UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

September 20, 2002

Florida Power and Light
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- NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 50-250/02-05 AND 50-251/02-05

Dear Mr. Stall:

On August 23, 2002, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the Turkey Point Nuclear Plant. The enclosed report documents the inspection findings, which were discussed on August 23, 2002, with Ms. M. Lacal and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities and interviews with personnel.

On the basis of the sample selected for review, the inspectors concluded that, in general, problems were properly identified, evaluated, and corrected. One green finding was identified associated with ineffective corrective actions to prevent recurrence of significant conditions adverse to quality. Previous corrective actions have not been effective in preventing recurring functional failures of charging pumps and important electrical breakers. These are risk significant components. This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance and since it has been entered into your corrective action program, the NRC is treating the finding as a noncited violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this noncited violation, you should provide a response with the basis of your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Center, Washington DC 20555-0001, with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC Resident Inspector at the Turkey Point Nuclear Plant.

In addition, several examples of minor problems were identified regarding incomplete documentation of the apparent cause or associated corrective actions in condition report records. Also, the Plant Nuclear Safety Committee was not consistently conducting reviews of Technical Specification violations documented in NRC inspection reports. A number of mispositioned events documented by the licensee were assigned a significance level lower than

that recommended in the program procedure. Overall, the inspectors noted that issues regarding human performance problems, including mispositioned events, were entered into the condition report system with a low threshold and were receiving high levels of management attention.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document control 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/

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

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

Enclosure: Inspection Report 50-250/02-05, 50-251/02-05
w/Attachment - Supplemental Information

cc w/encl: (See page 3)

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-250, 50-251
License Nos:	DPR-31, DPR-41
Report Nos:	50-250/02-05, 50-251/02-05
Licensee:	Florida Power & Light Company (FPL)
Facility:	Turkey Point Nuclear Plant, Units 3 & 4
Location:	9760 S. W. 344th Street Florida City, FL 33035
Dates:	August 5 - 9 and August 19 - 23, 2002
Inspectors:	T. M. Ross, Senior Resident Inspector, Saint Lucie Nuclear Plant (Lead Inspector) J. R. Reyes, Resident Inspector, Turkey Point Nuclear Plant J. J. Lenahan, Senior Reactor Inspector, Division of Reactor Safety, Region II
Approved by:	L. Wert, Chief Reactor Projects Branch 3 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000250-02-05, IR 05000251-02-05; Florida Power and Light; on August 5-23, 2002; Turkey Point Units 3 and 4; biennial baseline inspection of the identification and resolution of problems. A violation was identified in the area of corrective action effectiveness.

The inspection was conducted by a senior resident inspector, the Turkey Point resident inspector, and a regional senior reactor inspector. One green finding of very low safety significance was identified during this inspection and was classified as a noncited violation. The finding was evaluated using the significance determination process (SDP). The significance of most findings is indicated 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.

Identification and Resolution of Problems

Overall, the licensee's corrective action program (CAP) was effective at prioritizing, evaluating and resolving conditions adverse to quality. The licensee was particularly effective at identifying problems with a low threshold and entering them into the CAP. One finding was identified involving corrective actions that were not fully effective in preventing repetitive failures of charging pumps and important electrical breakers. Several negative observations were also identified during the inspection. Some Condition Report records did not contain documentation to fully support disposition of the issues in that apparent causes or corrective actions were not adequately described. The significance level of some condition reports was not in accordance with licensee program guidance. Also, the Plant Nuclear Safety Review Committee was not consistently reviewing Technical Specification violations documented in NRC inspection reports. Operating experience information, including NRC generic communications, was routinely reviewed for applicability in a timely manner and effectively utilized. Root cause analyses were usually comprehensive and in-depth, and apparent cause determinations were sufficiently rigorous. Overall, audits and self-assessments were sufficiently critical and thorough; licensee identified findings, weaknesses, areas of improvement, or recommendations were consistently tracked to resolution. For almost all problems, appropriate corrective actions were developed and implemented in a timely manner commensurate with the safety significance. A safety conscious work environment was evident at Turkey Point where employees felt free to raise safety concerns.

Cornerstone: Mitigating Systems

Green: A noncited violation of 10 CFR 50, Appendix B, Criterion XVI was identified for ineffective corrective actions to prevent recurring charging pump and vital electrical breaker functional failures. These failures constituted repetitive significant conditions adverse to quality.

This finding was considered more than minor due to the safety significance of the affected systems and because actual loss of component safety functions occurred. The charging pump controller failures, and the failure of the 3A component cooling water pump breaker were determined to be of very low safety

significance by the significance determination process because the failures did not reduce the number of available pumps to below that required for each of the involved systems to perform their safety function. (Section 4OA2.c).

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed licensee corrective action program (CAP) activities documented since March 1, 2001, which corresponds with the completion of the last NRC team inspection (see inspection report (IR) 50-250, 251/2001-03). A complete list of the documents reviewed by the inspectors is included in the attachment to this report. The inspectors' review also included issues documented in prior NRC inspection reports and Licensee Event Reports regarding Turkey Point. Problem identification and resolution (PI&R) effectiveness since March 1, 2001, until the present, was also discussed with the resident inspectors who routinely observed PI&R activities as part of the NRC baseline inspection program.

The inspectors screened and reviewed numerous condition reports (CRs) associated with the seven cornerstones of safety to determine if problems were being properly identified and entered into the licensee's CAP for evaluation and resolution. The inspectors also reviewed CRs which had been canceled to determine if the reasons for cancellation were appropriate and adequately documented.

The inspectors also reviewed numerous work orders (WO) that were written to address specific equipment problems for highly risk significant systems such as auxiliary feedwater (AFW), component cooling water (CCW), station batteries, and emergency diesel generators (EDG). In addition, the recent quarterly maintenance rule performance summary reports of Units 3 and 4 were reviewed for selected high risk significant structures, systems, and components (SSC) such as Safety Injection, 4 Kilovolt Switchgear (A, B and D buses), and the Chemical Volume and Control System (CVCS).

The inspectors reviewed the Unit 3 and Unit 4 operator logs for the months of January and February, 2002; outstanding main control room (MCR) deficiency tags, operator work around log, and the Maintenance Rule a(1) log to verify whether plant equipment problems and control room deficiencies were being identified and entered into the CAP. The inspectors also monitored control room operations and performed MCR board walk downs on Unit 3 and Unit 4 to verify whether problems with control room equipment have been entered into the CAP.

The inspectors conducted general tours of plant areas containing equipment important to safety. The inspectors also performed more thorough walk downs of Unit 3 and 4 SSCs of high risk significance, which included the high head safety injection pumps; charging pumps; CCW pumps and heat exchangers; and AFW. These tours and walkdowns were conducted to ascertain whether the licensee had appropriately identified and entered into their CAP any existing equipment problems and deficient conditions. In addition, the inspectors interviewed various engineers, maintenance personnel, plant operators (licensed and nonlicensed), and supervisors to determine if

the corrective action system was being used to identify and properly disposition problems.

The inspectors reviewed industry operating experience, including NRC Information Notices (IN), NRC Regulatory Issue Summaries (RIS), NRC daily event reports, 10 CFR Part 21 reports, vendor reports and bulletins, and INPO documents, that were issued since March 21, 2001, to determine if they had been appropriately evaluated for applicability and whether problems identified through these reviews were entered into the licensee's CAP.

The inspectors also reviewed several Quality Assurance (QA) audits, QA quality reports, and licensee self-assessments, to determine if the findings were consistent with those identified by the NRC and to verify that licensee identified findings, weaknesses, and recommendations were being entered into the CAP. The inspectors also met with the onsite Speakout (employee concerns program (ECP)) investigator and reviewed the types of issues addressed by Speakout to verify whether any conditions adverse to quality identified by the ECP process were properly included as part of the CAP. The inspectors reviewed selected Speakout resolution reports to determine if concerns were being properly reviewed and entered into the CAP, as applicable.

(2) Issues and Findings

No findings of significance were identified. The inspectors determined that the licensee was very effective at identifying problems at a low threshold and entering them into the CAP. Operating experience, including NRC generic communications, was routinely reviewed for applicability in a timely manner, and if appropriate, entered into the CAP. Audits and self-assessments were sufficiently critical and thorough. Findings, weaknesses, areas of improvement, or recommendations were consistently entered into the CAP as CRs or plant manager action items (PMAIs).

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors screened or reviewed approximately 145 CRs, plus associated supplements, out of nearly 3500 CRs initiated since March 1, 2001. Although numerous CRs were selected from across all cornerstones, including Emergency Planning, Safeguards, and Radiation Protection, the inspectors focused on the top five risk significant mitigating systems (i.e., CVCS, HHSI, CCW, AFW, and EDG). The licensee's CAP requires all CRs to be assigned a significance level commensurate with its level of safety/risk significance in accordance with 0-ADM-518, Condition Reports. Significance level 1 problems are the most safety significant and require a formal root cause analysis; level 2 problems require an apparent cause determination; and, level 3 problems are correction only. Condition reports were specifically selected by the inspectors from each significance level and reviewed to determine if the appropriate significance (i.e., priority) was assigned, root or apparent cause determined, and corrective actions developed to effectively resolve the identified problem. These CRs were also reviewed to assess whether they properly characterized identified problems, and adequately addressed operability, reportability, extent of condition, repeatability,

generic implications, and impact upon Maintenance Rule performance criteria.

The inspectors attended several daily Condition Report Oversight Group (CROG) meetings, and morning management meetings, to determine the level of management attention and oversight given to issues entered into and being processed through the CAP.

(2) Issues and Findings

In general, the licensee's CAP was effective at prioritizing, evaluating and resolving conditions adverse to quality. Root cause analyses were usually comprehensive, thorough and detailed, and apparent cause determinations were sufficiently rigorous. For almost all identified problems, the licensee's CAP ensured timely disposition commensurate with safety and risk significance. However, the inspectors did identify two negative observations.

One negative observation was identified regarding inadequate documentation to support CR and PMAI closure. The inspectors found several CRs lacked the documentation to "stand alone," when it came to describing the apparent cause and corrective actions taken to ensure adequate resolution of the identified problem. However, after further review, the licensee was able to confirm that the problems had been adequately dispositioned and provided supplemental documentation. Specific examples related to this observation are described below:

- CR 02-1094 did not contain sufficient documentation to justify continued operability of the turbine-driven AFW pumps at a higher lube oil pressure than specified by the vendor and original system design. Through interviews with the system engineer and engineering management, the inspectors determined that the licensee had also considered the past operating history of the AFW pumps and turbines as an integral part of justifying continued operability but had not documented this information. The licensee wrote a CR supplement to address this issue.

- CR 01-1404, 1404S1,1643, 1643S1, 1643S2, and 1691 described issues regarding CCW heat exchanger anodes that had separated from their mountings and clogged several tubes. Casual factors and corrective actions had not been fully documented in the CR records. The licensee wrote a supplement to condition report 01-1691 to clarify the resolution of all the CRs relating to this issue.

- CR 01-0277 was initiated when the 4B safety injection pump failed to start during a surveillance test. Operations reported that breaker 4AB12 would not close. It was concluded that this failure was a Maintenance Preventable Functional Failure on the High Head SI system and the 4KV system. The inspectors noted that this MPFF was counted towards 4 KV breakers and not the HHSI system. The available documentation did not justify this decision but interviews with the system engineer provided additional information supporting the decision. The licensee wrote a supplement to the CR to document an appropriate technical justification. In addition, the PMAI (01-03-086) closure for corrective action #1 of this CR did not document whether the system engineer had actually followed through and conducted an additional investigation to obtain information from other utilities and the vendor, and

to incorporate appropriate changes to the 4KV breakers. The licensee wrote another supplement to the CR to address this issue.

- CR 01-2255 was initiated to address a greater than expected thermal performance degradation of the 4A CCW heat exchanger due to fouling that resulted in declaring the heat exchanger inoperable and removing it from service for cleaning. It was subsequently determined that elevated canal temperatures accelerated the rate of fouling from calcium carbonate scaling. As part of the corrective actions to prevent recurrence, specific changes to the surveillance procedure were proposed. However, the inspector found that the procedure was not revised in the manner described in the CR. Apparently, a decision had been made to revise the procedure in a different manner. The licensee wrote a supplement to the CR to address this issue.

- CR 02-0068 addressed the licensee's discovery during post maintenance testing that certain critical electrical leads in the newly refurbished 4B Charging pump breaker had been inadvertently "rolled" by the vendor. However, the CR did not fully document the vendor's investigation, cause determination, extent of condition, and corrective actions. The licensee has since reviewed the vendor's actions and supplemented this CR.

A second negative observation was identified regarding the assigned significance level of several CRs. The CRs listed below were assigned a significance level inconsistent with the guidance of ADM-518.

- CR 01-2153 was initiated to address the incorrect assembly of the reactor head control rod drive mechanism cooling shroud. This CR was assigned a significance level 3 but should have been a significance level 2 according to ADM-518 recommendations because it was a nonconformance. However, the corrective actions appeared appropriate to resolve the identified deficiencies.

- CR 02-1039 was initiated to address the sheared control air tubing for the 4B charging pump. The CR was assigned a significance level 2, but because this was a considered a repetitive failure of equipment important to plant safety it should have been assigned significance level 1 in accordance with ADM-518 guidance. No root cause analysis or corrective action effectiveness review was performed. CR 02-1650 was initiated to address this issue (see noncited violation in the next section).

- Numerous CRs involving repetitive maintenance (e.g., CR 01-1278, 01-2031, 02-1107) and mispositioned events (e.g., 01-1020, 01-1133, 01-1637, 02-0617,CR 02-0727, and 02-0856) were assigned significance level 3 but should have been significance level 2 according to ADM-518 guidance. Even though the specific problems associated with the CRs were corrected, the documented actions did not sufficiently address preventing recurrence. CR 02-1651 was initiated to review the implementation of the ADM-518 guidance, particularly for mispositioned events.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed numerous CRs of various significance levels to determine if the licensee had developed appropriate corrective actions consistent with the apparent/root cause. The inspectors also independently verified many of the corrective actions to confirm whether they had been implemented as described and in a manner commensurate with their safety significance. And where appropriate, the inspectors evaluated the effectiveness of the corrective actions taken to address the extent of conditions, generic implications, and to prevent recurrence.

The inspectors also specifically reviewed and verified the corrective actions taken to resolve six noncited violations issued since the last PI&R inspection.

The inspectors reviewed the 1st Quarter 2002 Turkey Point Plant Health Report, and Operations CAP rollup, used to trend and assess the licensee's effectiveness in resolving significant equipment problems and human performance issues. Where applicable, the inspectors reviewed the Maintenance Rule evaluations and resultant corrective actions relating to functional failures, maintenance preventable functional failures, and the classification of SSCs into and out of a(1) status. Additionally, the inspectors interviewed responsible personnel and management directly involved with these aspects (e.g., Health Report, CAP Rollup, Maintenance Rule) of the licensee's CAP.

The inspectors examined the existing backlogs of PMAI, WO, and RTS items that were generated to track CR-related corrective actions. The inspectors also verified selected PMAI, WO, and RTS items that had been closed, to verify whether corrective actions were completed as described by the CR, and in a timely manner as scheduled. Additionally, the inspectors performed plant walk downs; reviewed applicable procedure revisions, drawing changes, training records, and other documents; and conducted interviews to verify whether corrective actions were actually implemented as described by the applicable CRs.

(2) Issues and Findings

Overall, the inspectors concluded that the licensee's corrective actions were appropriately developed to correct the identified problem, and were verified to be implemented in a timely manner commensurate with the safety significance of the problem. With very few exceptions, the corrective actions directly addressed the apparent/root cause, and effectively prevented recurrence for significant conditions adverse to quality. However, the inspectors identified a noncited violation involving ineffective corrective actions and a negative observation regarding the Plant Nuclear Safety Review Committee (PNSC).

The inspectors identified a Green finding related to ineffective corrective actions. This finding involved a violation of 10 CFR 50, Appendix B for ineffective corrective actions to prevent recurring charging pump and vital 4KV breaker functional failures. These components involve risk significant systems.

On July 23, 2001, the licensee initiated a Level 1 CR (01-1432) to investigate the large number of material deficiencies and functional failures associated with safety-related 4KV breakers during the past two years. As recently as February 2001, the 4B HHSI

pump and 4C Intake Cooling Water pump had failed to start due to breaker installation induced problems. A multi-disciplined team was assembled to conduct the investigation. Although the team subsequently concluded the root cause was equipment age, the team also determined there were several contributing causes such as breaker-to-cubicle interface/fit problems, inconsistent levels of expertise by the journeymen, and inadequate periodic inspections and post-maintenance testing/exercising. The team recognized that these issues, combined with an increased number of breaker exchanges being performed as a consequence of the ongoing accelerated breaker overhaul program, could contribute to additional breaker performance problems. However, the licensee's team did not propose any additional specific corrective actions to address these contributing causes, but rather they relied upon the sufficiency of previous CR corrective actions. Even though CR 01-1432 was a Level 1 CR, it failed to develop comprehensive corrective actions to address all known causes, and did not establish an review plan to ensure corrective actions were effective. This CR was closed out September 19, 2001.

On August 6, 2002, the 3A CCW pump failed to start (i.e., breaker 3AA12 would not close). The licensee's investigation (CR 02-1544) subsequently determined that the breaker's positive interlock roller (PIR) was improperly set in the cubicle, thereby preventing the breaker from closing. This critical interlock between the cubicle and the breaker was not properly adjusted for the fully racked in position when the 3AA12 breaker was swapped with a refurbished breaker on August 2, 2002. The causes for the failure appear to include a lack of knowledge concerning the critical dimensions of the PIR position by the journeymen, inadequate procedures, and cubicle-to-breaker fit differences between the swapped breakers. CR 02-1544 was classified as a potential repeat condition and assigned as a significance level 1. The 3A CCW pump was considered inoperable for slightly more than four days and was determined to be reportable by the licensee pursuant to 10 CFR 50.73.

On May 12, 2002, the 4B charging pump speed control copper air tubing was discovered to be sheared completely. The licensee initiated a significance level 2 CR (02-1039) and concluded the cause was cyclic fatigue. The licensee also concluded this was a functional failure, since they were uncertain whether the charging pump would have been able to achieve the required maximum speed during accident conditions with a broken actuator supply tubing. As part of the generic implications review, the licensee recognized that there have been several other failures associated with the charging pump copper control air tubing during the past 18 months. Two of these other failures included - CR 02-0113, 3A charging pump speed control copper air tubing failure due to cyclic fatigue; and, CR 01-0388, 4A charging pump speed control copper tubing leak due to a hole caused by rubbing. Concurrent to, and preceding, these events the licensee has also experienced numerous charging pump speed controller problems (e.g., CR 02-1055, 01-547, 00-1495) that have resulted in functional failures. However, despite the number of failures and their similarities the licensee did not initiate a level 1 CR (see section 4OA2.b) for the most recent 4B charging pump failure. Consequently, no root cause analysis was performed and no effectiveness review plan was established.

Corrective actions to date by the licensee have not been effective in preventing recurring charging pump and vital 4KV breaker functional failures. This issue is

considered more than minor due to the risk significance of the affected systems and the actual loss of component safety function. Both the charging pumps and vital 4KV breakers involve the reactor safety mitigating systems cornerstone and the objective of ensuring availability of mitigating system equipment was affected. Using the Significance Determination Process (SDP) this issue was determined to have very low safety significance (Green). The charging pump failures screened as Green according to Phase 1 of the SDP and the recent 3A CCW pump breaker failure was also determined to be Green according to Phase 2 of the SDP. The charging pump and CCW pump failures were of very low significance because there were three redundant pumps in both systems and the failure did not reduce the number of available pumps to below that required for the systems to accomplish their safety functions. Additionally, another pump was available in both instances for recovery of train operability.

10 CFR 50, Appendix B, Criterion XVI, Corrective Action, requires in part, that for significant conditions adverse to quality, measures shall be taken to assure the cause of the condition is determined and corrective actions implemented to preclude repetition. The licensee's failure to develop and implement effective corrective actions to prevent repetitive functional failures of the charging pumps and vital 4KV breakers is considered a violation of Criterion XVI. This violation was characterized by the SDP as having very low safety significance (i.e., Green finding) and is being treated as a noncited violation (NCV) consistent with Section VI.A.1 of the NRC Enforcement Policy. Two CRs (02-1650 and 1652) were initiated by the licensee to address the ineffectiveness of past corrective actions regarding recurring charging pump and vital 4 KV breaker failures. This finding is identified as NCV 50-250, 251/2002-05-01, Ineffective Corrective Actions To Prevent Recurring Charging Pump and 4KV Breaker Failures.

The inspectors determined that the PNSC was not consistently reviewing violations of Technical Specifications (TS) documented in NRC inspection reports. Although the PNSC reviewed the CRs associated with the identified violations of TS, the committee had not reviewed the TS violations once they were issued in NRC inspection reports. Section 12 of the updated Final Safety Analysis Report indicates that the PNSC evaluates all violations of TS and recommends actions to prevent recurrence. To address this issue, the licensee initiated CR 02-1597. Examples are described below:

- CR 01-1883 was initiated to investigate whether a nonlicensed operator (NLO) had falsely completed his daily operator rounds. Subsequently, NCV 50-250, 251/02-02-01 was written for violation of TS 6.8, Procedures And Programs. This NCV was not reviewed by the PNSC. A CR supplement was issued to provide additional documentation related to generic implications.

- CR 01-0516 was initiated to address three potential TS noncompliances identified by the NRC. The CR was reviewed by the PNSC on January 30, 2001. The NRC issued NCV 50-251/00-06-01, Failure to Meet TS Time Requirement for QPTR Calculations, on April 30, 2001. The PNSC did not review the NCV. The inspectors concluded that CR 01-0516 did not address the Event Review Team's (ERT) failure to identify the multiple TS noncompliances during the post-trip review. The licensee subsequently initiated a proposed revision of the post-trip review procedure to address this oversight by the ERT and post-trip review process.

- CR 01-2081 was initiated to address an inoperable boration flow path identified by the NRC. The CR was reviewed by the PNSC on December 12, 2001. The NRC issued NCV 50-250/01-06-01, Inoperable Boration Flow Path, on January 25, 2002. The PNSC did not review the NCV.

d. Assessment of Safety Conscious Work Environment

(1) Inspection Scope

The inspectors interviewed numerous plant employees, supervisors and managers to assess whether a safety conscious work environment existed at Turkey Point. The inspectors also reviewed the results of licensee QA audits, quality reports, self-assessments, Operations CAP rollup, Health Report and CRs, especially those regarding the CAP, to determine whether any issues were identified that would indicate employees might be reluctant to raise safety concerns. Furthermore, the inspectors reviewed selected issues addressed in the Speakout program which provides an alternate method than the CAP for employees to raise safety concerns and remain anonymous.

(2) Issues and Findings

No findings were identified. The inspectors determined that licensee employees were familiar with the CAP and Speakout program, and were not reluctant to raise safety issues.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the detailed inspection results in a pre-exit debriefing with Mr. J. McElwain, Site Vice President, and other members of his staff on August 22, 2002. An exit meeting with M. Lacal, Operations Manager, and A. Zielonka, Engineering Manager was held on August 23, 2002 at the conclusion of the inspection. No proprietary information is included in this report.

Supplemental Information

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Earl, Corrective Action Group Supervisor
M. Lacal, Operations Manager
R. Leckey, Speakout Supervisor
D. Lowens, Quality Assurance Manager
E. Lyons, Engineering Supervisor
J. McElwain, Site Vice President
W. Parker, Licensing Manager
K. Remmington, Maintenance Rule Program Administrator
B. Stamp, Operations Supervisor

G. Warner, Acting Quality Assurance Manager
A. Zielonka, Engineering Manager

Other licensee employees contacted included Operations, QA, Engineering, Maintenance, Corrective Action, and Chemistry/Radiation Protection personnel.

NRC
C. Patterson, Senior Resident Inspector, Turkey Point Nuclear Plant
L. Wert, Chief, Reactor Projects Branch 3, Division of Reactor Projects, Region II

ITEMS OPENED AND CLOSED

50-250, 251/02-05-01	NCV	Ineffective Corrective Actions To Prevent Recurring Charging Pump and 4KV Breaker Failures (Section 4OA2.c)

LIST OF DOCUMENTS REVIEWED

Procedures:

0-ADM-002, Nuclear Safety Speakout Program
0-ADM-005, Control Of Onsite Services
0-ADM-054, PMAI Corrective Action Tracking Program
0-ADM-102, On The Spot Changes To Procedures
0-ADM-310, Contractor And Temporary Employee Training
0-ADM-515, Operating Experience Feedback (OEF) Program
0-ADM-518, Condition Reports
0-ADM-710, Control Of Preventative Maintenance
0-ADM-728, Maintenance Rule Implementation
0-GMI-102.1, Troubleshooting and Repair Guidelines
0-GMM-102.5, Freeze Seal Application
0-PMI-025.1, Control Room HVAC Flow Switch Calibration
0-PMM-030.1, Component Cooling Water Heat Exchanger Cleaning
0-PMM-030.2, Component Cooling Water Pump Oil Change
0-PMM-075.6, Auxiliary Feedwater Pump Rotating Element Removal and Replacement
0-PMM-075.8, Auxiliary Feedwater Pump Oil Change
Nuclear Policy NP-800, Nuclear Safety Speakout Program
3-ONOP-028.3, Dropped RCC
0-OP-025, Control Room Ventilation System
3-OSP-019.4, Component Cooling Water HX Performance Monitoring
4-OSP-019.4, Component Cooling Water HX Performance Monitoring
0-OSP-025.1, Control Room Emergency Ventilation System Operability Test
0-OSP-025.2, Control Room Emergency Ventilation System Filter Performance Test
4-OSP-075.2, AFW Train 2 Operability Verification
0-OSP-200.5, Miscellaneous Test, Checks, and Operating Evolutions
4-OSP-201.1, RCO Daily Logs
3-OSP-201.1, RCO Daily Logs
QI 1-PTN-4, PNSC Organization and Operation
QI 16-PTN-1, Corrective Action
QI 16 QAD 4, Corrective Actions
QI 18 QAD 13, Performance of Quality Audits

Noncited Violations

CR 01-0516	NCV 50-251/00-06-01, Failure to Meet Technical Specification Time Requirement for Quadrant Power Tilt Ratio Calculations
CR 01-1197	NCV 50-250, 251/01-05-01, Control Room Emergency Ventilation System Inoperable Due To Mispositioned Damper

CR 01-1503	NCV 50-250/01-05-02, Both Trains of AFW Rendered Inoperable by a Single Event
CR 00-2164	NCV 50-251/01-04-01, Inadequate Training Verification of Contract Personnel Working on Safety-related Motor Operated Valves
CR 01-2081	NCV 50-250/01-06-01, Failure to Meet TS Requirements for Boration Injection Flow Path
CR 01-1883	NCV 50-250, 251/02-02-01, Operator Rounds Inadequately Performed

Plant Nuclear Safety Committee Meeting Minutes:

October 10,2000
January 30, 2001
July 30, 2001
July 31, 2001
September 04, 2001
October 09, 2001
December 12, 2001

Maintenance Rule Expert Panel Meeting Minutes:

January 25, 2001
February 15, 2002
April 04, 2002
April 17, 2002
April 19, 2002
April 30, 2002
May 2, 2002
July 23, 2002

Maintenance Rule SSC Performance Indicator Summary Reports

4.16 KV Switchgear (Unit 3 and 4)	1st and 2nd Quarter 2002
CVCS (Unit 3 and 4)	1st and 2nd Quarter 2002
Safety Injection (Unit 3 and 4)	1st Quarter 2002
EDG (Unit 3 and 4)	1st Quarter 2002
AFW (Unit 3 and 4)	1st Quarter 2002

Operating Experience

CR 01-0840	NRC Information Notice (IN) 2001-02, Summary of Fitness for Duty Program Performance for Calendar Years 1998 and 1999
CR 01-2352	IN 2001-14, Problems with Incorrectly Installed Swing-Check Valves
CR 02-0123	IN 2002-04, Wire Degradation at Breaker Cubicle Door Hinges
CR 02-0204	IN 2002-07, Use of Sodium Hypochlorite for Cleaning Diesel Fuel Oil Supply Tanks
CR 02-0840	IN 2002-12, Submerged Safety -Related Electrical Cables
CR 02-0841	IN 2002-14, Ensuring A Capability to Evacuate Individuals, including Members of the Public, from the Owner-Controlled Area

CR 01-1117	NRC Regulatory Issue Summary (RIS) 2001-12, Non-conservatism in Pressurized Water Reactor Spent Fuel Pool Reactivity Equivalency Calculations
CR 02-0347	NRC Generic Safety Issue (GSI) 191, Assessment of Debris Accumulation on PWR Sump Performance
CR 01-0690	INPO SER 2-01, Emergency Diesel Generator Failure from Inadequate Performance Monitoring and Inadequate Response
CR 02-0842	Westinghouse NSAL 02-008, Incomplete Rod Cluster Control Assembly (RCCA) Insertion in the Dashpot
CR 01-2216	10 CFR 21 Report (Part 21), Switch Lock Concern for Model 288A & 289A Indicating Switches
CR 01-1650	Part 21, Woodward Electronic Controllers with Electrolytic Capacitors
CR 02-0615	Part 21, Model # SS84 Rotary Ball Valves - Fisher Controls Seat Leakage
CR 01-0970	Part 21, Wiring Configuration of the Power Cable for the Hydrogen Recombiner
CR 02-0006	Part 21, OE12679 Switch Supplied by Magnetrol Does not Conform to Westinghouse Drawing Specifications
CR 02-0711	Part 21, Dresser-Rand Terry Turbine
CR 02-0185	Part 21, ASCO Limit Switches Failed to Operate Correctly
CR 01-1665	Surry LER 280-01-001, Emergency Diesel Generator Inoperable as a Result of Silver in Lubricating Oil
CR01-2292	Industry (DOE) Issue, Rigging Failure at Brookhaven National Laboratory

Condition Reports (including Supplements, as applicable):

00-1388	00-1495	00-2090	00-2091	00-2092	00-2093	00-2094
00-2164	00-2346	01-0277	01-0388	01-0415	01-0493	01-0516
01-0546	01-0547	01-0608	01-0617	01-0690	01-0783	01-0785
01-0838	01-0840	01-0856	01-0885	01-0893	01-0899	01-0951
01-0970	01-0971	01-1020	01-1029	01-1042	01-1068	01-1091
01-1098	01-1117	01-1128	01-1133	01-1158	01-1197	01-1220
01-1235	01-1236	01-1278	01-1311	01-1388	01-1404	01-1419
01-1432	01-1442	01-1444	01-1451	01-1462	01-1481	01-1503
01-1528	01-1596	01-1625	01-1634	01-1636	01-1643	01-1650
01-1665	01-1691	01-1760	01-1798	01-1883	01-1935	01-1967
01-1977	01-1995	01-1996	01-2006	01-2011	01-2024	01-2029
01-2031	01-2037	01-2075	01-2081	01-2083	01-2084	01-2101
01-2153	01-2216	01-2229	01-2248	01-2255	01-2292	01-2310
01-2323	01-2352	01-2391	01-2423	01-2441	01-2465	02-0006
02-0051	02-0068	02-0095	02-0113	02-0123	02-0185	02-0247
02-0305	02-0320	02-0335	02-0340	02-0347	02-0378	02-0390
02-0461	02-0470	02-0476	02-0496	02-0498	02-0540	02-0555
02-0566	02-0615	02-0617	02-0673	02-0711	02-0727	02-0763
02-0840	02-0841	02-0842	02-0888	02-0893	02-0899	02-0995
02-1002	02-1039	02-1053	02-1055	02-1065	02-1094	02-1107
02-1138	02-1166	02-1177	02-1487	02-1481	02-1544	

Canceled Condition Reports:

01-0507	01-0598	01-0608	01-0663	01-0876	01-0902
01-0903	01-0904	01-0905	01-0906	01-0907	01-0908
01-0909	01-1050	01-1051	01-1553	01-1696	01-1713
01-1763	01-1789	01-1793	01-1816	01-1825	01-1830

Plant Work Orders:

30021568	30021705	30023029	31000250	31000578	31011751
31011753	31011755	31011758	31011760	31011762	31011763
31022039	31012925	32008499	32009675	32010298	32010298
32010572	32010849	32010957	32010958	32010976	32010977
32011548	32011549	32011550	32011551	32011643	32011816
32012563	32013846	32013847			

Quality Assurance Audits, Quality Reports (QR), and Quarterly Reports

QAM-PTN-00-007	Corrective Action
QAO-PTN-00-010	Maintenance Functional Area Audit
QAO-PTN-01-006	Site Engineering Functional Area Audit
QAO-PTN-01-008	Triennial Fire Protection Audit
QAO-PTN-02-001	Security Functional Area Audit
QAO-PTN-02-002	Emergency Preparedness Program
QR 01-0089	Contractor Training and Qualification
QR 01-0119	Foreign Materials Exclusion Controls During Unit 3 Cycle 19 Outage
QR 01-0127	Control of Motor Operated Valve Maintenance and Testing
QR 02-0099	Self Assessment/Corrective Action Effectiveness For Mispositioned Components
QA Quarterly Report	First Quarter 2002
QA Quarterly Report	Second Quarter 2002

Self-Assessments

Maint 01-03	M&TE Program
Maint 01-04	Maintenance Department Corrective Action Program Assessment
Chem 01-01	Chemistry Technician Analytical and Surveillance Techniques and Procedures
HP 01-01	Health Physics
Eng 01-01	Engineering Design Control
WC 01-01	Work Scheduling Process
CAG 02-01	Corrective Action Program
1st Quarter 2002	Turkey Point Health Report
CAP Rollup	Operations