



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931**

March 26, 2004

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

**SUBJECT: ST. LUCIE NUCLEAR PLANT - NRC PROBLEM IDENTIFICATION AND
RESOLUTION INSPECTION REPORT
05000335/2004007 AND 05000389/2004007**

Dear Mr. Stall:

On February 27, 2004 the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your St. Lucie Nuclear Plant, Units 1 and 2. The enclosed inspection report documents the inspection findings, which were discussed on February 27, 2004 with Mr. William Jefferson and other members of your staff.

The inspection examined 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 with the conditions of your license. The inspectors reviewed selected procedures and records, conducted plant observations, and interviewed personnel.

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The team concluded that, in general, problems were properly identified, evaluated, and resolved within the problem identification and resolution programs. However, during the inspection, several examples of minor problems were identified. The inspectors noted that your Quality Assurance department identified that not all self assessments or quarterly CR rollups scheduled for performance in 2003 were actually performed as required by plant procedures. Also, Quality Assurance identified that there has been a lack of emphasis on completing corrective actions as exemplified by an increasing backlog of overdue Plant Management Action Items (PMAIs). At the time of this inspection there was a backlog of 360 overdue PMAIs of varying importance.

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 NRC's

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document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket Nos.: 50-335, 50-389
License Nos.: DPR-67, NPF-16

Enclosure: Inspection Report 05000335/2004007
and 05000389/2004007
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.: 50-335, 50-389

License Nos.: DPR-67, NPF-16

Report Nos.: 05000335/2004007, 05000389/2004007

Licensee: Florida Power & Light Company (FPL)

Facility: St. Lucie Nuclear Plant, Units 1 & 2

Location: 6351 South Ocean Drive
Jensen Beach, FL 34957

Dates: February 9 - 27, 2004

Inspectors: C. Julian, Team Leader

K. Green-Bates, Resident Inspector Turkey Point
D. Mas-Penaranda, Nuclear Safety Intern
S. Rudisail, Senior Project Engineer
S. Sanchez, Resident Inspector St. Lucie

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

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SUMMARY OF FINDINGS

IR 05000335/2004007, 05000389/2004007; 02/09/2004 -02/27/2004; St. Lucie Nuclear Plant, Units 1 & 2; Problem Identification and Resolution.

Identification and Resolution of Problems

The inspectors determined that the licensee was generally effective in identifying problems and entering them into the Corrective Action Program. In general, the threshold for initiating Condition Reports (CRs) was low and employees were encouraged by management to initiate CRs.

The inspectors concluded that the Quality Assurance (QA) audits were comprehensive, were well conducted, and had identified numerous performance problems. For example, licensee Quality Assurance identified that not all self assessments or quarterly CR rollups scheduled for performance in 2003, were actually performed as required by plant procedures. Quality Assurance also identified that there has been a lack of emphasis on completing corrective actions as exemplified by an increasing backlog of overdue Plant Management Action Items (PMAIs). At the time of this inspection there was a backlog of 360 overdue PMAIs of varying importance. Additionally, the inspectors observed that a recent revision to procedure ADM-07.01, PMAI Corrective Action Tracking Program removed all time limits for closure of PMAIs.

The inspectors did not identify any reluctance by the plant staff to report safety concerns. The inspectors concluded that the employee concerns program, Speakout, was functioning well.

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REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed procedures associated with the corrective action program (CAP) which described the administrative processes for identifying and resolving problems via Condition Reports (CRs). The inspectors also reviewed items selected across the seven cornerstones of safety and conducted interviews of station personnel to determine if problems were being properly identified, characterized, and entered into the licensee CAP. The inspectors specifically reviewed CRs initiated between May 1, 2002 and the end of year 2003 associated with the following plant systems: Intake Cooling Water, Low Head Safety Injection, Containment Spray, Fuel Pool Cooling, Emergency Diesel Generators, 4160 VAC electrical, 480V electrical, 125VDC, and 120V Vital AC. The inspectors discussed the resolution of a sample of those CRs with assigned system engineers. The inspectors reviewed all CRs associated with NRC findings and LERs for the period May 1, 2002 and the end of year 2003. The inspectors reviewed a sample of licensee audits and assessments, trending reports, system health reports, performance indicators, and various other documents related to problem identification and resolution. These reviews were conducted to determine if problems were being identified at an appropriate threshold, were accurately characterized, and entered into the CAP in accordance with licensee procedures.

The inspectors also conducted plant walkdowns of equipment associated with the selected systems to assess the material condition and to look for any deficiencies that had not been entered into the CAP. The inspectors reviewed CRs documenting selected industry operating experience items, including vendor CR's, 10 CFR Part 21 CR's, and NRC generic communications, to verify that these were appropriately evaluated for applicability.

Documents reviewed are listed in the Attachment.

(2) Assessment

The inspectors determined that the licensee was generally effective in identifying problems and entering them into the CAP. CRs normally provided complete and accurate characterization of the subject issues with only minor exceptions noted. In general, the threshold for initiating CRs was low and employees were encouraged by management to initiate CRs. The number of CRs issued in 2003 was 4601, which was a 42% increase over the previous year as a result of the lower threshold. Equipment performance issues were generally being identified and entered into the CAP. Additionally the licensee was effective in evaluating internal and external industry

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operating experience items for applicability and entering issues into the CAP. No findings of significance were identified.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed corrective action documents including CRs, Plant Management Action Items (PMAIs), Management Action Items (MAIs), Procedure Change Requests (PCRs), and Work Orders (WOs) to determine if the licensee appropriately characterized problems for evaluation and resolution. Specifically, the inspectors' review was to determine if the licensee correctly identified root and contributing causes for significant conditions adverse to quality, and where appropriate, adequately addressed operability, reportability, common cause, generic concerns, and extent of condition. The inspectors also reviewed corrective action documents to determine if issues were being correctly classified using the licensee's definition of significance level with proper consideration of risk, operability, and reportability. The inspectors observed multiple meetings of the "mini" Condition Report Oversight Group (CROG), which screened newly written CRs to determine a proposed significance level and investigation type. The inspectors also observed meetings of the CROG which reviewed CRs to determine their final significance level and future disposition. The inspectors also reviewed the condition reports initiated by the licensee in response to NRC Non-Cited Violations (NCVs) and licensee event reports to verify that the licensee had appropriately addressed the associated issues.

(2) Assessment

The inspectors observed that the committees functioned satisfactorily. Site management was actively involved in the CAP process and focused appropriate attention on significant plant issues. The inspectors determined that the licensee properly prioritized issues entered into the CAP. Generally, the licensee performed adequate evaluations that were technically accurate and of sufficient depth. The inspectors noted, however, that although CRs might initially be given a high priority, implementation of the corrective action was often delayed due to lack of emphasis on completing PMAIs. No findings of significance were identified.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed the corrective actions associated with condition reports to verify that the licensee had identified and implemented corrective actions commensurate with the safety-significance of the issue, and where appropriate, evaluated the effectiveness of the actions taken. The inspectors also checked if common causes and generic concerns were addressed when appropriate. The inspectors reviewed selected station internal performance indicators and reports, such as maintenance rule documents, and discussed safety system status with plant personnel to verify that deficiencies had been

corrected. The inspectors confirmed implementation of selected PMAs associated with CRs reviewed, along with the inspections discussed in Section 4OA2.a and b, to verify that the licensee had identified and implemented timely and appropriate corrective actions to address problems. The inspectors reviewed reports of Quality Assurance (QA) audits of Operations and Technical Specifications, Engineering, and Corrective Action Functional Area audits.

(2) Assessment

Corrective actions developed and implemented for plant equipment problems were generally effective in correcting the equipment deficiencies. The inspectors found that the scope and depth of corrective actions assigned by the licensee were appropriate for the severity and risk significance of the problem identified.

The inspectors conducted a focused review of corrective action documents for the 4160 Volt AC power system. Selection of these CRs and corrective action documents for review were directed towards circuit breaker and switchgear issues due to the increased number of past CRs initiated for these components. This system was also selected for a review of CRs generated over the last five years. The high number of CRs had been recognized and assessed by the licensee earlier and the system had been appropriately placed into Maintenance Rule (a)(1) status.

The inspectors observed that there were particular longstanding issues related to outdoor switchgear 2B-4. This switchgear is non-safety related equipment that is used to support maintenance with alternate electrical supplies for the startup transformers and can be used as an alternate means to restore power following a station blackout. Problems with racking in and racking out these circuit breakers had been identified as far back as 1999. Despite this identification, corrective action to resolve the issue was still outstanding. The licensee's most recent assessment concluded that the problem was a result of the switchgear floor settling and plans to implement a modification to the floor in 2004. Additional corrective actions to resolve overall circuit breaker reliability are planned and include replacement of 4KV and 6.9 KV breakers with ones of a new design which is scheduled to begin in April 2004. Because this equipment is non-safety related, no violation of regulatory requirements occurred.

The inspectors reviewed the majority of Significance Level 1 CRs that had been initiated since April 2002 at St. Lucie to assess the adequacy of the Root Cause Analyses. The inspectors determined that the Condition Reports reviewed had been thoroughly documented and the root cause analyses were comprehensive and appropriately focused. Corrective actions identified were appropriate and were being implemented.

The inspectors concluded that the QA audits were well conducted and identified numerous performance problems. QA identified that the past performances of quarterly CAP CR rollups were not being completed by all departments in 2003 as required by Procedure ADM-07.03, Condition Report Trending - step 6.2.8. QA also identified that not all self assessments scheduled for performance in 2003 were actually performed as required by Procedure ADM-11.05, Self Assessment. These procedures do not fulfill an

NRC regulatory requirement and therefore no violation of NRC regulatory requirements occurred.

The inspectors reviewed a list of 360 overdue PMAIs to determine if there were significant issues that were not being addressed. The PMAIs contained a mix of corrective actions of varying importance resulting from CRs and desirable enhancements. This backlog had been previously identified by QA in an audit of the Corrective Action program. To correct this issue, CR 04-0217 was written which initiated seven additional CRs, 04-0283 through 04-0289, to individual departments for development of a prioritized workdown plan to eliminate the PMAI backlog. Those CRs were due to be completed on the day of the inspection exit. Inspectors subsequently learned that PMAI workdown plans had been developed and the seven CRs were closed. The inspectors concluded that the backlog of PMAIs will require aggressive action to resolve.

The inspectors observed that a January 21, 2004 revision 4 to procedure ADM-07.01, PMAI Corrective Action Tracking Program removed all time limit requirements for closure of PMAIs. A previous revision 2 contained the statement "Due dates for non-outage PMAIs shall NOT EXCEED 12 months from the origination date without PGM approval." Plant staff stated that in June 2004 when an electronic CR system is scheduled to be implemented, PMAIs will no longer be used to track CR actions and CRs will stay open until all corrective actions are complete. The inspectors noted that during this interim period without goals or time limits for closing PMAIs, the potential to further increase the PMAI backlog exists which could delay corrective actions. No findings of significance were identified.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

During technical discussions with members of the plant staff the inspectors sought to develop a general perspective of the safety-conscious work environment at the site. The discussions were also used to determine if any conditions existed that would cause employees to be reluctant to raise safety concerns.

The NRC previously reviewed Speakout (Employee Concerns Program) records for the period January 2001, through October 2003 and documented the results of that review in NRC integrated inspection report 05-335,389/2003007. During this PI&R inspection the inspectors reviewed all the case files generated by Speakout from November 2003 until February 2004.

(2) Assessment

Based on this inspection and the CR reviews, the inspectors concluded that licensee management emphasized the need for all employees to promptly identify and report problems using the appropriate methods established within the administrative programs.

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The inspectors did not identify any reluctance by the plant staff to report safety concerns.

The inspectors also concluded that the Speakout files were complete and adequate. No findings of significance were identified.

40A6 Meetings

Exit Meeting Summary

On February 27, 2004 the inspectors presented the inspection results to Mr. W. Jefferson, and other members of his staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTARY INFORMATION

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SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

M. Alfonso	Corrective Action Supervisor
W. Bryan	Performance Improvement Department
C. Costanzo	Operations Manager
R. De La Espriella	Site Quality Manager
K. Frehafer	Licensing Department
J. Gallagher	Speakout Program
R. Hughes	Site Engineering Manager
W. Jefferson	Site Vice President
G. Johnston	Plant General Manager
E. Katzman	Performance Improvement Manager
J. Kirkpatrick	Maintenance Manager
R. Leckey	Speakout Program
T. Patterson	Licensing Manager
M. Pearson	Performance Improvement Department
J. Porter	Inservice Engineering Manager
D. Whitwell	Performance Improvement Department
S. Wisla	Health Physics Manager

Other licensee employees contacted include office, operations, engineering, maintenance, training, and corporate personnel.

NRC personnel

T. Ross	Senior Resident Inspector
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LIST OF DOCUMENTS REVIEWED

Procedures

ADM-07.02, Condition Reports, Rev. 7B, 05/10/03

NAP-400, Condition Reports, Rev. 0, 01/21/04

ADM-07.01, PMAI Corrective Action Tracking Program, Rev. 2, 06/18/01 and Rev. 4, 01/21/04

Administrative Procedure ADM-11.05, "Self Assessment Procedure", Revision 7B dated 11/21/03

Nuclear Policy NP-605, "Self Assessment", Revision 6 Dated 11/12/02

Work Control Guide WCG-006, "Work Control Self Assessment Program", Revision 2A dated 2/27/03

Procedure EMP-80.12, "VOTES Differential Pressure Testing of Motor Operated Valves", Revision 1B

Procedure 1-NOP-03.05, "Shutdown Cooling - Venting SDC Trains 1A and 1B", Revision 12

Off-Normal Operating Procedure 2-0640030, "Intake Cooling Water System", Revision 24B

Basis Document for OP-019; "Intake Cooling Water System", dated 8/7/03

Condition Reports (CRs)

03-4582	03-4493	03-4476	03-3507	03-3490	03-2481
03-2442	03-2418	03-2006	03-0722	02-2969	02-2247
02-2022	02-1342	03-4418	03-4221	03-3357	03-3305
03-2141	03-2047	03-1993	03-1821	03-1064	03-0082
02-3128	02-2733	02-2693	02-2411	02-2390	02-1711
97-2511	98-0738	98-1464	03-0751	03-1703	03-0637
02-1575	03-1546	02-2047	03-3176	04-0077	03-4544
03-4475	03-4328	03-3901	03-3481	03-3340	03-3470
03-3136	03-2950	04-0192	02-0888	02-2661	02-2454
03-1467	03-0821	02-1659	02-2604	02-2097	03-4232
02-1046	02-0059	00-0569	00-0784	00-0784-1	00-1752
01-3153	01-3154	00-0978	02-0903	03-0597	99-1271
02-2650	03-2469	02-2500	03-0344	02-0704	03-4158
03-3708	03-3028	03-2375	03-1955	02-2428	02-2291
02-1864	02-1406	02-1350	02-1341	03-4505	03-4183
03-3173	03-2912	03-2751	03-1932	03-1240	03-0812
03-0491	03-0464	03-0063	02-3130	02-2960	02-2075
02-1397	02-1098	02-1088	03-3524	03-3525	02-1270-1
02-2851	02-1268	03-3986	03-2486	02-1556	02-1020

02-1046	02-1631	03-1089	02-2220	02-1993	02-1678
02-1085	03-2822	03-2823	03-2824	03-2825	04-0217
04-0283	04-0284	04-0285	04-0286	04-0287	04-0288
04-0289	04-0283	04-0284	04-0285	04-0286	04-0287
04-0288	04-0289	01-3096	01-3232	02- 0521	02-0986
02-1077	02-1792	02-1321	02-2422	02-2499	03-0707
03-1731	03-2131	03-1080	04-0428	00-1431	00-1413
00-1422	02-1756	02-2912	03-0035	03-1257	03-2973
03-4018	03-4153	04-0073	04-0548		

Plant Management Action Items (PMAIs)

PM03-09-021	PM03-05-059	PM02-10-093	PM02-10-094
PM03-03-042	PM03-01-095	PM03-03-001	PM03-09-066
PM03-05-006	PM03-05-007	PM03-05-003	PM02-06-037
PM03-04-038	PM99-08-104	PM02-06-037	PM02-12-052
PM02-01-152	PM02-04-006	PM02-04-007	PM00-12-052
PM04-02-145	PM03-08-008	PM02-02-093	PM03-12-121
PM03-12-122	PM03-12-123		

Maintenance Action Items (MAIs)

02-06-112

Procedure Change Requests (PCRs)

03-1490 03-1491

Work Orders (WO)

WO 33004661	WO 34000665	WO 32012775	WO 32016765
WO 30008554	WO 32001268-01	WO 320032789	WO 33009085-01
WO 33017350			

Quality Assurance Audits

Site Engineering Functional Area Audit 8/27 - 11/17/2003, QSL-ENG-03-06

Corrective Action Functional Area Audit 11/10/2003 - 1/20/2004, QSL-CA-03-08

Operations and Technical Specifications Functional Area Audit 7/15 - 10/1/2003, QSL-OPS-03-05

Self- Assessments

SOER 02-4 Self Assessment Report, 07/21 - 24/2003

Self Assessment - Lessons Learned from the Unit 2 Distributed Control System Installation, 11/24/2003

Maintenance Rule Quarterly Report Summary Reports, 2nd and 3rd quarters 2003

Miscellaneous Documents

Performance Indicator D-5. Condition Report (CR) Corrective Action Backlog, week of 02/20/2004

Performance Indicator D-6. Overdue SL-1 Corrective Actions, week of 02/06/2004

Performance Indicator D-7. Condition Report (CR) Workorder Backlog, week of 02/06/2004

Condition Report Workdown Curve, Month of February 2004

Unit 1 LPSI System Health SSC Performance Indicator dated 2/7/04

Unit 2 LPSI System Health SSC Performance Indicator dated 2/9/04

Unit 1 ICW System Health SSC Performance Indicator dated 2/8/04

Unit 2 ICW System Health SSC Performance Indicator dated 2/10/04

Unit 1 FP&L St. Lucie Nuclear Drawing No. 2998-G-078, "Flow Diagram Safety Injection System"

Unit 1 FP&L St. Lucie Nuclear Drawing No. 8770-G-082, "Flow Diagram Intake Cooling Water and Circulating Water System"

Unit 2 FP&L St. Lucie Nuclear Drawing No. 8770-G-082, "Flow Diagram Intake Cooling Water and Circulating Water System"

Unit 2 FP&L St. Lucie Nuclear Drawing No. 2998-G-078, "Flow Diagram Safety Injection System"

CRs Resulting From This Inspection

CR 04-0538 - NRC observed that CR 03-2006 was closed to PCR 03-1491 but this PCR was not complete by its due date of 6/25/03.

CR 04-0581 - Evaluate the "Initial Operability Assessment" of CR 03-1972 for procedural compliance with extent of condition. Four valves were addressed but a fifth valve was addressed in the final disposition.

CR 04-0582 - CR 03-1972 identified that a SDC valve stem was 2.5" diameter versus 3" indicated on drawing and calculations. CR 03-1972 did not perform a past operability evaluation for purposes of Reportability.

CR 04-0583 - We are inconsistent in addressing MOV GL 89-10 commitments with regard to 10% margin in CR 03-1972 and 01-3096. We need a "template" for addressing the 10% commitment within CR dispositions.