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

May 21, 2002

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 INSPECTION REPORT
50-335/02-05 AND 50-389/02-05

Dear Mr. Stall:

On April 25, 2002, the NRC completed an inspection at your St. Lucie Nuclear Units 1 and 2. The enclosed report documents the inspection findings, which were discussed on April 25, 2002, with Mr. D. Jernigan 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 selected examination of procedures and representative records, observations of plant equipment and activities, and interviews with personnel.

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The team concluded that problems were properly identified, evaluated, and resolved within the problem identification and resolution programs.

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 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/

Randall A. Musser, Acting Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report 50-335/02-05, 50-389/02-05
w/attachment

cc w/encl: (See page 2)

cc w/encl:
D. E. Jernigan
Site Vice President
St. Lucie Nuclear Plant
Florida Power & Light Company
Electronic Mail Distribution

Plant General Manager
St. Lucie Nuclear Plant
Electronic Mail Distribution

T. L. Patterson
Licensing Manager
St. Lucie Nuclear Plant
Electronic Mail Distribution

Don Mothena, Manager
Nuclear Plant Support Services
Florida Power & Light Company
Electronic Mail Distribution

Mark Dryden
Administrative Support & Special Projects
Florida Power & Light Company
Electronic Mail Distribution

Rajiv S. Kundalkar
Vice President - Nuclear Engineering
Florida Power & Light Company
Electronic Mail Distribution

M. S. Ross, Attorney
Florida Power & Light Company
Electronic Mail Distribution

William A. Passetti
Bureau of Radiation Control
Department of Health
Electronic Mail Distribution

Craig Fugate, Director
Division of Emergency Preparedness
Department of Community Affairs
Electronic Mail Distribution

J. Kammel
Radiological Emergency
Planning Administrator
Department of Public Safety
Electronic Mail Distribution

Douglas Anderson
County Administrator
St. Lucie County
2300 Virginia Avenue
Ft. Pierce, FL 34982

Distribution w/encl:
B. Moroney, NRR
J. Jacobsen, NRR
RIDSNRRDIPMLIPB
PUBLIC

OFFICE	RII:DRP	RII:DRP	RII:DRP			
SIGNATURE	***SRudisail per fax***	***SRudisail per tele***	***KGreen-Bates***			
NAME	JStewart	DLanyi	KGreen-Bates			
DATE	***5/20/02***	***5/20/02***	***5/20/02***			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: C:\ORPCheckout\FileNET\ML021420046.wpd

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-335, 50-389
License Nos:	DPR-67, NPF-16
Report No:	50-335/02-05, 50-389/02-05
Licensee:	Florida Power & Light Company (FPL)
Facility:	St. Lucie Nuclear Plant, Units 1 & 2
Location:	6351 South Ocean Drive Jensen Beach, FL 34957
Dates:	April 15 - 25, 2002
Inspectors:	J. Stewart, Senior Resident Inspector, Crystal River 3 (Lead Inspector) D. Lanyi, Resident Inspector, St. Lucie Nuclear Power Plant K. Green-Bates, Project Engineer
Accompanied:	J. Herrera, Inspector Trainee, NRC Region I
Approved by:	Randall A. Musser, Acting Chief Reactor Projects Branch 3 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000335-02-05, IR 05000389-02-05 on 04/15-04/25/2002, Florida Power & Light Company, St. Lucie Plant, Units 1 & 2. Biennial baseline inspection of the identification and resolution of problems.

The inspection was conducted by two resident inspectors and one region-based inspector. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using the significance determination process (SDP) found in Inspection Manual Chapter 0609. Findings to which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website.

Identification and Resolution of Problems

Based on the results of the inspection, no findings of significance were identified. The implementation of the corrective action program was acceptable. There was an isolated maintenance effectiveness issue involving repairs to a failed emergency diesel generator cooling system radiator. Overall, the licensee properly classified discrepant conditions and corrective actions were completed in a timely manner with respect to plant risk. The licensee's quality audits were effective in identifying deficiencies in the licensee programs. The inspectors did not observe a reluctance to report safety concerns.

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed items selected across the seven cornerstones of safety to determine if problems were being properly identified, characterized, and entered into the licensee corrective action program. The review included a selection of condition reports entered into the corrective action program (CAP) since February of 2001. The inspectors conducted walkdowns of plant systems important to safety, accompanied plant operators on their log-taking tours, interviewed station personnel, and evaluated corrective action documentation to determine the licensee's threshold for identifying problems and entering them into the CAP. Also, the licensee's efforts in establishing the scope of problems were evaluated by reviewing pertinent work orders, engineering requests, station assessment results, and program plans. The inspectors reviewed a sample of licensee audits and assessments, trending reports, system health reports, maintenance rule implementation documents, and various other documents related to problem identification and resolution. Documents requested to support the inspection and documents reviewed are listed in the Attachment. The team compared the audit and assessment results, with self-revealing and NRC issues such as those in licensee event reports, to assess the effectiveness of the problem identification and resolution program.

The team reviewed the licensee's evaluation of selected industry experience information including event reports and NRC generic communications, to assess if issues applicable to the St. Lucie Nuclear Plant were appropriately addressed.

(2) Findings

The inspectors determined that the licensee was effective at identifying problems and placing them into the CAP. In general, the threshold for documenting problems was at an appropriate level, commensurate with the issue's risk significance and ease of discovery. The inspectors found an isolated instance where a problem with a safety related battery charger was delayed being placed in a corrective action program for two days. The licensee placed this in there CAP as CR 02-0806. The inspectors concluded that external industry operating experience and NRC generic communications had been evaluated for plant applicability, and had been incorporated into the CAP. Quality Assurance audits performed by the licensee were effective in identifying deficiencies and these deficiencies were entered into the CAP.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed corrective action documents (CRs/PMAIs/MAIs) to determine if the licensee appropriately characterized problems for evaluation and resolution. The documents reviewed are listed in the Attachment. The inspectors' review was to determine if the licensee identified root and contributing causes for significant conditions adverse to quality, and when appropriate, identified common cause and generic concerns. The corrective action documents selected for review were those having general application to regulatory programs, and those associated with plant systems that have risk significance determined by the plant-specific probabilistic risk assessment. These systems included the auxiliary feedwater (AFW), component cooling water (CCW), emergency diesel generator (EDG), intake cooling water (ICW), reactor protection (RPS), and high pressure safety injection (HPSI) systems. The inspectors also reviewed corrective action documents to check if the issues were being classified using the licensee's definition of significance level with proper consideration of risk, operability, and reportability. For issues classified at the highest significance level, the inspectors checked if proper consideration was given to root cause evaluation, extent of condition, and generic implications. One issue involving the failure of a safety related electrical breaker identified by the licensee during the inspection was not checked because the licensee's assessment continued at the end of the inspection (CR 02-0704).

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.

The inspectors observed daily meetings where corrective action issues were discussed to ensure that risk insights were being used in prioritization and evaluation of issues. The inspectors also reviewed the plant's weekly plan of activities and risk profiles to assess that risk information was employed in work planning and scheduling.

(2) Findings

The inspectors determined that when conditions adverse to quality were identified, the licensee entered those conditions into the CAP and identified the appropriate causes. The inspectors determined that the licensee properly classified discrepant conditions. NRC identified issues and violations of regulatory requirements were appropriately addressed.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors checked 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, walked down plant systems important to safety, and discussed safety system status with plant personnel to verify that deficiencies had been corrected. Maintenance effectiveness issues, such as those identified in licensee event reports for systems important to safety were checked for timely corrective actions as well as for appropriate inclusion in licensee maintenance rule programs.

(2) Findings

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. An isolated maintenance effectiveness issue was found where a failure of an emergency diesel generator cooling system radiator was not initially corrected to prevent recurrence. When the system failed a second time, the radiator was replaced and long term preventive actions were specified to prevent recurrence (CR 01-1491). The inspectors also observed that licensee reviews of the effectiveness of corrective actions for significant conditions adverse to quality were at times, less than formal and actions had been started to formalize and document these assessments. Maintenance rule monitoring of systems important to safety was done and performance goals for the selected systems designated a(1) were appropriate.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The inspectors interviewed licensee operations, maintenance, security, health physics, engineering, and supervisory personnel to develop a general view of the safety-conscious work environment at St. Lucie and to determine whether any conditions existed that would cause workers to be reluctant to raise safety concerns. The inspectors questioned licensee staff to determine whether any conditions existed that were not placed in the CAP. The inspectors also checked the licensee's employee concerns (Speakout) program designated by the licensee as an alternate means for workers to identify deficiencies and to raise safety concerns while remaining anonymous. The inspectors checked Speakout concern resolution with the program coordinator to check if concerns were being adequately assessed and concerns were being resolved.

(2) Findings

The inspectors found that licensee management emphasized the need for all employees to identify and report nonconforming conditions using the methods established within their administrative programs. The inspectors did not identify a reluctance of licensee staff to report safety concerns.

4OA6 Exit Meeting

The team discussed these findings with Mr. D. Jernigan and other members of the licensee's staff on April 25, 2002. Licensee management did not identify any materials examined during the inspection as proprietary.

KEY POINTS OF CONTACT

Licensee

G. Bird, Protection Services Manager
D. Calabrese, Emergency Preparedness Supervisor
R. De La Espriella, Site Quality Manager
B. Dunn, Site Engineering Manager
W. Guldemond, Operations Manager, Acting Plant General Manager
D. Jernigan, Site Vice President
J. Martin, Operations Supervisor
D. Mohre, Engineering Supervisor
G. Varns, Security Manager
J. Voorhees, Licensing Manager
C. Wood, Maintenance Manager

ITEMS OPENED AND CLOSED

None

ATTACHMENT

DOCUMENTS REQUESTED FOR INSPECTION

1. Copies of procedures associated with the corrective action process

2. A list of all condition reports initiated since February 2, 2001 (Note: This is the starting date for all other lists unless otherwise stated) including a brief description of the problem and the classification

3. A list of top cutsets from the plant probabilistic risk assessment

4. A copy of all condition report documents associated with NRC findings and licensee event reports

5. A list of industry operating experience documents

6. Corrective action program statistics such as the number initiated by department

7. A list of systems which are classified as (a)(1) in accordance with the Maintenance Rule, 10 CFR 50.65, including related goals and action plans

8. A list of Maintenance Preventable Functional Failures

9. System Health Reports

10. Summary of actions taken to upgrade EOPs to latest revision

11. Results of recent quality assurance audits

12. Department self-assessments

13. The employee concerns program (Speakout) will be checked

LIST OF DOCUMENTS REVIEWED

Condition Reports

CR 98-0259, CR 98-0260, CR 98-0303, CR 98-0304, CR 98-0305,
CR 98-0307, CR 98-0405, CR 98-0429,
CR 00-2076, CR 01-0049, CR 01-0125, CR 01-0184, CR 01-0237, CR 01-0244, CR 01-0403,
CR 01-0464, CR 01-0714, CR 01-0728, CR 01-0741, CR 01-0822,
CR 01-1069, CR 01-1108, CR 01-1159, CR 01-1195, CR 01-1202, CR 01-1237, CR 01-1305,
CR 01-1355, CR 01-1372, CR 01-1441, CR 01-1491, CR 01-1551, CR 01-1662, CR 01-1992,
CR 01-1993, CR 01-2056, CR 01-2181, CR 01-2255, CR 01-2290, CR 01-2397,
CR 01-2476, CR 01-2515, CR 01-2521, CR 01-2554 CR 01-2555, CR 01-2597, CR 01-2602,
CR 01-2604, CR 01-2645, CR 01-2698, CR 01-2710, CR 01-2720, CR 01-2752, CR 01-2754,
CR 01-2757, CR 01-2759, CR 01-2789, CR 01-2817, CR 01-2828, CR 01-3055,
CR 01-3090, CR 01-3117, CR 01-3181, CR 01-3184, CR 01-3248, CR 01-3259, CR 01-3270,
CR 01-3281, CR 02-0011, CR 02-0028, CR 02-0030, CR 02-0041, CR 02-0059, CR 02-0082,

CR 02-0194, CR 02-0219, CR 02-0234, CR 02-0242, CR 02-0263, CR 02-0272, CR 02-0277, CR 02-0278, CR 02-0280, CR 02-0282, CR 02-0294, CR 02-0299, CR 02-0312, CR 02-0330, CR 02-0340, CR 02-0347, CR 02-0349, CR 02-0381, CR 02-0382, CR 02-0396, CR 02-0398, CR 02-0411, CR 02-0451, CR 02-0473, CR 02-0502, CR 02-0525, CR 02-0613, CR 02-0685

Condition Reports Generated From Inspection

CR 02-0793, CR 02-0806, CR 02-0825, CR 02-0826, CR 02-0828

Corrective Actions (Plant Management Action Items)

PMAI 98-03-138, PMAI 98-03-204, PMAI 98-03-230, PMAI 98-04-129, PMAI 01-03-005, PMAI 01-03-006, PMAI 01-09-014, PMAI 01-05-022, PMAI 01-05-024, PMAI 01-05-025, PMAI 01-07-027, PMAI 01-05-060, PMAI 01-03-129, PMAI 01-03-162, PMAI 01-03-167, PMAI 01-05-175, PMAI 01-10-180, PMAI 01-05-181, PMAI 01-05-188, PMAI 01-05-186, PMAI 01-07-186, PMAI 01-05-187, PMAI 01-07-187, PMAI 01-05-188, PMAI 01-07-188, PMAI 01-05-189, PMAI 01-07-189, PMAI 01-05-190, PMAI 01-05-191, PMAI 01-07-214, PMAI 02-02-016, PMAI 02-02-017, PMAI 02-02-018, PMAI 02-03-060, PMAI 02-02-092,

Procedures and Drawings

Quality Instruction QI-16-PSL-3, Corrective Action
Administrative Procedure ADM-08.04, Root Cause Evaluations
Administrative Procedure ADM-07.01, PMAI Corrective Action Tracking Program
Administrative Procedure ADM-07-02, Condition Reports
1-ARP-01-MOO; Annunciator Response Procedure, Panel M
Operations Instruction 0-OI-99-02, Appendix A, General Inspection Guidelines
Operations Instruction 0-OI-99-02, Appendix D, Generic Rounds
Operating Procedure 1-0640020, Intake Cooling Water System Operation
1-NOP-03.05, Shutdown Cooling Normal Operating Procedure
1-GOP-504, Operating Procedure Reactor Plant Heatup

0-NOP-100.01, Equipment Out of Service Log
ADM 27.10, Administrative Procedure, Controls for Application of Coatings
ADM-17.08, Administrative Procedure, Implementation of 10 CFR 50.65 The Maintenance Rule
ADM-18.05, Implementation of The Systematic Approach to Training
1-EOP-01: Emergency Procedure, Standard Post Trip Actions, Revision 18
1-EOP-03: Loss of Coolant Accident
Flow Diagram 2998-6-078, Sheet 130A, 131, Safety Injection System
Flow Diagram 8770G-080, Sheet 4, Feedwater and Condensate System
Flow Diagram 8770-6-079, Sheet 1, Main Steam System
Flow Diagram 8770-G-083, Sheet 1A, Component Cooling System
Flow Diagram 8770-G-082, Sheet 2, Circulating and Intake Cooling Water System

Engineering Documents

Maintenance Rule Program, 4th Quarter Report, January 15, 2002
System Health Reports, Fourth Quarter 2001

Quality Assurance Documents

ENG-SPSL-02-0037; Engineering Self-Assessment 10 CFR 50.59, April 9, 2002
2001 St. Lucie Self-Assessment Plan, Revision 2
Chemistry Human Performance Assessment, 2001-003, 3rd Quarter 2001
Information Systems Self-Assessment, Qualification of Facility Review Group Members, December 2001
Nuclear Assurance Quality Report, Technical Specification Surveillances, April 18, 2002

Other Documents

Work order 98015698-01,02 Inspect Fire Suppression Sprinkler Heads
Work order 31023133-01, 02 Battery Charger 2A/2A Trouble; Annunciator Locked In
Work order 3103516, 02 Battery Charger 2A/2A Trouble; Low Voltage Alarm
Work order 31012015, 02 Battery Charger 2A/2A Trouble; Low Voltage Alarm
Work order 32000026-01, 02 Battery Charger 2A/2A Trouble; Low Voltage Alarm
Operations Policy-109 Tagout Controls
Work order 31009500-3A Replace Containment Spray Actuation System Relay
Operator Workaround Summary Log, April 15, 2002
Operations Plan of the Day, Workweek 3B, April 15, 2002
Maintenance Schedule, Workweek 13B, April 15, 2002
Chief Nuclear Officer's Indicator Report, November 12, 2001
Site Engineering Audit Report, QSL-ENG-01-05, July 19, 2001
Office Correspondence, Closure of Significant Level 1 Condition Reports, February 22, 2002
Inter-Office Correspondence, Use of Condition Reports, March 7, 2002
Memorandum, Raising Nuclear Safety or Quality Concerns, February 20, 2002
Unit 2 Performance Indicator, 125VDC Panels, Batteries and Chargers, 1st Quarter
Emergency Preparedness Evaluated Exercise Critique; February 20, 2002
St. Lucie Plant Health Report, 4th Quarter 2001
Temporary Change 02-008 Alignment of 2AB Busses and Components, March 20, 2002