



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

October 27, 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
05000250/2005004 AND 05000251/2005004

Dear Mr. Stall:

On September 30, 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 October 6, 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, the inspectors identified three self-revealing findings of very low safety significance (Green). One of these findings was determined to involve violations of NRC requirements. However, because of the very low safety significance of the issues, and because each was entered into your corrective action program, the NRC is treating the issues as Non-Cited violations (NCVs) consistent with Section VI.A of the NRC Enforcement Policy. Additionally, licensee-identified violations, which were determined to be of very low safety significance, are listed in Section 4OA7 of this report. If you wish to contest any NCVs 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 20555-001; 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 Turkey Point.

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 by Binoy Desai Acting For/

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 05000250/2005004 and 05000251/2005004
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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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: 05000250/2005004, 05000251/2005004

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

Facility: Turkey Point Nuclear Plant, Units 3 & 4

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

Dates: July 1, 2005 - September 30, 2005

Inspectors: S. Stewart, Senior Resident Inspector
R. Hagar, Senior Resident Inspector, H.B. Robinson (4OA3)
J. Herrera, Resident Inspector, Oyster Creek
T. Kolb, Resident Inspector
S. Ninh, Senior Project Engineer
J. Fuller, Reactor Engineer (1R15)
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Approved by: Joel T. Munday, Chief
Reactor Projects Branch 3
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Enclosure

SUMMARY OF FINDINGS

IR 05000250/2005-004, 05000251/2005-004; 07/01/2005 - 09/30/2005; Turkey Point Nuclear Power Plant, Units 3 and 4; Event Follow-up.

The report covered a three month period of inspection by resident inspectors, two region based project engineers, and two region based inspectors. Three Green self-revealing findings, one of which was a non-cited violation, 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: Initiating Events

- Green: A self-revealing finding was identified when oil leaked from an improperly installed seal on the Unit 3 high pressure turbine. The oil ignited, causing a fire, and in response, operators tripped the reactor. The licensee entered the seal failure into their corrective action program for resolution. As corrective action, the licensee rebuilt the leaking seals and replaced the oil soaked insulation that resulted from the leak. The issue involved the cross-cutting aspect of Human Performance because an inadequate oversight to assure correct installation of an oil seal resulted in a oil fire.

This finding was more than minor because it caused a fire and affected the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability with the attribute of protection against fire. The finding is of very low safety significance because the fire was extinguished by the fire brigade in a short time and no safety-related systems were affected. All mitigating systems responded as designed following the reactor trip. Defense in depth for fire protection was not impacted. (Section 4OA3.2)

- Green: A self-revealing finding was identified for when Unit 3 generator exciter turbine water cooler leaked from an improperly installed gasket during refurbishment. The leakage entered the vital switchgear and caused the operators to manually trip the reactor, declare a residual heat removal pump inoperable, and stop a component cooling pump and an intake cooling water pump. The licensee entered the problems into their corrective action program for resolution. Completed corrective actions included examining Unit 3 coolers for inadequate gasket joints and making repairs, and repair of the gasket seals that allowed water to enter the vital switchgear. The issue involved the cross cutting element of Human Performance because an inadequate oversight to assure correct installation of a water cooler gasket resulted in a water leak into the safety-related equipment room.

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The finding was more than minor because it affected the Initiating Events (reactor trip) cornerstone objective of limiting the likelihood of events that upset plant stability and the Mitigating Systems (residual heat removal (RHR) pump declared out of service) cornerstone objectives of ensuring the availability and capability of systems that respond to initiating events to prevent undesirable consequences. Significance Determination Process (Manual Chapter 0609) Phase 1 and 2 worksheets were completed and determined to be of very low safety significance because there was no loss of RHR safety function. (Section 4OA3.5)

Cornerstone: Mitigating Systems

- Green: A self-revealing Non-cited violation of Technical Specification Table 3.3-5, Accident Monitoring Instrumentation was identified for failure to maintain the required number of channels of pressurizer level indication operable because of heat damage to instrument cables located near reactor coolant system piping in the containment building. The licensee entered the failure of the cables into their corrective action program for resolution. The licensee replaced the affected cables with higher temperature rating cables and improved the cooling in the vicinity of the cabling. The finding involved the cross-cutting aspect of Problem Identification and Resolution because a similar failure in 2003 was not adequately assessed and resolved to prevent recurrence in 2005.

The issue was more than minor because it is associated with the Mitigating Systems cornerstone and affected the reliability of systems (instrumentation) used to respond to initiating events as well as accident monitoring. The finding was determined to be of very low safety significance because there was no complete loss of function with one of the three redundant channels remaining available. (Section 4OA3.1)

B. Licensee Identified Violations

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

REPORT DETAILS

Summary of Plant Status:

Unit 3 began the period at full rated thermal power and operated at or near full power for the inspection period except for a planned reduction to 40 percent power on August 6 for secondary maintenance. Unit 3 was returned to full power on August 8, 2005.

At the beginning of the inspection period, Unit 4 was shutdown in Mode 3 to replace the main transformer. On July 13, Mode 1 operations and power escalation resumed until early on July 14, when the unit was taken from 29 percent power to Mode 2 to balance the main turbine generator and to troubleshoot erratic main turbine control valves. Mode 1 operations resumed on July 15, when power was raised to 75 percent, then rapidly reduced to 35 percent to troubleshoot abnormal noise and grounding wires associated with the main transformer and isophase bus ducting. Later on July 15, the reactor was tripped from approximately 20 percent power in accordance with plant procedures, to remove improperly installed grounding devices on the main transformer, to repair loose/missing bolting on the isophase bus ducting, and to repair an intermediate range nuclear instrument. Power operation resumed on July 16 and the plant returned to full power on July 17, 2005.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection

.1 Impending Adverse Weather: Hurricane Katrina

a. Inspection Scope

During the preparations and onset of Hurricane Katrina on August 25, 2005, the inspectors verified the status of licensee actions in accordance with off-normal procedure 0-ONOP-103.3, Severe Weather Preparations, and 0-EPIP-20106, Natural Emergencies. This verification included physical walkdowns of the portions of the plant protected area and discussions with responsible licensee personnel regarding preparations of systems and personnel for high winds and potential flooding. The inspectors specifically examined the following areas:

- 4A Emergency Diesel Generator
- 3B Emergency Diesel Generator
- Auxiliary Feedwater Pump area

b. Findings

No findings of significance were identified. Hurricane Katrina had no substantive impact at Turkey Point Nuclear Plant.

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.2 Impending Adverse Weather: Hurricane Rita

a. Inspection Scope

During the preparations and onset of Hurricane Rita on September 20, 2005, the inspectors verified the status of licensee actions in accordance with procedure 0-ONOP-103.3, Severe Weather Preparations, and 0-EPIP-20106, Natural Emergencies. This verification included physical walkdowns of the portions of the plant protected area and discussions with responsible licensee personnel regarding preparations of systems and personnel for high winds, heavy rain, and possible grass intrusion to the intake. The inspectors specifically examined the following areas:

- Unit 4 Intake Cooling Water Pump area and Traveling Screen area
- Auxiliary Feedwater Pump area
- Unit 3 High Head Safety Injection Pumps
- Unit 3 and Unit 4 Component Cooling Water Pumps and Heat Exchanger area

b. Findings

No findings of significance were identified. Hurricane Rita had no substantive impact at Turkey Point Nuclear Plant.

1R04 Equipment Alignment

1. Partial Equipment Walkdowns

a. Inspection Scope

The inspectors conducted three partial alignment verifications of the safety-related systems listed below. The inspectors reviewed the operability of a redundant train of plant safety systems. These inspections included reviews using plant lineup procedures, operating procedures, and piping and instrumentation drawings, which were compared with observed equipment configurations to verify that the critical portions of the operable systems were correctly aligned to minimize risk.

- Unit 4, AFW system, in accordance with procedure 4-OP-075-N, Auxiliary Feedwater System, conducted on July 22, 2005
- Unit 3, Intake cooling water system in accordance with procedure 3-OSP-019.2, Intake cooling water system flow path verification and drawing 5613-M-3019 sheets 1&2, Intake cooling water system conducted on July 25, 2005
- Unit 3 Spent Fuel Pool using procedure 0-ADM-556, Fuel Assembly and Insert Shuffles, drawing 5610-C-254, Auxiliary Building Area 7 Floor Plan, and the licensee's spent fuel pool Cycle 21 post-reload layout, conducted on September 22, 2005

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown

a. Inspection Scope

The inspectors conducted one detailed walkdown/review of the alignment and condition of the Unit 3 intake cooling water (ICW) system, which included both A and C intake cooling water pumps. The inspectors utilized licensee procedure 3-OP-019, Intake Cooling Water System and drawing 5613-M-3019 (Intake Cooling Water System), as well as other licensing and design documents to verify that the system alignment was correct and to verify the capability of the system. During the walkdown, the inspectors also verified that: valves and pumps did not exhibit leakage that would impact their function; that major portions of the system and components were correctly labeled; that selected hangers and supports were installed and functional; and that electrical support systems were properly aligned. A review of open corrective action reports and maintenance work requests using the system health report was also performed to verify that the licensee had appropriately characterized and prioritized equipment problems for resolution in the corrective action program. In addition, the inspectors reviewed the Updated Final Safety Analysis Report to check the ability of the system to perform its design function.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

.1 Fire 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 including 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. The licensee's fire impairment lists, updated on a daily basis were routinely reviewed. 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 Main and Start-up Transformer and Unit 3 Turbine Lube Oil Reservoir Area
- Unit 3 Main Transformer and Start-up Transformer
- Unit 3 A-train Residual Heat Removal Pump Room
- Unit 3 3A Emergency Diesel Generator
- Unit 4 4B Emergency Diesel Generator
- Unit 4 Component Cooling Water Pump area
- Unit 3 Component Cooling Water Pump area
- Auxiliary Feedwater Pump Room
- Main Control Room

b. Findings

No findings of significance were identified.

.2 Annual Fire Drill

a. Inspection Scope

On July 20, 2005, the inspectors observed the licensee fire brigade respond to a simulated fire in the control room Heat Vent Air Conditioning (HVAC) equipment room. The inspectors checked the brigade's communications, ability to set-up and execute fire operations, and their use of fire fighting equipment. The inspectors attended the post-drill critique to check that the licensee's drill acceptance criteria were used and that any discrepancies were discussed. The inspectors checked that licensee personnel documented drill observations in Condition Report (CR) 2005-20025.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

.1 Internal Flooding

a. Inspection Scope

The inspectors conducted walkdowns of the following two areas which included checks of the sumps to ensure that flood protection measures were in accordance with design specifications. The inspectors reviewed the Updated Final Safety Analysis Report, Appendix 5F, Internal Plant Flooding, that discussed protection of areas containing safety-related equipment that may be affected by internal flooding. Specific plant attributes that were checked included structural integrity, availability of temporary flooding barriers, sealing of penetrations, control of debris, and operability of sump systems.

- Unit 4 residual heat removal vaults
- Unit 3 4160 volt switchgear rooms

b. Findings

No findings of significance were identified.

.2 External Flooding

a. Inspection Scope

The inspectors reviewed the Turkey Point Updated Final Safety Analysis Report, Appendix 5G, External Flood Protection for Turkey Point, that discussed the design flood levels and protection for areas containing safety-related equipment. A general site walkdown was conducted, with a specific walkdown of the external areas of the auxiliary building to ensure that flood protection measures were in accordance with design specifications. Specific plant attributes that were checked included structural integrity, sealing of penetrations below the design flood line, and adequacy of flood barriers. FP&L Drawing 5614-C-1600, Emergency Diesel Generator Building Fire Barrier Walls and Miscellaneous Details was checked to verify that drain connections through the flood barrier were properly designed for flood protection.

b. Findings

No findings of significance were identified.

1R07 Biennial Heat Sink Performance

a. Inspection Scope

The inspectors reviewed inspection records, test results, and other documentation to ensure that heat exchanger (HX) deficiencies that could mask or degrade performance were identified and corrected. The test procedures and records were also reviewed to verify that these were consistent with Generic Letter (GL) 89-13 licensee commitments, and industry guidelines. Risk significant heat exchangers reviewed included the component cooling water heat exchangers, and the residual heat removal (RHR) pump and charging pump coolers.

The inspectors reviewed heat exchanger inspection and cleaning procedures, performance monitoring procedure and trends, testing and cleaning frequencies, Eddy Current Test (ECT) tube plugging maps and limits, and performance testing completed procedures, acceptance criteria, and trends for the component cooling water heat exchangers. In addition, the inspectors reviewed, flow and temperature trends for the Residual Heat Removal (RHR) and charging pump coolers, and Component cooling water system flow balance procedures and chemistry trends. These documents were

reviewed to verify inspection methods were consistent with industry standards, to verify heat exchanger design margins were being maintained, and to verify performance of the heat exchangers under the current maintenance frequency was adequate.

The inspectors also reviewed general health of the Intake Cooling Water (ICW) system via review of design basis documents, system health reports, crawl thru header inspection reports, intake structure inspection reports and level trends, ICW pump data trends, and discussions with the ICW system engineer. These documents were reviewed to verify design basis were being maintained and to verify adequate ICW system performance under current preventive maintenance, inspections and frequencies.

CRs were reviewed for potential common cause problems and problems which could affect system performance to confirm that the licensee was entering problems into the corrective action program and initiating appropriate corrective actions. These CRs included actions regarding 4C Component cooling water heat exchanger increased fouling and performance test issues, and ICW intake canal low levels and ICW pump operability issues. In addition, the inspectors conducted a walk down of all selected heat exchangers and major components for the ICW system to assess general material condition and to identify any degraded conditions of selected components.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

On July 25, 2005, the inspectors observed and assessed licensed operator actions to a simulated set of transients and operating events conducted in the licensee's plant specific simulator. The events were done using the licensee's Simulator Evaluated Scenario 750006503, Loss of Component Cooling Water, Loss of Offsite Power, and 3A Emergency Diesel Generator Fails. The inspectors observed the operator's use of Emergency Operating Procedure E-0, Reactor Trip or Safety Injection; ECA-0.0, Loss of All AC Power; and off normal procedure, 3-ONOP-014, Loss of Main Condenser Vacuum. The observed operator actions in response to the simulated events were checked to be in accordance with licensee procedures. Event classifications (Unusual Event and Alert) were checked for proper classification and prompt state notification. CR 2005-20532 was reviewed, which documented problems that occurred when the incorrect scenario was used in evaluating the crew. The inspectors specifically evaluated the following attributes related to operating crew performance:

- 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

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the following equipment problems and associated condition reports to verify that 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 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 and entered into the corrective action program.

- CR 2005-18866, C auxiliary feedwater pump governor speed control knob fell off during reactor trip response and 2003-01453, B auxiliary feedwater pump governor speed control knob fell off
- CR 2005-26007, B Standby Steam Generator Feed failed to start

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 (five) maintenance or surveillance 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 licensee Procedures O-ADM-068, Work Week Management and O-ADM-225, On Line Risk

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Assessment and Management. The inspectors also reviewed the effectiveness of the licensee's contingency actions to mitigate increased risk resulting from the maintenance. The inspectors evaluated the following risk assessments during the inspection:

- Unit 4, risk assessment for work conducted on July 13, 2005, which included start-up of the secondary plant and return to Mode 1 operations
- Unit 4, risk assessment for work conducted on July 20, 2005, updated when 3C Emergency Containment Cooling Fan failed to start during surveillance testing (CR 2005-20037)
- Unit 3, Unit 4 risk assessment for maintenance conducted on August 2, 2005, during the 24 hour surveillance test of 4A Emergency Diesel Generator in accordance with Technical Specification 4.8.1.1.2.g.7
- Unit 3, risk assessment for maintenance conducted on September 7, 2005, when 3A Intake Cooling Pump was removed from service for pump and motor replacement
- Unit 4, risk assessment for testing of train 2, auxiliary feedwater using 4-OSP-075.2 on September 12, 2005, when the 4B emergency diesel air compressor was found degraded (CR 2005-24964)
- Unit 3, risk assessment for overhaul and replacement of the A auxiliary feedwater pump on September 26, 2005 revised when the B standby steam generator feedwater pump was removed from service because of battery failure (CR 2005-26178)

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

For the seven non-routine events described below, the inspectors either observed the activity or reviewed operator logs and computer data to determine that the evolution was conducted safely and in accordance with plant procedures. Specific checks were done to assess operator preparedness and performance in coping with non-routine events and transients.

- Week of July 12, Unit 4 recovery and restart activities following replacing the main generating transformer. Included observation and review of 4-ONOP-028.1, Rod Cluster Control Assembly (RCC) Misalignment when rod L-9 analog rod position indication deviated from the group position by 25 steps (CR 2005-19310)
- July 14, 2005, 4-ONOP-059.7, Intermediate Range Nuclear Instrument Malfunction, when N35 failed during plant downpower (CR 2005-19446)
- July 15, 2005, 4-ONOP-100, Fast Load Reduction, for unplanned power decrease due to improperly installed transformer grounding cable

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- 4-ONOP-041.1, Reactor Coolant Pump Off-Normal, for repeated 4A reactor coolant pump standpipe low level alarms (CR 2005-20380)
- August 24, 2005, Unusual Event Declaration, and subsequent implementation of 0-EPIP-20106, Natural Emergencies, during Hurricane Katrina (CR 2005-23341)
- August 28, 2005, 0-ONOP-013, Loss of Instrument Air after electrical trip of 4CM air compressor and high temperature shutdown of 3CM air compressor (CR 2005- 23705)
- September 20, 2005, Unusual Event Declaration and subsequent implementation of 0-EPIP-20106, Natural Emergencies, during Hurricane Rita (CR 2005-25641)

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed five 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 Updated Final Safety Analysis Report (UFSAR), applicable supporting documents and procedures, and interviewed plant personnel to assess the adequacy of the interim condition report disposition.

- CR 2005-21654, Service Water System is Degraded
- CR 2005-20428, 4C Heat Exchanger fails test 4-OSP-030.4, Component Cooling Water Heat Exchanger Performance Test
- CR 2005-24964, 4A Emergency Diesel Generator Air Compressor not maintaining air receiver pressure (CR 2002-0153, EDG Starting Air, was also reviewed)
- CR 2005-24901, 3-OP-019, Unit 3, Intake Cooling Water System, procedure non-compliance while backwashing 3A ICW/CCW Basket Strainer (FPL Nuclear Safety Evaluation JPN-PTN-SENP-95-011, Revision 1, ICW Flow Verification during Basket Strainer Cleaning was reviewed in this inspection)
- CR 2005-26412, Weld leak on flow transmitter FT-3-122, including calculation package PTN-04Q-302, Evaluation of CVCS Flow Element Leak dated September 29, 2005

b. Findings

No findings of significance were identified.

1R16 Operator Work Around.1 Cumulative Effectse. Inspection Scope

The inspectors reviewed the cumulative effects of the operator workarounds that were in place on September 21, 2005, to verify that those effects could not increase an initiating event frequency, affect multiple mitigating systems, or affect the ability of operators to properly respond to plant transients and accidents. The following workarounds were reviewed:

- CR 2005-2237, Unit 3 PORV block valves (MOV-3-535 and MOV-3-536) closed for leak isolation
- CR 2005-19433, Unit 4 #3 Control Valve oscillations cause power oscillations during down power

b. Findings

No findings of significance were identified.

.2 Selected Operator Work Arounda. 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 2005-2237, Unit 3 PORV block valves (MOV-3-535 and MOV-3-536) closed for leak isolation

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testinga. 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 was correctly performed and demonstrated that the affected equipment was functional and operable. The inspectors verified that the requirements of licensee Procedure 0-ADM-737, Post

Maintenance Testing, were incorporated into test requirements. The inspectors reviewed the following work orders (WO) and/or surveillance procedures (OSP):

- Unit 4, Post maintenance testing conducted on Unit 4 transformer replacement activities conducted between July 1, 2005 and July 11, 2005 in accordance with Transformer 49-1562 testing plan
- Unit 3, Post maintenance test procedure 3-OSP-075.2, Auxiliary Feedwater Train 2 Operability Verification, conducted on July 20, 2005 after preventative maintenance was performed on B AFW pump turbine trip and throttle valve
- Unit 3, Post maintenance test procedure 3-OSP-30.1, Component Cooling Water Pump Inservice Test, conducted on July 20, 2005, following component cooling water pump scheduled maintenance
- Unit 4, Work Order 35018861 Post maintenance testing conducted on September 14, 2005 following replacement of FT-4-122, Charging Pump Discharge Flow Transmitter Valve Manifold
- Unit 3, Work Order 35002099 Post maintenance testing conducted after Boric Acid Blender F-113/114 Calibration
- Unit 3, Work Order 35020568 Post maintenance testing conducted after 3C Component Cooling Water Heat Exchanger cleaning on September 19, 2005

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors either reviewed or witnessed the following six 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 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 Safety System Component (SSC's) to perform its safety function. The tests reviewed included one inservice test (IST).

- Unit 3, Procedure 3-OSP-063.1, Safeguards Actuation System Logic Test
- Unit 3, Procedure 3-OSP-023.1, Diesel Generator Operability Test
- Unit 4, Procedure 4-OSP-023.1, Diesel Operability Test on 4B EDG, including test of fuel oil transfer pump
- Unit 3, Procedure 3-OSP-019.1, Intake Cooling Water Inservice Test (IST)
- Unit 4, Procedure 4-OSP-075.1, Auxiliary Feedwater Train 1 Operability Verification
- Unit 3, 3-OSP-030.4, Component Cooling Water Heat Exchanger Performance Test

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b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP6 Drill Evaluation

Inspection Scope

On August 30, 2005, the inspectors observed the licensee emergency preparedness drill. Results of the drill are used by the licensee as inputs into the Drill/Exercise Performance and Emergency Response Organization Drill Participation Performance Indicators. The drill involved a reactor coolant system leak that escalated to a loss of coolant accident with loss of containment integrity. The inspectors evaluated the licensee's escalating event declarations, which resulted in a General Emergency with Protective Actions Recommendations. During the scenario, which included staffing of the technical support center, operational support center, and emergency offsite facility, the inspectors assessed the licensee's ability to classify emergent situations and make timely notification to government officials in accordance with 10 CFR Part 50.72. Emergency activities were checked to be in accordance with the Turkey Point Procedure 0-EPIP-20101, Duties of the Emergency Coordinator. At the conclusion of the drill, the inspectors observed portions of the drill critique and discussed the drill with plant staff.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

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 screening of items entered daily into the licensee's corrective action program. This review was accomplished by reviewing daily printed summaries of CRs and by reviewing the licensee's electronic CR database.

b. Findings

No findings of significance were identified

.2 Annual Sample Reviewa. Inspection Scope

The inspectors selected the following CR for detailed review and discussion with the licensee. The CR described circumstances in which the C Auxiliary Feedwater Pump governor speed control knob became loose and disengaged. The CR was reviewed to ensure that an appropriate evaluation was performed and appropriate corrective actions were specified and prioritized. Other attributes checked included disposition of operability, resolution of the problem including cause determination and corrective actions. The inspectors evaluated the CR in accordance with the requirements of the licensee's corrective actions process as specified in NAP-204, Condition Reporting.

- CR 2005-8073, Auxiliary Feedwater Pump speed control knob fell off

b. Findings and Observations

No findings of significance were identified.

4OA3 Event Follow-up.1 (Closed) Licensee Event Report (LER) 05000250/2004-005: Heat-damaged Cables Cause Potential Inoperability of 2 of 3 Pressurizer Water Level Monitoring Channelsa. Inspection Scope

The inspectors reviewed the LER and CR 2004-11329, which documented this event in the licensee's corrective action program, to verify that the cause was identified and the corrective actions were reasonable.

b. Findings

Introduction: A Green self-revealing Non-cited violation (NCV) of Technical Specification Table 3.3-5, Accident Monitoring Instrumentation was identified when on Unit 3, two channels of pressurizer level were found inoperable for longer than their allowed outage times because of degraded cabling.

Description: The failure of two channels of pressurizer water level was due to heat related degradation of cables routed in cable conduit that had been exposed to high temperatures. All cables in that conduit were similarly affected and these included two channels each of pressurizer level and pressure and single channels of other instruments. The licensee found that the cable degradation occurred in the conduit that was located near reactor coolant system hot leg piping. Localized temperatures in this area were in excess of the cable design rating, which was determined to be the root cause and resulted in significant damage to the cable jacket and insulation. Contributing factors included insulation gaps and deficiencies, a containment cooling ventilation register that was found closed, and enclosed areas around the cable conduit that

inhibited heat dissipation. In their investigation of the matter, the licensee noted that the heat related degradation first occurred in a pressurizer pressure channel failure in the same conduit in 2003. That cable was substituted with a spare in the conduit and during the 2004 event, the replacement cable was found degraded by high temperature. No apparent cause investigation nor extent of condition evaluation was done at the time of the 2003 failure, which resulted in the cables being degraded for longer than their allowed outage times.

Analysis: On October 16, 2004, abnormal control room pressure indication was observed by plant operators and an investigation was initiated. The investigation revealed that cabling in conduit 3C226 had been degraded by prolonged exposure to high temperatures associated with the locality of the conduit relative to reactor coolant system hot leg piping, insulation gaps and deficiencies, and a containment cooling ventilation register found closed vice open. A similar pressurizer pressure instrument which had failure in 2003 was not investigated and the repair was insufficient to prevent recurrence, which was a performance deficiency. The issue was more than minor because the reliability of systems (pressurizer level instrumentation) used to respond to initiating events as well as accident monitoring was affected. Pressurizer level is used in emergency operating procedures. A Manual Chapter 0609 Significance Determination Process Phase 1 screening was done; the mitigating systems cornerstone was affected (post-accident monitoring capability), the finding represented a design deficiency (operation of instrumentation cabling at temperatures above design) that did not result in a loss of function; and the finding screened as Green. The finding involved the cross-cutting aspect of Problem Identification and Resolution because the initial failure in 2003 was not adequately identified and resolved to prevent recurrence in 2005.

Enforcement: Turkey Point Technical Specification Table 3.3-5, Accident Monitoring Instrumentation, Instrument 6, requires two channels of Pressurizer Water Level be Operable or either restore the inoperable channels to Operable status within 30 days, or submit a Special Report to the NRC outlining the action taken and the cause of the inoperability. Contrary to the above, with less than two channels of Pressurizer Water Level operable due to the instrument cable exposed to greater than the design temperature, the licensee neither restored a second channel to operable status within 30 days or submitted a Special Report to the NRC. The violation existed for an indeterminate time although likely in excess of one operating cycle. The violation occurred due to cable design, gaps in insulation, and an improperly closed ventilation register. When identified after a second pressurizer instrument failure, the licensee completed a root cause investigation, replaced the affected cabling with cable of a higher design temperature, repaired faulty insulation, restored ventilation, and initiated temperature monitoring of the replacement cables. A redundant channel of pressurizer level was routed in a different cable tray and was not affected. Because the failure to correct the failed instrumentation was of very low safety significance and had been entered into the licensee's corrective action program as CR 2005-11329, this violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000250/2005-04-01: Failure to Maintain Operability of Accident Monitoring Instrumentation Affected by Heat Damage

Enclosure

.2 (Closed) Licensee Event Report 05000250/2004-006: Manual Reactor Trip Due to Fire in the High Pressure Turbine Area

a. Inspection Scope:

The inspectors reviewed the LER and CR 2004-16994, which documented this event in the licensee's corrective action program, to verify that the cause was identified and the corrective actions were reasonable.

b. Findings:

Introduction: A Green self-revealing finding was identified when an incorrectly installed Unit 3 main turbine seal assembly allowed oil to leak and catch fire necessitating a reactor trip.

Description: On December 14, 2004, while both units were both operating at full power, a fire was reported at the north end of the Unit 3 main turbine, beneath the turbine deck. Five minutes later, control-room operators manually tripped unit 3 due to the fire. Approximately four minutes later, fire brigade personnel extinguished the fire. No damage to equipment or personnel injury occurred as a result of the fire, and all safety systems responded as designed during and after the trip. The fire was caused by the ignition of oil vapors generated by oil leaking from the Unit 3 main turbine, number 2 bearing seal onto the high-pressure turbine lower shell insulation. The cause of the seal oil leak was improper assembly of the turbine seal. This incorrect assembly, which included missing and loose bolting, excessive seal ring clearance, improperly installed shims, and inappropriate gasket sealing compound, resulted in oil leaking from the bearing seal onto the high pressure turbine lower shell insulation and caused a fire by the ignition of oil vapors. The licensee's corrective actions included revising eight procedures used to maintain various main turbine components to include: specific details and criteria for oil seal inspection, clearance measurements, setting, and torque specifications; cautions regarding the consequences of deviating from acceptable seal settings; and associated supervisory verification points.

Analysis: The inspectors determined that the performance deficiency was a failure to ensure that the Unit 3 main turbine number 2 seal was correctly assembled to prevent a fire when overhauled in the Spring 2003 refueling outage. Subsequently, when the seal failed and a fire started, Unit 3 was manually tripped due to the fire. This finding is more than minor because it is associated with the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and the attribute of protection against external factors, fire. Because the finding affected fire prevention and administrative controls, it was assessed in accordance with the NRC significance determination process as described in NRC Inspection Manual Chapter 0609, Appendix F (IMC 609, App.F). In the Phase 1 screening, the finding was associated with fire prevention and administrative controls, it was assigned a low degradation rating, and screened out as Green, because the fire protection program was minimally impacted. The finding is of very low safety significance because the fire was extinguished by the fire brigade in a short time and no safety-related systems were affected and defense in

depth for fire protection was not impacted. The issue involved the cross-cutting aspect of Human Performance because an inadequate oversight to assure correct installation of an oil seal resulted in an oil fire.

Enforcement: Although this event did not involve a violation of NRC requirements, it did include a performance deficiency affecting the Initiating Events Cornerstone, in that the licensee employed poor workmanship and oversight in assembling the number 2 bearing seal on the main turbine, resulting in an oil leak which ignited, causing a fire. This finding was more than minor because it is associated with the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and the attribute of protection against fire. This finding is in the licensee's corrective action program as CR 2004-16994. The licensee rebuilt the leaking seals and replaced the oil soaked insulation that resulted from the leak. This finding has been designated as FIN 05000250/2005-04-02, Inadequate seal assembly result in an oil fire and reactor trip. This LER is closed.

.3 (Closed) Licensee Event Report 05000251/2005-004: Foreign Material Causes Inoperability of One Emergency Containment Cooler

The inspectors reviewed the subject LER and determined that the Unit 4, 4C emergency containment cooler (ECC) fan failed to start during a routine monthly surveillance test on July 20, 2005. The 4C ECC fan tripped due to thermal overload during two start attempts. A subsequent containment entry identified a rubber shoe cover had lodged between the fan stationary vanes and rotating blades, which caused the fan to trip. The previous surveillance test was successfully conducted on June 20, 2005, however the licensee determined that the condition preventing the start of the 4C ECC existed for greater than 72 hours, and Technical Specification 3.6.2.2, Action a, was exceeded. The licensee found the apparent cause to be due to human performance in failing to maintain control of foreign material, which included failing to report the loss of the rubber shoe cover during the recent refueling outage. Corrective actions included plans to revise the containment closeout inspection procedure to require inspection inside the emergency containment coolers to assure the absence of foreign material.

The inspectors determined that the finding is greater than minor because it involved the human performance attribute of the containment barrier integrity cornerstone and affected the objective of maintaining functionality of the containment so as to protect the public from radionuclide releases caused by accidents or events. The finding was evaluated using the SDP Phase 1 per IMC 0609, Appendix A, and was determined to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment or involve an actual reduction in defense in depth for the atmospheric pressure control or hydrogen control functions of reactor containment. The remaining two operable ECCs were available to perform and accomplish the safety function. This finding was documented in the licensee's corrective action program as CR 2005-20892. The event was evaluated as a licensee identified violation of Technical Specification 3.6.2.2, Action a. The enforcement aspects of this violation are discussed in Section 4OA7. This LER is closed.

Enclosure

.4 (Closed) Licensee Event Report 05000251/2005-001-00: Steam Generator Feedwater Pump Trip Leading to Manual Reactor Trip and Auxiliary Feedwater Actuation

On March 22, 2005, Unit 4 was manually tripped after a feedwater pump tripped causing a secondary plant transient. Safety systems operated as expected and there were no safety consequences from the event. The licensee replaced the faulty pump motor, which had been in operation for about three years and completed a root cause evaluation. The LER was reviewed by the inspectors and no performance deficiency was identified. The licensee documented the failure in CR 2005-8330. This LER is closed.

.5 (Closed) Licensee Event Report 05000250/2004-007-01: Revised LER 2004-007 for Manual Reactor Trip Due to Generator Exciter Turbine Cooling Water Leak

a. Inspection Scope:

The inspectors reviewed the LER and CR 2004-17947, which documented the cause of this event in the licensee's corrective action program, to verify that the cause was identified and the corrective actions were reasonable.

b. Findings:

Introduction: A Green self-revealing finding was identified due to inadequate oversight for a generator exciter turbine water cooler repair that led to a cooling system leak that potentially affected safety related equipment and resulted in a Unit 3 manual reactor trip.

Description: The LER revision supplements the original LER by stating that the root cause of the cooler failure, which led to the reactor trip was determined to be poor workmanship along with inadequate technical guidance to the supplier for the repairs. It also stated that similar deficiencies were found in the Unit 4 exciter air coolers, which were corrected without incident. Because the leakage migrated into safety related 3B 4kV switchgear, operators declared the 3B residual heat removal pump out of service due to a pump trip alarm and stopped the 3B component cooling water pump, and 3B intake cooling water pump.

Analysis: The performance deficiency in this event was a result of inadequate oversight that caused a cooling water leak that necessitated a manual reactor trip and affected a train of safety related equipment. The finding was more than minor because it affected the Initiating Events (reactor trip) cornerstone objective of limiting the likelihood of events that upset plant stability and the Mitigating Systems (residual heat removal (RHR) pump declared out of service) cornerstone objective of ensuring the availability and capability of systems that respond to initiating events to prevent undesirable consequences. The improperly installed gasket existed for 30 days and the turbine plant cooling water scenarios were reviewed with a degraded residual heat removal pump. The dominant sequence was a small break loss of coolant event with a degraded low pressure safety function. Significance Determination Process (Manual Chapter 0609) Phase 1 and 2 worksheets were completed and determined to be of very low safety significance

(Green) because there was no loss of RHR safety function. The issue involved the cross-cutting element of Human Performance because an inadequate oversight to assure correct installation of a cooler gasket resulted in water leak into the safety related equipment room.

Enforcement: No violation of regulatory requirements occurred because the improperly installed gasket was on a non-safety secondary plant system. Completed corrective actions included examining generator exciter turbine water coolers for inadequate gasket joints and making repairs, removing from the approved vendor list the vendor who installed the gaskets that subsequently failed, and repair of the gasket seals that allowed water to enter the vital switchgear under work order 34023333 and CR 2004-17949. This finding is in the licensee's corrective action program as CR 2005-17947. This finding has been designated FIN 05000250/2005004-03, Inadequate technical guidance to a vendor cause cooling water gasket failure that resulted in a reactor trip. This LER is closed.

.6 (Closed) Licensee Event Report 05000250/2005-002: Missed As-Found Local Leak Rate Test

The inspectors reviewed the subject LER, which reported that the inlet and outlet fittings of containment isolation valve CV-3-956D, a 3/8 inch safety injection accumulator sample line, were tightened on February 9, 2005, in response to boric acid residue and leakage. The inspectors noted that an as-found local leak rate test (LLRT) was not performed prior to fitting adjustment. This was considered a missed surveillance test required by Technical Specification (TS) 4.6.1.2 that could not be subsequently performed. The apparent cause was a failure to recognize LLRT requirements during work planning when intending to disturb a containment boundary. Corrective actions included an extent of condition review and providing improved instruction to personnel involved with similar work activities.

The inspectors determined that the finding is greater than minor because it involved the human performance attribute of the containment barrier integrity cornerstone and affected the objective of maintaining functionality of the containment so as to protect the public from radionuclide releases caused by accidents or events. The finding was evaluated using the SDP Phase 1 per IMC 0609, Appendix A, and was determined to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment or involve an actual reduction in defense in depth for the atmospheric pressure control or hydrogen control functions of reactor containment. The penetration leakage was assumed to be within allowable limits prior to the fitting adjustment because there was no maintenance activity on the penetration since the previous as-left LLRT. This finding was documented in the licensee's corrective action program as CR 2005-4651. This licensee identified violation involved a violation of TS 4.6.1.2, which is discussed in Section 4OA7. This LER is closed.

.7 (Closed) Licensee Event Report 05000250/2005-003: Missed As-Found Local Leak Rate Test

The inspectors reviewed the subject LER which reported that the cap screws that secure the actuator to the bonnet on letdown isolation valve CV-3-200B, were tightened during troubleshooting activities on April 28, 2003. The inspectors noted that a LLRT was not performed prior to adjusting the frame cap screws on CV-3-200B. This was considered a missed surveillance test required by Technical Specification (TS) 4.6.1.2 that could not be subsequently performed. The inspectors also noted that the initial condition report evaluation incorrectly concluded, that the missed TS surveillance was administrative in nature and therefore, it was not reportable. However the licensee discovered the condition during an extent of condition review of the event discussed in LER 50-250/2005-002: Missed As-Found Local Leak Rate Test. The apparent cause was a failure to recognize LLRT requirements during work planning when intending to disturb a containment boundary. Corrective actions included providing improved instruction to personnel involved with similar work activities.

The inspectors determined that the finding is greater than minor because it involved the human performance attribute of the containment barrier integrity cornerstone and affected the objective of maintaining functionality of the containment so as to protect the public from radionuclide releases caused by accidents or events. The finding was evaluated using the Significant Determination Process (SDP) Phase 1 per IMC 0609, Appendix A, and was determined to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction in defense in depth for the atmospheric pressure control or hydrogen control functions of reactor containment. The penetration leakage was assumed within allowable technical specification limits prior to the fitting adjustment because there was no maintenance activity on the penetration since the previous as left LLRT. This finding was documented in the licensee's corrective action program as CR 2005-4651 during the extent of condition review of LER 05000250/2005-002-00. This licensee identified violation involved an additional example of violation of TS 4.6.1.2. The enforcement aspects of this violation are discussed in Section 4OA7. The failure to report and submit an original LER on the missed surveillance in a timely manner 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.

40A4 Cross-Cutting Aspects

Section 4OA3.1 describes a finding that has a cross-cutting aspect in Problem Identification and Resolution, in that the finding would have been prevented if a precursor problem with damaged cables in 2003 had been fully assessed and resolved.

Section 4OA3.2 describes a finding that has a cross-cutting aspect in Human Performance, in that an inadequate oversight to assure correct installation of an oil seal resulted in an oil fire.

Sections 4OA3.5 describes a finding that has a cross-cutting aspect in the Human Performance, in that an inadequate oversight to assure correct installation of a cooler gasket resulted in water leak into the safety related equipment room.

4OA5 Other

(Discussion) Temporary Instruction (TI) 2515/163: Operational Readiness of Offsite Power

This TI was completed in inspection report 05000250, 251/2005003. However, after NRC headquarters review of the information provided, additional information related to the TI was requested. The inspectors collected this information from licensee discussions, site procedures and other licensee documentation. Appropriate documentation of the inspection results was provided to the headquarters staff for further analysis.

4OA6 Meetings

Exit Meeting Summary

The resident inspectors presented the inspection results to Mr. T. Jones and other members of licensee management at the conclusion of the inspection on October 6, 2005. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. The licensee did not identify any proprietary information.

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:

- .1 Technical Specification 3.6.2.2, requires that three emergency containment cooling units shall be operable in Mode 1. Technical Specification 3.6.2.2, Action a requires that an inoperable emergency containment cooler be restored to operable status within 72 hours or the unit be in at least hot standby within the next 6 hours. Contrary to the above, on July 20, 2005, with Unit 4 in Mode 1, after having an inoperable emergency containment cooler for an estimated 30 days due to a lack of foreign material exclusion controls, Unit 4 was not in hot standby. The finding was determined to be of very low safety significance (Green) because the redundant coolers remained operable. The problem was identified during a licensee surveillance test. This finding was documented in the corrective actions program (CR-2005-20892).
- .2 Technical Specification Table 4.3-2 requires a Steam Line flow channel be demonstrated operable by completing a channel check at least once per 12 hours when in Mode 1. When a channel is not operable, Technical Specification

Table 3.3-2 requires the affected channel be placed in the tripped condition within 6 hours. Contrary to the above, on August 21, 2005, with Turkey Point Unit 4 in Mode 1, for a period of approximately 35 hours, channel checks were not completed on steam flow channel IV at least once per 12 hours nor was the channel placed in the tripped condition. Redundant instrumentation and protection channels were not affected and remained available. The violation was identified by the licensee during a supervisory review of plant status. When identified, the licensee took prompt action to place the affected channels in the tripped condition and documented the issue in the corrective actions program (CR 2005-22985).

- .3 Technical Specification 6.8.1.a requires that written procedures covering the activities of Regulatory Guide 1.33, Revision 2, Appendix A, February 1978 be implemented. Section 8.b of Appendix A requires procedures for surveillance testing, including containment local leak rate testing as required by Technical Specification 3.6.1.2 and 10 CFR Appendix J. The licensee implements these requirements, in part, with procedure 0-ADM-531, Containment Leakage Rate Testing Program, which states, in part, that an As-found Type C test shall be performed (on a containment penetration) prior to any repair that could affect the penetrations leak tightness. Contrary to the above, on the following two occasions, repairs were done that could affect containment penetration leak tightness without completing an As-found Type C test:

- On February 9, 2005, the inlet and outlet fittings of containment isolation valve CV-3-956D were tightened in a repair activity
- On April 28, 2003, capscrews that secure the actuator of valve CV-3-200B were tightened in a repair activity

As a consequence, the licensee failed to assure the performance of the containment penetrations prior to making repairs. The violation was identified during the licensee's supervisory review of the work activity in the first case, and extent of condition review in the second case. When identified, the licensee documented the issue in the corrective actions program (CR 2005-4651) and licensee procedure 0-ADM-701, Control of Plant Work Activities was revised to assure as found testing prior to work on containment isolation valves.

Functionality of containment was not affected by the repairs.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:

M. Moore, Corrective Actions Supervisor
M. Murray, Emergency Preparedness Supervisor
J. Antignano, Fire Protection Supervisor
D. Poirier, Maintenance Manager
W. Pravate, Work Controls Manager
S. Greenlee, Engineering Manager
T. Jones, Site Vice-President
M. Navin, Operations Manager
K O'Hare, Radiation Protection and Safety Manager
W. Parker, Licensing Manager
M. Pearce, Plant General Manager
B. Stamp, Operations Supervisor
T. Sweeney, Engineering Electrical Supervisor
C. Tudor, ISI NDE Supervisor

NRC personnel:

J. Munday, Chief, Reactor Projects Branch 3, Region II
W. Rogers, Senior Reactor Analyst, Region II

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

05000250/2005004-01	NCV	Failure to Maintain Operability of Accident Monitoring Instrumentation Affected by Heat Damage (Section 4OA3.1)
05000250/2005004-02	FIN	Inadequate Installation of a Seal Assembly Resulted in an Oil Fire and Reactor Trip (Section 4OA3.2)
05000250/2005004-03	FIN	Inadequate Technical Guidance to a Vendor Cause Cooling Water Gasket Failure That Affected Safety Equipment and Resulted in a Reactor Trip (Sections 4OA3.5)

Closed

05000250/2004-005	LER	Heat-damaged Cables Cause Potential Inoperability of 2 of 3 Pressurizer Water Level Monitoring Channels (Section 4OA3)
05000250/2004-006	LER	Manual Reactor Trip Due to Fire in the High Pressure Turbine Area (Section 4OA3)
05000251/2005-004	LER	Foreign Material Causes Inoperability of One Emergency Containment Cooler (Section 4OA3)

05000251/2005-001	LER	Steam Generator Feedwater Pump Trip Leading to Manual Reactor Trip and Auxiliary Feedwater Actuation (Section 4OA3)
05000250/2004-007-01	LER	Revised LER 2004-007 for Manual Reactor Trip Due to Generator Exciter Turbine Cooling Water Leak (Section 4OA3)
05000250/2005-002	LER	Missed As-Found Local Leak Rate Test (Section 4OA3)
05000250/2005-003	LER	Missed As-Found Local Leak Rate Test (Section 4OA3)

Discussion

2515/163: TI Operational Readiness of Offsite Power

LIST OF DOCUMENTS REVIEWED

Section 1R07 : Biennial Heat Sink Performance

Procedures

- 0-PMM-030.1, Component Cooling Water Heat Exchanger Cleaning, Rev. 03/18/05
- 3-OP-030, Component Cooling Water System, Rev. 01/04/05
- 3-OSP-019.4, Component Cooling Water Heat Exchanger Performance Monitoring, Rev. 03/14/05
- 3-OSP-030.9, Component Cooling Water System Flow Balance, Rev. 09/16/04
- 3-OSP-047.1, Charging Pumps/Valves Inservice Test, Rev. 11/18/04
- 3-OSP-050.2, Residual Heat Removal System Inservice Test, Rev. 02/24/05

Drawings

5610-M-12A-7, Intake Cooling Water Pump, Rev. 8

Completed Procedures

- 3-OSP-030.4, Component Cooling Water Heat Exchanger Performance Test, completed 08/29/05
- 4-OSP-030.4, Component Cooling Water Heat Exchanger Performance Test, completed 08/29/05

Condition Report (CR)

- 2002-1020, Screen Wash Pumps Cavitating due to Low Water Canal Levels, 05/19/02
- 2004-13422, DBD for Minimum Component cooling water Flows to Charging Pumps is Incorrect, 11/07/04
- 2004-2152, Intake Canal Low Level Caused Loss of Suction for the Screen Wash Pumps, 04/26/04
- 2004-2244, Evaluate Impact on ICW Pumps due to Low Intake Canal Level, 04/26/04
- 2005-13429, Unit 4 Component cooling water Out of Specification Low for Required Corrosion Inhibitors, 05/01/05
- 2005-14611, Unit 4 Component cooling water Out of Specification for pH, 05/17/05
- 2005-20428, 4C Component cooling water Heat exchanger Fails Performance Test, 07/25/05

Miscellaneous

Turkey Point Units 3 & 4 Intake Structure Inspection Report, 08/17/05

Unit 3B ICW Inspection, October 18-22, 2004

Unit 4B ICW Inspection, October 18-20, 2003

3A Component cooling water Eddy Current Examination Results, 03/09/05

3B Component cooling water Eddy Current Examination Results, 07/13/05

3C Component cooling water Eddy Current Examination Results, 05/14/05

4A Component cooling water Eddy Current Examination Results, 02/18/04

4B Component cooling water Eddy Current Examination Results, 02/25/04

4C Component cooling water Eddy Current Examination Results, 02/11/04

Unit 3 & 4 Intake Cooling Water System Checklist/Health Report, 08/16/05 & 06/11/05

Unit 3 & 4 Component Cooling Water System Checklist/Health Report, 08/17/05

3B, 4C Charging Pump Oil Temperature Trending, 08/05

Unit 3 & 4 Charging Pump Oil Cooler Component cooling water Flow Return Trending, 08/05

3A/B & 4A/B RHR Pump Cooler Component cooling water Flow Trending, 08/05

Unit 3 & 4 Component Cooling Water Chemistry Trending, 07/04 - 09/05

3A/B/C & 4A/B/C ICW Pump IST Trend Data, 12/03 - 07/05

Intake Canal Level Trend, 08/05

Unit 3 Component cooling water Heat exchanger Performance Test Trending, 01/04 - 09/05

3A/B/C & 4A/B/C Heat Exchanger Trending for Predicting Heat exchanger Cleanings, 04/05 - 10/05

Unit 3 & 4 ICW Temperature Limits vs Date Trend, 08/05