector (1EP1, 4OA1)

Accompanying Personnel: M. Brown, Operations Engineer (1EP1)  
J. Shehee, Physical Security Inspector (1EP1)

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

Enclosure

## SUMMARY OF FINDINGS

IR 05000250/2005-002, 05000251/2005-002; 01/01/2005 - 03/31/2005; Turkey Point Nuclear Power Plant, Units 3 and 4. Event Followup

The report covered a three month period of inspection by resident inspectors, two region based project engineers, four region based inspectors, and two region based emergency preparedness inspectors. One Green self-revealing non-cited violation and two Green licensee-identified violations were identified. The significance of most findings is identified by their color (Green, White, Yellow, Red) using IMC 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 Oversight Process," Revision 3, dated July 2000.

### A. Inspector Identified & Self-Revealing Findings

#### Cornerstone: Mitigating Systems

- Green A Green self-revealing Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion V was identified for the failure to include adequate instructions in procedures which resulted in two manual reactor trips due to two rod drop events.

This finding was greater than minor because it involved the procedure quality and adequacy attributes of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown and power operations. The finding was analyzed using the Significance Determination Process (SDP) Phase 1, and was determined to be of very low safety significance (Green). While the finding resulted in two events where Shutdown Bank B Rod E-11 dropped into the core and subsequent manual reactor trips due to being in a conditions where Technical Specification 3.0.3 was entered, the finding did not result in the likelihood that mitigation equipment or functions would not be available.

### B. Licensee Identified Violations

Two violations of very low safety significance, which were identified by the licensee, have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. The violation and corrective action tracking number are listed in Section 4OA7 of this report.

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## REPORT DETAILS

### Summary of Plant Status:

At the beginning of the inspection period, Unit 3 was shutdown for repairs to the main turbine generator exciter. On January 6, following maintenance for the main turbine generator exciter, the unit was restarted and achieved 100 percent power on January 8, 2005. On January 28, reactor power was reduced to approximately 58 percent for condenser water box cleaning and returned to 100 percent power on February 2 .

At the beginning of the inspection period, Unit 4 operated at full power. On March 22, the 4A Steam Generator Feedwater Pump (SGFP) tripped due to a motor ground. A turbine runback automatically initiated and operators performed a manual reactor trip at 15% SG level. On March 23, following troubleshooting activities, the Unit 4 operators commenced a power increase and reached 43% power when the 4B SGFP main lube oil pump discharge connection was observed to be leaking. The operators commenced a power decrease per procedure and tripped Unit 4 at 20% power. On March 24, following repair of the 4B SGFP leak, the operators commenced power increase, entered Mode 1 and reached 60% power. Unit 4 remained at 60% power for the remainder of the inspection period with only the 4B SGFP in service.

### 1. REACTOR SAFETY

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

#### 1R02 Evaluations of Changes, Tests or Experiments

##### a. Inspection Scope

The inspectors reviewed nine changes to confirm that the licensee had appropriately considered the conditions under which changes to the facility, Updated Final Safety Analysis Report (UFSAR), or procedures may be made, and tests conducted, without prior NRC approval. The inspectors reviewed full evaluations and additional information, such as calculations, supporting analyses, the UFSAR, and drawings to confirm that the licensee had appropriately concluded that the changes could be accomplished without obtaining a license amendment. All packages reviewed were from 2003-2004. The nine evaluations reviewed are listed in the Attachment.

The inspectors also reviewed fourteen samples of changes for which the licensee had determined that evaluations were not required, to confirm that the licensee's conclusions to "screen out" these changes were correct and consistent with 10 CFR 50.59. The fourteen "screened out" changes reviewed are listed in the Attachment.

The inspectors also reviewed a recent audit and self-assessment of the 10 CFR 50.59 process and selected corrective action items, and work orders (WOs) to confirm that problems were identified at an appropriate threshold, were entered into the corrective action process, and appropriate corrective actions had been initiated.

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b. Findings

No findings of significance were identified.

1R04 Equipment Alignmenta. Inspection ScopePartial Equipment Walkdowns

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 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 3, 3A and 3B Intake Cooling Water (ICW) Pumps, in accordance with Procedure 3-OP-019, "Intake Cooling Water System," conducted on January 11, and 12, 2005, while the 3C ICW pump was out of service for maintenance.
- Unit 3, 3B Emergency Diesel Generator (EDG) in accordance with Procedure 3-OP-023, "Emergency Diesel Generator," on January 12, 2005, while the 3A EDG was surveillance tested.
- Unit 4, 4B EDG in accordance with Procedure 4-OSP-023.1, "Diesel Generator Operability Test" on January 18, 2005, while the 4A EDG was surveillance tested.
- Unit 3, High Head Safety Injection System (HHSI) in accordance with Procedure 3-OP-062, "Safety Injection," on January 27, 2005, while the 3B HHSI Pump was out of service for maintenance.

b. Findings

No findings of significance were identified.

1R05 Fire Protectiona. Inspection ScopeFire Area Walkdowns

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"; 0-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 (CR) database to verify that fire protection problems were being identified and appropriately resolved. The following areas were inspected:

- Unit 3, 3A, Main Steam Header Platform, Fire Zone 115
- Unit 3, 3B EDG Building, Fire Zone 72
- Unit 3 and 4, Turbine Deck, Fire Zone 117
- Unit 4, 4A EDG Control Room, Fire Zone 140
- Unit 4, 4B EDG Control Room, Fire Zone 135
- Unit 3, Unit 3 Safety Injection Pump Room, Fire Zone 53
- Unit 4, 4B 4160 Volt Switchgear Room, Fire Zone 67
- Unit 4, Steam Generator Feedwater Pump Area, Fire Zone 66
- Unit 4, Condensate Pump Area, Fire Zone 91

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

On January 25, 2005, the inspectors observed and assessed licensed operator actions on the simulator to a small break loss of coolant accident and a subsequent loss of off site power. 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 Operation 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 periodic training critiques

b. Findings

No findings of significance were identified.

## 1R12 Maintenance Effectiveness

### a. Inspection Scope

The inspectors reviewed the following three equipment problems and associated CRs 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 Administrative Procedure 0-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.

- CR 2004-16990, Unit 3 Steam Generator Feed Pump Failure During Recirculation Mode
- CR 2004-7770, 4B High Head Safety Injection Pump Inoperable
- CR 2004-15272, Containment Spray Pump failure

### b. Findings

No findings of significance were identified.

## 1R13 Maintenance Risk Assessments and Emergent Work Evaluation

### a. Inspection Scope

The inspectors completed in-office reviews and control room inspections of the licensee's risk assessment of seven 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 0-ADM-068, "Work Week Management" and 0-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, 3C ICW Pump maintenance risk assessment for work conducted on January 11.
- Unit 3, maintenance risk assessment for the 3A EDG 24 hour surveillance test conducted January 12.
- Unit 4, maintenance risk assessment for the 4A EDG surveillance testing conducted on January 18.

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- Unit 3, maintenance risk assessment for work conducted on January 25, which included the 3B EDG 24 hour surveillance and B ICW header maintenance.
- Unit 4, maintenance risk assessment for work conducted on February 23, which included the B Auxiliary Feedwater (AFW) Pump surveillance testing and 4A Component Cooling Water (CCW) heat exchanger maintenance.
- Unit 3, maintenance risk assessment for work conducted on March 3, which included the 3CM air compressor, C AFW Pump, and the 3B CCW heat exchanger.
- Unit 3, maintenance risk assessment for work conducted on March 9, which included the 3A CCW heat exchanger, 3A Charging Pump, and the B Standby Steam Generator Feed Pump.

b. Findings

No findings of significance were identified.

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

o. Inspection Scope

The inspectors evaluated operator, maintenance and engineering response and performance for the following 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 On March 22 through 23, 2005, the inspectors observed and/or evaluated the operator, maintenance and engineering response to the Unit 4 manual reactor trip from 78% power upon loss of a SGFP and steam generator level decrease. Prior to the manual reactor trip, a turbine runback from 100% to 78% occurred when 4 A SGFP tripped due to a fault within the pump motor. The inspectors reviewed the licensee's post trip review report and observed the recovery activities and subsequent reactor startup
- C On March 23 through 24, 2005, the inspectors observed and/or evaluated operator, maintenance and engineering response to the Unit 4 planned manual reactor trip from 20% for the repair of the oil leak on discharge piping of the gear driven lube oil pump for the 4B SGFP. The inspectors reviewed the licensee's post trip review report, and observed the recovery activities and subsequent reactor power increase to 60% power.

b. Findings

No findings of significance were identified.

## 1R15 Operability Evaluations

### a. Inspection Scope

The inspectors reviewed six interim disposition and operability determinations associated with the following CRs 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 CR disposition.

- C Unit 4, CR 2005-006, Unit 4, chemical volume and control system letdown, demineralizer leakage during rinse in of 4B Demineralizer
- C Unit 3, CR 2005-061, 3A Main Steam Isolation Valve (MSIV) Solenoid Valve SV-3-2607B venting air with MSIV open
- C Unit 3, CR 2005-5748, 3A HHSI pump outboard seal cooler vent isolation Valve 3-3472 active boric acid leak
- C Unit 3, CR 2005-4909, 3A HHSI pump outboard mechanical seal leakage
- C Unit 4, CR 2005-5698, Control room ventilation system emergency air intake dampers
- Unit 4, CR 2005-2040, Water intrusion into 4B Vital Motor Control Center cubicle

### b. Findings

No findings of significance were identified.

## 1R17 Permanent Plant Modifications

### a. Inspection Scope

Biennial Review. The inspectors evaluated engineering design changes (PC/Ms) for the following eleven modifications to evaluate for adverse effects on system availability, reliability, and functional capability. The following modifications and the associated attributes were reviewed (modifications from 2003-2004):

- PC/M 03-094 (MSP), AFW Pump B Lube Oil Piping Modifications, Reviewed: Heat Removal, Material/Replacement Components, (Mitigating Systems)
- PC/M 03-097 (MEP), U4 EDG Alarm Device Test Circuit Mod Installing Test Switches at Engine Control Panels 4C13A(B), Reviewed: Energy Needs, Electricity, Control Signals (Initiating Events)
- PC/M 01-023 (EP), Permanent Removal of Pressurizer Cubicle Missile Shield Plug, Reviewed: Seismic Qualifications, Ventilation Boundary, Equipment Protection (Mitigating Systems)

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- PC/M 02-033 (MEP), Unit 3 Control Rod Drive Mechanism (CRDM) Cooling Ductwork Modifications, Reviewed: Ventilation Boundary, Heat Removal (Mitigating Systems)
- PC/M 03-007 (MEP), Steam Generator Tube Plug and Cable Stabilizer, Reviewed: Pressure Boundary (Mitigating Systems)
- PC/M 01-017 (EP), Circulating Water Pump Upgrade, Reviewed: Energy Needs, Process Medium (Mitigating Systems)
- PC/M 95-035 (EP), Abandonment of Nitrogen Capping System to Various Feedwater Heaters & Steam Jet Air Ejector Condenser, Reviewed: Materials/Replacement Components (Mitigating Systems)
- PC/M 03-090, (MEP), Unit 3 Polar Crane Up Rate to 205 Tons, Reviewed: Structural, Equipment Protection (Initiating Events)
- PC/M 02-006 (EP), Control Room Emergency Ventilation System Backup Fan (SF1A) Start Time Delay (2X/LOFL), Reviewed: Control Signals (Mitigating Systems)
- PC/M 01-012 (EP), AFW Bus Stripping Reset Modification, Reviewed: Timing, Control Signals, Energy Needs (Mitigating Systems)
- PC/M 95-124 (EP), Replacement of Containment Purge Valve Actuators, Reviewed: Materials/Replacement Components, Pressure Boundary (Barrier Integrity)

For selected modification packages, the inspectors observed the as-built configurations. Documents reviewed included procedures, engineering calculations, modification design and implementation packages, WOs, site drawings, corrective action documents, applicable sections of the living UFSAR, supporting analyses, Technical Specifications, and design basis information.

The inspectors also reviewed selected self-assessments and corrective action documents associated with modifications to confirm that problems were identified at an appropriate threshold, were entered into the corrective action process, and appropriate corrective actions had been initiated.

The inspectors reviewed other corrective action documents and discussed several systems with the responsible engineers to determine that the licensee was not using other processes to perform modifications of plant equipment. On a sampling basis, the inspectors reviewed CRs, modification package changes (CRN), and WOs on mechanical systems (Auxiliary Feedwater, Component Cooling Water, and on Radiation Monitoring systems as well as several critical motor operated valves.) The system engineers for incore/excore instrumentation and for emergency diesel generators electrical cabinets, were interviewed on the type of repair work accomplished on these

components. Also, the inspectors reviewed a number of maintenance support packages for modification content.

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 and/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 WOs and/or procedures:

- Unit 3, 3A Main Steam Isolation Valve post maintenance testing following maintenance in accordance with WO 35000098, conducted on January 4, 2005
- Unit 3, 3C ICW Pump post maintenance testing following maintenance in accordance with WO 33013694-01, conducted on January 11, 2005.
- Unit 3, 3A Containment Spray Pump post maintenance testing following maintenance in accordance with WO 34016590, conducted on January 12, 2005.
- Train 2, B AFW Pump post maintenance testing Procedures 0-OSP-075.11 and 0-OSP-075.2, following maintenance in accordance with WOs 34020890 and 34015390, conducted on February 24, 2005
- Unit 3, 3A HHSI Pump post maintenance testing Procedure 0-OSP-062.2, following maintenance in accordance with WOs 34010948-03, 34015937-01, 34016592-01, and 34022807-01, conducted on February 13, 2005
- Train 2, C AFW Pump Operability Verification Procedure 4-OSP-075.2, following maintenance in accordance in accordance with WO 33018254, conducted on March 3, 2005

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors either reviewed or witnessed the following eight surveillance tests to verify that the tests met the Technical Specifications, the UFSAR, the licensee's procedural requirements and demonstrated the systems were capable of performing

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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 Structures Systems Components to perform its safety function. The tests reviewed included one inservice test (IST.)

- Unit 3, Procedure 3-OSP-023.2, "Diesel Generator 24 Hour Full Load Test and Load Rejection"
- Unit 4, Procedure 4-OSP-023.1, "Diesel Generator Operability Test"
- Unit 3 and Unit 4, Procedure 0-OSP-074.3, "Standby Steam Generator Feedwater Pumps Availability Test"
- Unit 4, Procedure 4-OSP-063.1, "Safeguards Actuation System Logic Test"
- Unit 4, Procedure 4-OSP-055.1, "Emergency Containment Cooler Operability Test"
- Unit 4, Procedure 4-OSP-059.15, "Nuclear Instrumentation Channel Check and Calibration"
- Unit 4, Procedure 0-OSP-062.2, "Safety Injection System Inservice Test"
- Unit 3, Procedure, 3-OSP-041.1, "Reactor Coolant System Leak Rate Calculation"

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the emergency exercise and scenario for the biennial, full participation 2005 emergency response exercise for Turkey Point Nuclear Plant. The review evaluated whether the licensee created a scenario suitable to test the major elements of their emergency plan in accordance with 10 CFR 50, Appendix E.

Licensee activities inspected during the exercise included independent observations in the Control Room Simulator, Emergency Operations Facility (EOF), Technical Support Center, and Operational Support Center. The exercise was conducted on February 16, 2005. The inspectors reviewed a sample of corrective actions identified in the past, to determine if trends in performance represented failures to correct weaknesses or a failure to meet a planning standard or other regulatory requirement. The inspectors developed a list of performance areas to be observed in this exercise. The inspectors' evaluation focused on the risk-significant activities of event classification, notification of governmental authorities, onsite protective actions, offsite protective action recommendations, and accident mitigation. The inspectors also evaluated command and control, the transfer of emergency responsibilities between facilities,

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communications, adherence to procedures, and the overall implementation of the emergency plan. The inspectors attended the post-exercise critique to evaluate the licensee's self-assessment process and the presentation of critique results to plant management.

At the conclusion of these evaluations and independent observations, the inspectors determined that the exercise was a satisfactory test of the Emergency Plan.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

a. Inspection Scope

The inspectors reviewed a selected sample of changes made to the Emergency Response Plan (ERP) since the last inspection in this program area. The ERP changes were reviewed against the requirements of 10 CFR 50.54(q) to determine whether any of the changes decreased ERP effectiveness. The subject changes, which were incorporated in ERP Revision 42, did not include modifications to the emergency action levels (EALs). The inspectors reviewed documentation of the licensee's 10 CFR 50.54(q) screening evaluations for Revisions 42. Licensee procedures, records, and other documents reviewed within this inspection area are listed in the Attachment to this report.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

On January 19, 2005, the inspectors observed an operating crew in the simulator during the fourth quarter emergency plan drill of the site emergency response organization. During the drill the inspectors assessed operator actions to verify that emergency classification, notification, and protective action recommendations were made in accordance with the emergency plan implementing procedures and 10 CFR 50.72 requirements. Additionally, the inspectors reviewed whether the initial activation of the emergency response centers was correctly conducted. Technical Specifications required actions during the drill were reviewed to assess correct implementation. Drill critique items were discussed with the licensee and reviewed to verify that drill issues were identified and captured. Licensee procedures and documents reviewed are included in the Attachment to this report.

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b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals relative to the PIs listed below for the period January through December 2004. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline", Revision 2, were used to confirm the reporting basis for each data element.

Emergency Preparedness Cornerstone

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

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 PI for ERO drill and exercise performance 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 alert and notification system 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 to this report.

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution

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

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licensee's corrective action program. This review was accomplished by reviewing daily hard copy summaries of CRs and by reviewing the licensee's electronic CR database.

b. Findings

No findings of significance were identified

4OA3 Event Follow-up

.1 (Closed) Licensee Event Report (LER) 05000250/2004-004-00: Plant Shutdowns Due to Drop of Shutdown Bank B Rod E-11 During Low Power Physics Testing

a. Inspection Scope

The inspectors reviewed the LER and CRs 2004-15903 and 2004-15675, which documented this event in the corrective action program, to verify the cause of the November 29, 2004, Shutdown Bank B Rod E-11 drop into the core during low power physics testing and manual reactor trip. The inspectors also reviewed the subsequent November 30, 2004, manual reactor trip that occurred after troubleshooting and recommencing of low power physics testing, when Shutdown Bank B Rod E-11 again dropped into the core.

b. Findings

Introduction. A Green self-revealing NCV was identified for failure to comply with 10 CFR 50, Appendix B, Criterion V, for failure to include adequate instructions in procedures for precluding the rod drop event.

Description. A self-revealing finding was identified due to an inadequate procedure that did not specify pin inspection prior to mating connectors, and cable routing that did not consider connector alignment complicating the connector mating process. Specifically, procedure VP04-069, "Turkey Point 3 IHA Cable Routing Procedure" did not include instructions to inspect the pins of the connectors for the control rod drive mechanism coil stack and cavity edge connectors. On November 29, 2004, the reactor was manually tripped after Shutdown Bank B Rod E-11 dropped into the core during low power physics testing. During troubleshooting no specific problem was identified for this rod drop. After post maintenance testing, Rod E-11 was returned to service. On November 30, 2004, after recommencing low power physics testing, Shutdown Bank B Rod E-11 dropped into the core again. For each dropped rod event, the licensee entered Technical Specification 3.0.3 requiring the unit shutdown.

The cause of the event was determined to be a pushed pin in the CRDM coil stack connector that resulted in intermittent pin contact. The displaced pin was attributed to the inadequate procedure that did not specify pin inspection prior to mating the connectors halves. Cable routing also complicated the connector mating process because the short length resulted in inability to freely align and engage the connector slot and key.

Analysis. The inspectors determined that this is a performance deficiency due to inadequate procedural guidance. The inadequate procedure resulted in a pushed pin on the connector causing intermittent contact. This resulted in the dropped rod during low power physics testing and subsequent manual reactor trips. This finding was greater than minor because it involved the procedure quality and adequacy attributes of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown and power operations. The finding was analyzed using the SDP Phase 1 per Manual Chapter 0609, Appendix A, and was determined to be of very low safety significance (Green). While the finding resulted in two events where Shutdown Bank B Rod E-11 dropped into the core and subsequent manual reactor trips due to being in a condition where Technical Specification 3.0.3 was entered, the finding did not result in the likelihood that mitigation equipment or functions would not be available. This finding was documented in the licensee's corrective action program as CR 2004-15675.

Enforcement. 10CFR50, 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. Contrary to the above, on November 30, 2004, the licensee identified that due to an inadequate procedure, the CRDM system was placed into a configuration which resulted in the plant being in a condition that prevented the CRDM system from being able to adequately maintain control rods in a withdrawn position resulting in two events where rods dropped and the reactor was subsequently manually tripped. Because of the very low safety significance and the licensee's action to place the issue in their corrective action program as CR 2004-15675, this violation is being treated as a non-cited violation in accordance with Section VI.A.1 of the Enforcement Policy: 05000250/2005002-01. This LER is closed.

2. (Closed) Licensee Event Report (LER) 05000250/2004-007-00, Manual Reactor Trip Due to Generator Exciter Turbine Cooling Water Leak

On December 28, 2004, Unit 3 reactor was manually tripped from 70% power following a fast load reduction from 100% power. The load reduction was initiated when the turbine plant cooling water (TPCW) leakage exceeded the makeup capability to the TPCW surge tank. The reactor trip was initiated following the discovery of water in the Unit 3 main generator exciter housing. The cause of the TPCW leak was an incorrectly installed gasket on the exciter cooler by the licensee's vendor during cooler refurbishment. Residual water from the exciter housing leaked through conduit floor seals onto 3B 4160 Volts (3B 4kv) safety related switchgear enclosure, located directly beneath the exciter housing. However, the 3B 4kv switchgear remained operable through the event and did not experience any AC grounding or shorts caused by the water intrusion other than the annunciator alarms. Immediate corrective actions included the identification and repair of the TPCW leak source and drying electrical components. The long term corrective actions to address root cause are being evaluated. The LER was reviewed by the inspectors and no findings of significance were identified. The licensee documented the failed equipment in CR 2004-17947. This LER is closed.

.3 (Closed) LER 05000250, 251/2004-001-00 and 01, Installation of Ground Test Devices in Output Breakers during Startup Transformer Maintenance Causes Both EDGs to be inoperable

On January 14, 2004, while preparing a temporary procedure to be used during the upcoming Unit 3 startup transformer outage, the licensee identified that ground test devices (GTDs), installed in the Unit 3 startup transformer breaker cubicles during maintenance, would cause the Unit 3 EDGs to respond to a loss-of-offsite power (LOOP) in droop mode instead of isochronous mode. In droop mode, EDG steady state output frequency (57.0 Hz) and voltage (3950 Volts) would be less than required Technical Specification surveillance requirement 4.8.1.1.2 ( $60 \pm 1,2$  Hz;  $4160 \pm 420$  Volts); and therefore, both Unit 3 EDGs are considered inoperable during the startup transformer maintenance. This condition is not applicable to Unit 4 EDGs because they have a different control circuit design. Subsequently, the licensee performed an extent of condition review and identified that, with the GTD installed in the A or B ICW pump or the CCW pumps switchgear cubicle, no ICW or CCW pump would automatically load during sequencer loading onto its associated EDG for a LOOP. Therefore, the A or B ICW or CCW pumps, with the GTD device installed in its associated cubicle, and the ICW or CCW pumps on the swing D Bus switchgear, would be considered inoperable. The cause of this event was a failure to recognize the effect of the GTD used in the 4 kV cubicles on the associated EDG and 4 kV switchgear control circuits, in addition to a procedural deficiency that did not include this precaution. Corrective actions included procedure changes to install appropriate jumpers, when the GTDs are installed in associated 4 kV cubicles, prior to the next maintenance or test.

The inspectors determined that this finding was a performance deficiency due to inadequate maintenance procedural guidance, which resulted in both Unit 3 EDGs being inoperable in July 2000, for 36 hours, Unit 3 3A and 3C CCW pumps being inoperable in August 2002, for 130 hours, Unit 4 4A and 4C ICW pumps being inoperable in October 2002, for 77 hours, and Unit 4 4B and 4C CCW pumps being inoperable in November 2002, for 131 hours. The finding is greater than minor because it involved the procedure quality and adequacy attributes of mitigating system cornerstone and affected the objective of ensuring that equipment is available and capable to respond to an event.

The SDP Phase 1 for both Unit 3 EDGs being inoperable per Technical Specifications was evaluated per NRC Manual Chapter 0609, Appendix A. and screened out as Green because the finding did not represent an actual loss of safety function. Both EDGs would have performed their safety function and carried all accident loads in the event of a LOOP. Because the finding also involved an actual loss of safety function of two Unit 3 CCW pumps, two Unit 4 ICW pumps, and two Unit 4 CCW pumps for longer than the Technical Specification allowed outage time, a SDP Phase 2 was evaluated and completed. The finding was determined to be of low safety significance (Green) because the D switchgear ICW or CCW pump would operate prior to a LOOP and would be available to be manually started and loaded on the EDG from the control room via the control switch after the sequencer automatic load per emergency procedures. The most dominant core damage sequence involved the LOOP and Loss of Emergency AC accidents.

The finding was documented in the licensee's corrective action program as CR 2004-0157 and had been identified by licensee personnel during temporary procedure reviews. This licensee identified finding involved a violation of 10CFR50, Appendix B, Criterion V, Procedures. The enforcement aspects of the violation are discussed in Section 4OA7. This LER is closed.

.4 (Closed) Licensee Event Report (LER) 05000250/2004-002-00, As-Found Cycle 20 Main Steam Safety Valve Setpoints Outside Technical Specification Limits

On September 25, 2004, Unit 3 was in Mode 1 and holding at 50 % power when Technical Specification surveillance testing of the main steam safety valves (MSSVs) found that one of the valves, RV-3-1405, lifted at 4.71 % above the Technical Specification allowable setpoint pressure of  $\pm 3$  % of 1085 psig. The valve was declared inoperable and Unit 3 entered Technical Specification action statement 3.7.1.1.b. Since the reactor power was at 50 percent, no reactivity changes were required in order to comply with the Technical Specification 3.7.1.1b requirement to be at or less than 53 % reactor power. The valve was adjusted, retested and returned to service once the root cause was determined. The root cause of the high as-found lift setpoint for RV-3-1405 was determined to be a slow build-up of corrosion between the ground ends of the spring and the spring washers. The licensee determined use of a specific corrosion inhibitor as a contributing cause and the change to another corrosion inhibitor an adequate corrective action. The valve was subsequently overhauled, tested satisfactorily and returned to service. Two additional MSSVs were tested in accordance with the IST program requirements and found to be within the range of their required setpoint pressures. The licensee performed an evaluation and concluded the as-found setting of the inoperable valve did not challenge the overpressure design basis criteria during the operating cycle. This problem was identified and resolved through the licensee's corrective action program as CR 2004-8570.

The inspectors verified that the applicable Technical Specification action statement was complied with once the condition was identified. The inspectors also verified that the LER was submitted to the NRC within 60 days of the discovery of the event per 10 CFR 50.73 (a) requirements. This finding constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC's enforcement policy. This LER is closed.

.5 (Closed) Licensee Event Report (LER) 05000250/2004-003-00: Single Failure Vulnerability in Dousing Function Can Cause Emergency Containment Filters to be Inoperable

On October 2, 2004, a single failure vulnerability was discovered during a Unit 3 clearance review which affected the dousing function of all the Emergency Containment Filters (ECF). The ECFs are required to perform the safety related function of radioactive iodine removal from the containment building so that offsite radiation dose is maintained within regulatory guidelines during an accident. During a clearance review Operations personnel identified that all three ECFs were vulnerable to inadvertent dousing if power was lost to power panel 3P22 breaker 12 or power panel 3P21 breaker 12. Also, for Unit 4 a power failure of power panel 4P21 breaker 12 or power panel

4P22 breaker 12 could inadvertently douse the Unit 4 ECFs. The dousing function is used to dissipate the decay heat in the ECF charcoal filters generated from adsorbed radioactive iodine during an accident. The cause of the event was determined to be human error as the design deficiency was raised several times previously, however the licensee failed to recognize the impact on the ECF function. This finding was greater than minor because it involved the design control attribute of the barrier integrity cornerstone and affected the cornerstone objective of maintaining functionality of the containment so as to protect the public from radio nuclide releases caused by accident or events. The finding was analyzed using the Significance Determination Process (SDP) Phase 1 per Manual Chapter 0609, Appendix A, and was determined to be of very low safety significance (Green). The finding did not represent an actual open pathway in the physical integrity of reactor containment and the design deficiency was corrected in the licensee's corrective action program as CRs 2004-9718. This licensee identified violation involved a violation of 10CFR50, Appendix B, Criterion III, Design Control. The enforcement aspects of this violation are discussed in Section 4OA7. This LER is closed.

#### 4OA6 Meetings, including Exit

##### Exit Meeting Summary

On April 7, 2005, 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.

#### 4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

10CFR50, 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. Contrary to the above, on January 14, 2004, two Unit 3 EDGs in July 2000, two Unit 3 CCW pumps in August 2002, two Unit 4 ICW pumps in October 2002, and two Unit 4 CCW pumps in November 2002, were determined be inoperable for longer than the Technical Specification allowed outage time due to inadequate maintenance procedure guidance. This was identified in the licensee's corrective action program as CR 2004-0157. This finding was determined to be of very low safety significance (Green) by Phase 1 and Phase 2 evaluations under the Significance Determination Process.

10CFR50, Appendix B, Criterion III, requires, in part, that measures shall be established to assure that applicable regulatory requirements and the design basis be correctly translated to structures, systems and components. Contrary to the above, on October 2, 2004, the licensee identified a design deficiency that resulted in a single failure vulnerability in the dousing function of the Emergency Containment Filters. Specifically, the loss of power to a power panel breaker could result in dousing all three ECFs. This design deficiency was found to affect both Units 3 and 4. This finding was of very low safety significance because it does not represent an actual open pathway in the physical integrity of reactor containment.

ATTACHMENT: SUPPLEMENTAL INFORMATION



## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee personnel:

C. Brunstetter, Emergency Preparedness  
S. Greenlee, Engineering Manager  
O. Hanek, Licensing Engineer  
W. Johns, Security Manager  
T. Jones, Site Vice-President  
J. Manso, Maintenance Manager  
G. Mendoza, Chemistry Manager  
S. Mihalakea, Licensing Engineer  
D. Mothena, Manager Plant Support Services  
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

None

Opened and Closed

05000250/2004-004-00	NCV	Plant Shutdowns Due to Drop of Shutdown Bank B Rod E-11 During Low Power Physics Testing Due to an Inadequate Vendor Procedure (Section 4OA5)
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Closed

05000250/2004-004-00	LER	Plant Shutdowns Due to Drop of Shutdown Bank B Rod E-11 During Low Power Physics Testing (Section 4OA5)
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05000250/2004-007-00	LER	Manual Reactor Trip Due to Generator Exciter Turbine Cooling Water Leak (Section 4OA5)
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05000250;251/2004-001-00, 01	LER	Installation of Ground Test Devices in Output Breakers During Startup Transformer Maintenance Causes Both EDGs to be Inoperable (Section 4OA5)
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05000250/2004-002-00	LER	As-Found Cycle 20 Main Steam Safety Valve Setpoints Outside Technical Specification Limits (4OA5)
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05000250/2004-003-00	LER	Single Failure Vulnerability in Dousing Function Can Cause Emergency Containment Filters to be Inoperable (4OA5)
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## LIST OF DOCUMENTS REVIEWED

### **Section 1R02: Evaluations of Changes, Tests or Experiments**

#### Procedures

- Guidance for Performing 10 CFR 50.59 Safety Evaluations, Rev. 3
- Guidance for Performing 10 CFR 50.59 Evaluations, Rev. 4
- 0-ADM-104, 10 CFR 50.59 Applicability/Screening Reviews, 12/15/04

#### Full Safety Evaluations

- JPN-PTN-SEEJ-89-085, Safety evaluation for de-energization of Unit 3 4160V safety related busses
- JPN-PTN-SEMS-96-003, 10CFR50.59 evaluation for Unit 4 steam generators' secondary side foreign objects
- PTN-ENG-SECS-04-043, Various plant requests to prepare plant for hurricane Frances
- PC/M 01-023 (EP), Permanent Removal of Pressurizer Cubicle Missile Shield Plug,
- PC/M 01-017 (EP), Circulating Water Pump Upgrade,
- PC/M 95-035 (EP), Abandonment of Nitrogen Capping System to Various Feedwater Heaters & Steam Jet Air Ejector Condenser,
- PC/M 02-006 (EP), Control Room Emergency Ventilation System Back up Fan (SF1A) Start Time Delay (2X/LOFL),
- PC/M 01-012 (EP), AFW Bus Stripping Reset Modification,
- PC/M 95-124 (EP), Replacement of Containment Purge Valve Actuators,

#### Screened 50.59 Reviews

- PTN-ENG-SECJ-04-038, Use of the R-cal feature of the measurement systems international wireless load cell, (CR 2005-1244)
- PTN-ENG-SECS-04-025, Engineering evaluation for temporary construction loads on dome's ring beam
- PTN-ENG-SECS-04-028, Eng. Eval. for I-shape mast climbing work platform loads on the Auxiliary Building roof
- PTN-ENG-SEOS-03-056, Inservice Testing program relief request PR-04-RHR discharge & suction pressure gauge range requirements
- PC/M 03-014 (MEP), Temperature Switch 2114 upgrade
- PC/M 03-065 (MSP), Installing a motor shaft to pump shaft coupling on the ICW pumps
- PC/M 04-149 (MSP), Replacement elbow for Unit 3 ICW discharge from TPCW
- PC/M 03-049 (MEP), CCW leaving Non-Regen Hx outlet flow indication upgrade
- PC/M 03-016 (MEP), Reverse osmosis system for silica removal
- PC/M 03-094 (MSP), AFW Pump B lube Oil Piping Modifications,
- PC/M 03-097 (MEP), U4 EDG Alarm Device Test Circuit Mod Installing Test Switches at Engine Control Panels 4C13A(B),
- PC/M 02-033 (MEP), Unit 3 CRDM Cooling Ductwork Modifications,
- PC/M 03-007 (MEP), Steam Generator Tube Plug and Cable Stabilizer,
- PC/M 03-090 (MEP), Unit 3 Polar Crane Up Rate to 205 Tons,

#### Other Documents

- Final Safety Analysis Report
- Technical Specifications
- Letter FPL to NRC, March 8, 2001, Implementation of the Revised 10 CFR 50.59

Condition Reports (CRs)

- 03-0382, Work Order Does List Appropriate Mod Process Number
- 03-0385, Confusion over Administrative Requirements
- 03-0552, Mod Requires Change to Equipment Damage
- 03-0783, Discrepancy in Mod Documentation
- 03-1147, Minor Error in Mod Implementation
- 03-1200, Existing Drawing Error Found During Mod Installation
- 03-1847, Post Mod Test Failed Due to Damper Problem
- 03-1857, Modification Implementation Temporarily Halted
- 03-3180, Spike on Channel 1 of Over Temperature and Over Pressure
- 04-0022, Breaker for Chiller
- 03-1223, PWO for Control Room Relay PCM 02-006
- 02-0473, Stroke Time Testing of POV-4--2600, Containment Purge Valve
- 02-0763, CRDM Ductwork Cooling
- 03-4268, Containment Ventilation Heat Removal Fans
- 02-2154, Implementation of New 50.59 Process

Audits and Assessments

- QRNO-04-0035, 10CFR50.59 Applicability and Screening Reviews

**1R11: Licensed Operator Requalification**Procedures

Procedure NAP-402, "Conduct of Operations"

Procedure 0-EPIP-2001, "Duties of Emergency Coordinator"

Procedure 3-EOP-E-0, Reactor Trip or Safety Injection

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

Procedure 3-EOP-ECA-0.2, Loss of All AC Power Recovery With SI Required

Procedure 3-ONOP- 0034, Loss of DC Bus 3D01 and 3D01A (3A)

Procedure 3-ONOP-0041.3, Excessive Reactor Coolant System Leakage

**1R12: Maintenance Effectiveness**Condition Reports

CR 2004-16990, The 3B steam generator feed pump bearing overheated requiring a pump shutdown.

**1R14 Personnel Performance During Nonroutine Plant Evolutions and Events**Procedures

Procedure 4-EOP-E-0, Reactor Trip or Safety Injection

Procedure 4-EOP-ES-0.1, Reactor Trip Response

Procedure 0-OSP-040.4, Estimate Critical Conditions

Procedure 4-GOP-301, Hot Standby to Power Operation

Procedure 4-GOP-103, Power Operation to Hot Standby

Procedure 0-ADM-529, Unit Restart Readiness

Procedure 0-ADM-511, Post Trip Review Restart Report, Unit 4 Manual Trip Due to Lowering S/G Levels Following 4A SGFP Trip dated 3/22/05

Procedure 0-ADM-511, Post Trip Review Restart Report, Unit 4 Pre-planned Manual Reactor Trip from 20 % Power for 4B SGFP Oil Leak repair

**Section 1R17: Permanent Plant Modifications**Procedures

Design Basis Document (DBD), Rev. 11  
 0-ADM-701, Control of Plant Work Activities, 8/12/04  
 QI 3-PTN-1, Design Control, 6/30/04  
 ENG-QI-1.0, Design Control, Rev. 19  
 ENG-QI-1.1, Engineering Package, Rev. 14  
 ENG-QI-1.14, Maintenance Support Package, Rev. 1  
 ENG-QI-2.1, 10 CFR 50.59 Applicability/Screening/Evaluation, Rev. 7  
 ENG-QI-2.0, Engineering Evaluations, Rev. 11

Other Documents

- Final Safety Analysis Report
- Technical Specifications
- PC/M 03-028 (MSP), Jeumont Pumps Seals
- PC/M 04-155, (MSP), Spacer between yoke and yoke Rods
- PC/M 03-053, (MSP), CCW Pump Split Seal
- PC/M 03-095, (MSP), Auxiliary Feedwater Pump, S/N 0601001, Refurbishment

Condition Reports

- 00-1614, Teflon Tape Found in the Plant - Resolution
- 03-2398, B AFW Pump Repair Problem Resolution
- CRN M-11233, MSP 03-065 CCW Replacement Coupling Requirements
- CRN M-10454, MSIV Failed Pop Test
- CRN E-15778, Spring UPS Connection
- 04-0228, Wrong Wire Used in PC/M
- 98-1549, PMAI 98-11-165, Agastat Maintenance
- 03-2398, Modified AFW Governor Collar
- 04-0022, Chiller Breaker PC/M 03-070
- 03-0585, HHSI Fill Check Valves
- 05-816, Two FPER's were identified as not containing the required verification summary statement required by Engineering Quality Instruction ENG-QI-2.0
- 05-350, Potential Violation of ENG QI 1.1 Review Interface Requirement
- 05-1244, Completeness of Engineering Evaluation PTN-ENG-SECJ-04-038

Work Order Reviewed

- 34015390, K3B Coupling Alignment
- 33015160, K3B Main Oil Pump Overhaul
- 33015160, AFW Pump - Inspect Bearings
- 32003125, Suspect Wrong Oil in Governor
- 32010635, Remove Low Orifices
- 32010324, Replace Lube Oil Cooler Relief
- 33022203, K3C: Troubleshooting and Inspection
- 33016752, K3C: Implement MSP 03-102
- 33015325, Install Oil Test Port
- 32006045, Replace Valve Spindle and & Thrush Washer
- 32007706, Valve Will Not Open
- 34010931, 3P215A Repair
- 34010837, Align Motor to Coupling
- 34012242, Inspect High Head Si Pump

- 34013795, 4P215B Repair
- 33003599, Unable to Remove Outboard Drain
- 34021275, MSIV Spacer
- 33023650, Spring Power
- 33007316, HHSI Pipe Plug (CR 97-696)
- 32003125, Check Oil in Governor
- 34018931, R-4-17A Slow Failure
- 34008086, R-15 Spiking
- 34005686, RD-4-19 Needs NIST Cal
- 33021785, RD-4-6417, Trouble Light
- 33019379, Source Window Stuck
- 33017234, R-4-11 Purge Function Failed
- 33015859, FI-866 Backup Air Sampler
- 33015612, RM4-20 Power Light Does Not Stay on
- 33010854, R-4-1419, Pts 11 & 12 Improper Position
- 33004931, RAD-6412 Pump Diaphragm Replacement
- 33004236, R-ii/12 Pump Diaphragms Replacement
- 32016280, RAD-4-6417, UPS Inoperable
- 34022260, R-3-1417 Flow out of Specification
- 34014340, RAD-6417 Steam Jet Air Ejector
- 34013996, Pump Will Not Start
- 34008335, RAD-6417 Pump Diaphragm Replacement
- 34005683, RAD-3-6417 Replace Battery Backup
- 34005365, PRMS SFP Stack RAD-6418 Repair

#### Audits and Assessments

- QAO-PTN-03-006, Site Engineering Functional Audit
- QAO-PTN-04-007, Maintenance/Work Control Functional Area Audit
- QRNO-04-0021, Unit 3 Major Modification Plant Change/Modifications

#### **1EP1: Exercise Evaluation**

##### Emergency Preparedness Plans and Procedures

0-ADM-115, Rev. 10/10/01C3, Notification of Plant Events

0-ADM-028, Rev. 9/26/02C, On the Job Injuries

0-ADM-032, Rev. 11/22/04, NRC Performance Indicators Turkey Point

EP-AD-001, Rev. 12, Preparation, Conduct, and Evaluation of Emergency Preparedness Drills and Exercises

0-EPIP-20101, Duties of Emergency Coordinator, 10/28/2004

0-EPIP-20126, Offsite Dose Calculations, 03/26/2001

0-EPIP-20132, Technical Support Center Activation and Operation, 10/28/2004

2005 Emergency response exercise and scenario for Turkey Point Nuclear Plant

##### Records and Data

50.59 Applicability Determination/Screen for REP Rev. 42

50.54(q) Screening Criteria Form for REP Revs. 42

FPL Siren System Availability Test Records for 2004: First Quarter (03/2004), Second Quarter (06/2004), Third Quarter (09/2004), Fourth Quarter (12/2004)

Turkey Point Siren System Availability Information (matrix) for 2003-2004

Documentation to support Drill Participation for 2003-2004

Documentation to support Drill/Exercise Performance for 2003-2004

**1EP6: Drill Evaluation**Procedures

0-EPIP-20101, "Duties of Emergency Coordinator"

0-EPIP-20133, "Operations Support Center Activation and Operation

3ONOP-004, "Loss of Offsite Power"

**LIST OF ACRONYMS**

AFW	Auxiliary Feedwater
CCW	Component Cooling Water
CR	Condition Report
EAL	Emergency Action Level
EDG	Emergency Diesel Generator
EOF	Emergency Operation Facility
ERO	Emergency Response Organization
ERP	Emergency Response Plan
GTD	Ground Test Device
HHSI	High Head Safety Injection
ICW	Intake Cooling Water
IST	Inservice Test
LOOP	Loss Of Offsite Power
MSIV	Main Steam Isolation Valve
MSSV	Main Steam Safety Valve
NCV	Non-cited Violation
SDP	Significance Determination Process
SGFP	Steam Generator Feedwater Pump
TPCW	Turbine Plant Cooling Water
UFSAR	Updated Final Safety Analysis Report
WO	Work Order