UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

AUG 21 1992

Report No.: 50-335/92-14 and 50-389/92-14

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33102

Docket Nos.: 50-335 and 50-389 License No.: DPR-67 and NPF-16

Facility Name: St. Lucie Nuclear Plant

Inspection Conducted: July 20-24, 1992

Inspector: F. N. Wright, August 18, 1992
Date Signed

Approved by: W. H. Rankin, Chief August 19, 1992
Date Signed
Emergency Preparedness Section
Radiological Protection and Emergency
Preparedness Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection was conducted to assess the operational readiness of the site emergency preparedness program, and included a review of the following program elements: (1) Emergency Plan and associated implementing procedures; (2) facilities, equipment, instrumentation, and supplies; (3) organization and management control; (4) training; and (5) independent and internal reviews and audits.

Results:

In the areas inspected, no violations or deviations were identified. Emergency facilities and equipment were properly maintained. The Emergency Preparedness Program was being effectively implemented and adequately supported by plant management. Overall, the emergency preparedness program appears to be maintained in a state of operational readiness.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*G. Boissy, Plant Manager
D. Borgmann, Training
*H. Buchanan, Health Physics Supervisor
*C. Burton, Operations Manager
J. Crum, Auditor, Quality Assurance (QA)
*P. Fincher, Training Manager
*J. Holt, Licensing Engineer
J. Leifhelm, Training
*L. Leon, Protection and Controls Coordinator
*G. Madden, Licensing Manager (Acting)
R. McCullers, Health Physics Supervisor
K. McKay, Health Physics
K. McManus, Training Resources
*R. Mothena, Manager, Nuclear Emergency Preparedness
J. Ross, Radiation Protection Man
*D. Sager, Plant Vice President
F. Smith, Specialist
M. Snyder, Lead Engineer
J. Spodick, Training
*J. Voorhees, QA Supervisor Regulatory Compliance Audits
*R. Walker, Emergency Planning Coordinator
*T. Ware, Technical Training Supervisor
D. West, Truck Driver/Helper

Other licensee employees contacted during the inspection included engineers, operators, security force members, technicians, and administrative personnel.

Nuclear Regulatory Commission

S. Elrod, Senior Resident Inspector

*Attended exit interview

2. Emergency Plan and Implementing Procedures (82701)

Pursuant to 10 CFR 50.47(b)(16), 10 CFR 50.54(q), Appendix E to 10 CFR Part 50, and Section 7.3 of the licensee's Emergency Plan, this area was inspected to determine whether significant changes were made in the licensee's emergency preparedness program since the last inspection (January 1991), to assess the impact of any such changes on the overall state of emergency preparedness at the facility, and to determine whether the licensee's actions in response to actual emergencies were in accordance with the Emergency Plan and its implementing procedures.

The inspection reviewed the licensee's system for making changes to the Emergency Plan and the Emergency Plan Implementing Procedures (EPIPs). The inspector verified that changes to these documents were reviewed and approved by licensee management. Examination of a selected sample of records showed that EPIP changes were submitted to the NRC within 30 days of the effective date, as required. The inspector selected several recent implementing procedure changes and made random checks of controlled copies of procedures to verify copies of the procedures were being properly maintained.

The inspector determined that the licensee had not made any emergency declarations in 1991 and 1992.

The inspector verified that the licensee was providing for offsite agency reviews of licensee Emergency Action Levels.

No violations or deviations were identified.

3. Emergency Facilities, Equipment, Instrumentation, and Supplies (82701)

Pursuant to 10 CFR 50.47(b)(8) and (9), 10 CFR 50.54(q), Section IV.E of Appendix E to 10 CFR Part 50, and Sections 2 and 7 of the Emergency Plan, this area was inspected to determine whether the licensee's Emergency Response Facilities (ERFs) and associated equipment, instrumentation and supplies were maintained in a state of operational readiness, and to assess the impact of any changes in this area upon the emergency preparedness program.

The inspector toured the Operations Support Center (OSC) and the Technical Support Center (TSC). Selective examination of emergency equipment and supplies therein indicated that an adequate state of readiness was being maintained.

Discussions were also held with a licensee representative concerning modifications to facilities, equipment, and instrumentation since the last inspection. The inspector determined that the licensee's emergency preparedness facilities had not changed significantly since the previous inspection and no immediate changes were proposed.

The inspector reviewed licensee procedure, Health Physics Procedure HP-90, Emergency Equipment, Revision (Rev.) 20, dated June 8, 1992 and reviewed completed surveillance documentation for various emergency preparedness equipment and supplies made in 1991. A review of applicable records indicated that the equipment was being properly maintained in a state of operational readiness.

St. Lucie Emergency Plan Paragraphs 7.1.4.5, 7.1.4.6, and Paragraph 8.1.6 of EPIP 3100050E required announced and unannounced communication drills with the Florida Power and Light offsite Emergency Response Organization once per calendar quarter. The inspector reviewed the licensee's quarterly offsite communication drill evaluation reports and determined that objectives were met. The licensee performed the unannounced drills during the annual graded exercises.

The inspector reviewed the licensee's testing program for the sirens included in the Alert and Notification System. The inspector discussed the procedures for siren test, maintenance and the performance of the sirens with licensee representatives. The siren availability exceeded the Federal Emergency Management Agency criterion of 90 percent. Documentation of sirens test conducted during 1991 and 1992 indicated an overall system availability of about 97 percent, as calculated on a 12 month rolling average.

The licensee utilized a Site Assembly station to store the mobile field monitoring team equipment. When activation of the teams was required, a driver from the site motor pool reports to the station where a health physics technician prepares and loads the vehicle for field monitoring duties. The inspector observed a health physics technician inventory and perform operability checks of all the equipment in a field monitoring kit. The health physics technician verified that all equipment was present and operable. The technician installed and energized a portable radio in the vehicle and made a successful radio check with the TSC. The technician demonstrated excellent knowledge of monitoring procedures and equipment. The vehicle supplied for the exercise was a pickup truck without a cover over the bed. The inspector pointed out to licensee management that during adverse weather conditions the field monitoring task would be difficult and perhaps dangerous with a lot of communication and monitoring equipment located in the cab of the vehicle. Licensee representatives reported that the field monitoring equipment was selected to work in any vehicle, with a 12 volt cigarette lighter outlet, and another vehicle, with additional internal space, could have been selected to perform the assigned task.

Based upon ERF walk-downs, review of the Emergency Plan, inspection of completed surveillance procedures, and statements by licensee representatives, the inspector concluded that no degradation of ERF capabilities had occurred since previous inspection was made.

No violations or deviations were identified.

4. Organization and Management Control (82701)

Pursuant to 10 CFR 50.47(b)(1) and (16), Section IV.A of Appendix E to 10 CFR Part 50, and Section 2 of the Emergency Plan, this area was inspected to determine the effects of any changes in the licensee's emergency organization and/or management control systems on the emergency preparedness program, and to verify that any such changes were properly factored into the Emergency Plan and EPIPs.

The organization and management of the emergency preparedness program were reviewed and discussed with licensee representatives. The inspector determined that there had not been any significant changes in the licensee's emergency preparedness organization since the previous inspection.

The inspector reviewed the licensee's management strategy for ensuring compliance with the planning standard of 10 CFR 50.47(b)(2), which specifies that "timely augmentation of response capabilities is available."

The inspector reviewed the licensee's Emergency Plan and EPIPs. The inspector determined that neither the licensee's Emergency Plan or EPIPs described the licensee's method for testing or monitoring staff augmentation capabilities. The Emergency Plan simply contained a table that displayed emergency response functional areas and the numbers of personnel required to report to the facility within 30 and 60 minutes to meet the guidance of NUREG-0654. Table 2-2a, "Shift Staffing Augmentation and Emergency Capabilities", was not addressed in the body of the Emergency Plan and the only reference to emergency response organization augmentation performance was in EPIP 3100050E. EPIP 3100050E, "Maintaining Emergency Preparedness-Emergency Exercises, Drills, Test, and Evaluations", Revision 10 provided the instructions for maintaining the St. Lucie Plant Emergency Preparedness Program. Item 6, of the Annual/Semi-Annual EP Maintenance Items section of Appendix A, "EP Maintenance Checklist", provided for an off-hours call-out-drill.

The inspector determined that the licensee conducted an Emergency Response Organization augmentation drill annually. The drill was a phone test in which individuals contacted were requested to estimate their arrival time back to the plant. The drill was to test the availability and response times of the participants to meet the shift staffing augmentation requirements specified in Table 2-2a of the Emergency Plan. The inspector reviewed the licensee's reports for the 1991 and 1992 augmentation drills. The inspector learned that the licensee had not performed the

1991 drill until January 8, 1992 and that the drill was delayed in order to test a new autodialer. As documented in the licensee's Offhours Call-Out Drill-Critique Report, 3 of the 30-minute-positions would have exceeded the response time limit by more than 15 minutes and all 60-minute-positions would have met the response time. The licensee believed that the problem could be corrected with changing the autodial database priorities. The licensee made those corrective actions and conducted a similar test on April 8, 1992. In that drill, the licensee was unable to contact and fill 2 of the 30-minute-positions and 1 of the 30-minute-positions exceeded the 30 minute response time. Additionally, the licensee was unable to contact and fill 2 of the 60-minute-positions and 1 of the 60-minute-positions exceeded the 60 minute response time. The licensee believed that additional alternates for those positions needed to be identified and added to the autodial database. At the time of the inspection the licensee was planning to conduct another call-out-drill to evaluate the effectiveness of the licensee's corrective actions. The inspector found the licensee's methods and frequency for testing emergency response organization augmentation were minimal and the licensee's test in 1991 and 1992 had failed to demonstrate that the licensee could meet the staff augmentation provided in the licensee's Emergency Plan. The inspector discussed the concern with licensee representatives. The licensee made no commitments to modify it's staff augmentation testing methods or frequency, however, the inspector determined that the licensee did have plans to conduct an actual announced offhours augmentation drill, before 1993. The inspector stated that a review of the licensee's corrective actions and performance for augmentation drills and other drill performance would be made an Inspector Followup Item (IFI).

IFI 50-335/92-14-01: Review licensee's corrective actions and performance for augmentation drills and performance of other licensee emergency preparedness drills in a future inspection.

The inspector discussed Emergency Operations Facility (EOF) activation timeliness with licensee representatives. As documented in a previous EP program inspection report, the licensee's EOF staffing requirement was not clearly stated. A EOF staffing requirement was implied through Table 2-2a of the Emergency Plan that the EOF activation would be accomplished within 60 minutes. Additionally, the report documented that the real time activations of the EOF had been taking between 70 and 120 minutes. Activation of the EOF in the 1992 annual EP exercise took approximately 96 minutes. The inspector determined that the licensee planned to implement an "intermediate" EOF emergency

response organization to enable the licensee to activate the EOF facility more quickly. EPIP 1102, Duties of Recovery Manager, dated April 9, 1992 had been approved to allow the activation of the EOF with a limited number of key EOF personnel. The licensee planned to test the process during the 1993 annual exercise.

No violations or deviations were identified.

5. Training (82701)

Pursuant to 10 CFR 50.47(b)(2) and (15), Section IV.F of Appendix E to 10 CFR Part 50, and Section 7.2 of the Emergency Plan, this area was inspected to determine whether the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

The licensee maintained a formal emergency preparedness training program. The status of the training program was reviewed by selecting key positions from the licensee's emergency response organization and reviewing their training records to verify training requirements were being implemented. A review of the training records for each of the selected individuals revealed that personnel had received the required training and that training was current.

10 CFR Part 50, Appendix E, IV Content of Emergency Plans requires that applicant's emergency plans contain information needed to demonstrate compliance with necessary elements specified in that section including training. Section F, Training, requires, in part, that the licensee's EP program provide for the training of employees to ensure that they are familiar with their specific emergency response duties and the description of that training. The training description shall include the specialized initial and periodic retraining programs for various emergency response organization personnel including repair and damage control teams.

In the previous inspection, the inspector noted that the licensee's approved Emergency Plan did not require any specialized initial training and annual retraining programs for the OSC managers and repair and damage control teams as specified in Section IV.F of Appendix E to 10 CFR Part 50. The inspector also noted, at that time, problems with repair and damage control teams had not been identified. During the 1992 annual EP exercise, the licensee experienced problems with the timely deployment of repair and damage control teams. Following the exercise the licensee committed to review the process and procedures for

dispatching and controlling the damage control teams. The licensee's review and program revisions was made an inspector followup item for review in a future inspection. At the time of the inspection the licensee had not completed a review of the repair and damage control processes. One consideration discussed included the possibility of developing a specialized training program for OSC and repair and damage control personnel, however, no decision or commitment concerning the training program had been made at the end of the inspection.

The inspector observed a licensee conducted simulator exercise for assessing control room response to a plant casualty. The control room crew promptly identified an adverse condition and initiating condition for entering the Emergency Plan. The crew properly classified the event and worked through the emergency procedures. The exercise did not evaluate offsite notification functions.

The inspector reviewed the implementation of the training program for offsite support organizations, which was delineated in Emergency Plan Section 7.2.4. Documentation disclosed that the licensee had provided appropriate training during 1991 and 1992 to fire and rescue personnel, medical support personnel, local police, and State and county emergency agencies.

No violations or deviations were identified.

6. Independent and Internal Reviews/Audits (82701)

Pursuant to 10 CFR 50.47(b)(14) and (16), 10 CFR 50.54(t), and St. Lucie REP, section 7.3.4.; this area was inspected to determine whether the licensee had performed an independent review or audit of the emergency preparedness program, and whether the licensee had a corrective action system for deficiencies and weaknesses identified during exercises and drills.

The inspector reviewed the following licensee audits:

- QSL-OPS-91-0795; conducted February 5, 1991 to April 17, 1991; by the licensee's onsite QA organization.
- QSL-OPS-92-880; conducted May 11, 1992 to July 14, 1992; by the licensee's onsite QA organization.
- QAS-EMP-92-1; conducted January 10, 1992 to March 4, 1992; by the licensee's corporate QA organization.

The inspector reviewed the checklist and field notes for the audits performed by the onsite QA organization. The inspector determined that the audits performed by the onsite QA organization primarily audited the program against the QA program requirements and verified compliance with those commitments, however, the value of the audits appeared minimal, in that, the audits generally did not evaluate the adequacy or performance of the EP program. The inspector determined that the auditors were ANSI qualified QA auditors, but, lacked experience in the EP program area. Audit Findings appeared to be effectively documented, tracked and controlled, and corrected in a timely manner.

No violations or deviations were identified.

7. Followup on IE Information Notices (92701)

The inspector determined that the following recent NRC Information Notices (INs) were received by the licensee, reviewed for applicability, and distributed to cognizant personnel, and that corrective actions, as appropriate, were completed or scheduled.

- IN 91-33 Reactor Safety Information for States During Exercises and Emergencies
- IN 91-64 Site Area Emergency Resulting from a Loss of Non-Class 1E Uninterruptible Power Supplies
- IN 91-68 Careful Planning Significantly Reduces the Potential Adverse Impacts of Loss of Onsite Power Events During Shutdown
- IN 91-72 Issuance of a Revision to the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
- IN 91-77 Shift Staffing at Nuclear Power Plants
- In 91-81 Switchyard Problems that Contribute to Loss of Offsite Power

8. Licensee Action on Previous Inspector Follow-up Items (IFIs)

a. (Open) IFI 50-335/92-01-01: Review licensee EP program improvements concerning the licensee's ability to prioritize, control and dispatch emergency response teams (repair and damage control teams) in a timely manner. The issue was identified in the licensee's corrective action system as NRC CAR No.: N-92-040 and was scheduled to be completed by September 1, 1992. The licensee was actively evaluating the problem and

searching for program improvements but had not established any corrective action at the time of the inspection.

b. (Open) IFI 50-335/92-01-02: Review licensee EP program improvements concerning the licensee's ability to calculate radiological dose projections in the TSC. The issue was identified in the licensee's corrective action system as NRC CAR No.: N-92-042 and was scheduled to be completed by September 1, 1992. The licensee had not specified or completed any corrective action at the time of the inspection.

9. Exit Interview

The inspection scope and results were summarized on July 24, 1992, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results. Although proprietary information was reviewed during the inspection, none is contained in this report. Dissenting comments were not received from the licensee.

Item Number	Description and Reference
50-335/92-14-01	IFI: Review licensee's corrective actions and performance for Emergency Organization augmentation drills and performance of other licensee emergency preparedness drills in a future inspection. (Paragraph 4)