



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

**JUL 31 1989**

Report Nos.: 50-250/89-31 and 50-251/89-31

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

Docket Nos.: 50-250 and 50-251

License Nos.: DPR-31 and DPR-41

Facility Name: Turkey Point Plant, Units 3 and 4

Inspection Conducted: July 10-14, 1989

Inspector: James L. Kreh 07-28-89  
 J. L. Kreh Date Signed

Approved by: William M. Sartorius 07-28-89  
 W. H. Rankin, Chief Date Signed  
 Emergency Preparedness Section  
 Emergency Preparedness and Radiological Protection  
 Branch  
 Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, unannounced inspection was conducted to determine the adequacy of the licensee's emergency preparedness program in the following specific areas: (1) emergency detection and classification, (2) protective action decision-making, (3) notifications and communications, (4) training, (5) public information program, and (6) independent reviews and audits. The operational readiness of the emergency preparedness program was assessed from an overall perspective during an inspection in January 1989 (see NRC Inspection Report Nos. 50-250, 50-251/89-02).

Results:

No violations or deviations were identified. Despite a vacancy in the position of plant emergency preparedness program coordinator at the time of the inspection, the program was being effectively managed by a corporate specialist on full-time temporary assignment to the plant. Inspection disclosed that the schemes for classifying emergencies and deriving protective action recommendations appeared to be adequately designed and understood by designated users. Special training had been given in recent months on these subjects, and appeared to have been effective. Communications systems were tested and maintained as required. The public information program appeared to be functioning properly.



## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*G. Casto, Acting Emergency Planning Coordinator (Site)
- \*S. Chappelle, Regulatory Compliance Engineer
- M. Cooper, Maintenance and Specialty Instructor Supervisor
- A. Dallau, Assistant Plant Supervisor - Nuclear (APSN)
- W. Haley, Plant Supervisor - Nuclear (PSN)
- G. Hollinger, Operations Training Supervisor
- W. Lightfoot, Maintenance and Specialty Instructional Materials Supervisor
- E. Lyons, Acting Regulation and Compliance Supervisor
- \*J. Maisler, Emergency Planning Manager (Corporate)
- \*G. Marsh, Reactor Engineering Supervisor
- \*W. Pearce, Operations Superintendent
- A. Slawinski, Technical Staff Developer
- \*A. Taylor, Emergency Planning Technician
- T. Ward, Shift Technician

Other licensee employees contacted during this inspection included engineers, operators, technicians, and administrative personnel.

#### NRC Resident Inspectors

- \*R. Butcher
- \*T. McElhinney
- G. Schnebli

\*Attended exit interview

### 2. Emergency Detection and Classification (82201)

Pursuant to 10 CFR 50.47(b)(4); 10 CFR Part 50, Appendix E, Sections IV.B and IV.C; and Section 3 of the licensee's Radiological Emergency Plan (REP), this program area was inspected to determine whether the licensee used and understood a standard emergency classification and action level scheme.

The licensee's classification scheme was contained in Emergency Plan Implementing Procedure (EPIP) 20101, "Duties of the Emergency Coordinator." Selected emergency action levels (EALs) specified in EPIP-20101 were reviewed. The classification system did not appear to contain impediments or errors which could lead to incorrect or untimely classification. The reviewed EALs appeared to be consistent with the initiating events specified in Appendix 1 of NUREG-0654 but not with REP Section 3 (Revision 17). REP Revision 18, in preparation at the time of the inspection, was planned to make the REP EALs consistent with those in



EPIP-20101. The NRC will formally and thoroughly review the revised EALs when REP Revision 18 is issued.

The inspector verified that the licensee's procedures included criteria for initiation of offsite notifications and for development of protective action recommendations. The procedures specified that offsite notifications be made promptly after declaration of an emergency.

The inspector discussed with licensee representatives the coordination of EALs with State and local officials. Documentation showed that the licensee had discussed the EALs with 13 State and local officials during a training session on Turkey Point Plant Systems on February 22, 1988, and that these officials agreed with the EALs used by the licensee.

The responsibility and authority for classification of emergency events and initiation of emergency action were prescribed in the EIPs and the REP. Interviews with selected key members of the licensee's emergency organization revealed that these personnel understood their responsibilities and authorities in relation to accident classification, notification, and protective action recommendations (PARs).

Walk-through evaluations involving accident classification problems were conducted with one PSN and one APSN (see Paragraph 1). Both individuals properly classified the hypothetical accident situations presented to them, and appeared to be thoroughly familiar with the classification procedure.

No violations or deviations were identified.

### 3. Protective Action Decision-Making (82202)

Pursuant to 10 CFR 50.47(b)(9) and (10); 10 CFR Part 50, Appendix E, Section IV.D.3; and Section 5 of the REP, this area was inspected to determine whether the licensee had 24-hour-per-day capability to assess and analyze emergency conditions and make recommendations to protect the public and onsite workers.

The inspector discussed responsibility and authority for protective action decision-making with licensee representatives and reviewed pertinent portions of the REP and EIPs. These documents clearly assigned responsibility and authority for protective action decision-making to the Emergency Coordinator (EC). Interviews with potential ECs indicated that these personnel understood their authorities and responsibilities with respect to accident assessment and protective action decision-making.

Walk-through evaluations involving protective action decision-making were conducted with one PSN and one APSN, both of whom were cognizant of appropriate onsite protective measures and aware of the range of PARs appropriate to offsite protection. Personnel interviewed also were aware of the need for timeliness in making initial PARs to offsite officials. Interviewees demonstrated adequate understanding of the requirement that



PARs be based on core condition and containment status even if no release is in progress.

No violations or deviations were identified.

4. Notifications and Communications (82203)

Pursuant to 10 CFR 50.47(b)(5) and (6); 10 CFR Part 50, Appendix E, Section IV.D; and Section 4 of the REP, this area was inspected to determine whether the licensee was maintaining a capability for notifying and communicating with its own personnel, offsite supporting agencies and authorities, and the populace of the 10-mile emergency planning zone (EPZ) in the event of an emergency.

The inspector reviewed the licensee's notification procedures. The procedures were consistent with the emergency classification and EAL scheme used by the licensee. The inspector determined that the procedures made provisions for message verification.

The inspector determined by review of applicable procedures and by discussion with licensee representatives that adequate procedural means existed for alerting, notifying, and activating emergency response personnel. The procedures specified when to notify and activate the onsite emergency organization, corporate support organization, and offsite agencies.

The licensee's management control program for the Alert and Notification System (ANS) was reviewed. According to documentation and discussions with licensee representatives, the system consisted of 42 fixed electronic sirens with public-address capability which were located throughout the populated areas of the 10-mile EPZ. The sirens were maintained by the General Engineering group based at the licensee's corporate office. A permanent, full-time contractor performed individual siren tests biweekly to verify both rotation and sound production. In addition, officials in Dade County conducted a monthly full-cycle test of their portion of the ANS. The licensee's records showed that availability of the sirens, as calculated on a 12-month rolling average, was between 96 and 98 percent throughout the period May 1988 to May 1989.

Communications equipment in the Control Room, Technical Support Center (TSC), and Operational Support Center (OSC) was inspected. Provisions existed for prompt communications among emergency response organizations and with emergency response personnel. The installed communications systems at the emergency response facilities were consistent with system descriptions in the REP.

The inspector reviewed licensee records for the period June 1988 to June 1989, which indicated that communications tests were conducted at the required frequencies. These records also revealed that corrective action was taken on problems identified during communications tests.



No violations or deviations were identified.

5. Knowledge and Performance of Duties (Training) (82206)

Pursuant to 10 CFR 50.47(b)(15) and 10 CFR Part 50, Appendix E, Section IV.F, this area was inspected to determine whether emergency response personnel understood their emergency response roles and could perform their assigned functions.

The licensee's emergency response training program was described in REP Section 7.2, EPIP-20201 ("Maintaining Emergency Preparedness - Radiological Emergency Plan Training"), and Nuclear Training Department Administrative Guideline AG-022. The inspector reviewed these documents, along with selected lesson plans, and interviewed members of the instructional staff. Based on these reviews and interviews, the inspector determined that the licensee had established an adequate emergency training program.

Records of training for 12 selected key members of the emergency organization were reviewed. The training records revealed that assigned personnel, including some designated as alternates in the emergency organization, were provided with training which was appropriate, in terms of content and frequency, and consistent with applicable requirements.

To determine the effectiveness of the emergency response training program, extensive interviews were conducted with one PSN and one APSN, both chosen at random by the inspector. The APSN position was designated as alternate for the EC role if the PSN were unavailable or incapacitated during an emergency. The interviews examined general knowledge of emergency response as well as specific understanding of such matters as emergency classification, onsite and offsite protective actions, notification, and nondelegable responsibilities of the EC. Each interviewee was given several sets of hypothetical emergency conditions and plant data, and was asked for each case to talk through the response he would provide as EC if such conditions actually existed. The interviewees demonstrated good understanding of the concepts and specifics of the emergency response program. No problems were observed during the course of the interviews.

No violations or deviations were identified.

6. Public Information Program (82209)

Pursuant to 10 CFR 50.47(b)(7) and 10 CFR Part 50, Appendix E, Section IV.D.2, this area was inspected to determine whether basic emergency planning information was disseminated to the public in the 10-mile EPZ on an annual basis.

The licensee had developed an emergency response information brochure for use by the public residing in or visiting the 10-mile EPZ. The brochure was updated annually in coordination with the Metro-Dade County Office of Emergency Management, the Monroe County Civil Defense Office, and the



State of Florida, Division of Emergency Management. The inspector reviewed the current brochure (1988 edition), and verified that it included the information specified by NUREG-0654, Section II.G. It was noted that a condensed Spanish-language version of the brochure was available upon request. Instructions in Spanish for making such a request were prominently displayed in the front of the brochure, and a postpaid reply card was included for this purpose. A copy of the Spanish version was provided to the inspector for review.

In addition to the brochure, the public information program included an annual session to acquaint news media personnel with the licensee's emergency response plans and information concerning nuclear power. The inspector also reviewed a description of the public information program in the emergency plan and procedures. Based on these reviews, the inspector determined that the licensee's public information program continued to meet the applicable regulatory requirements.

No violations or deviations were identified.

7. Licensee Audits (82210)

Pursuant to 10 CFR 50.47(b)(14) and (16) and 10 CFR 50.54(t), 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 addressing deficiencies and weaknesses identified during exercises and drills.

Records of emergency preparedness program audits were reviewed. An independent audit of the program was conducted by the plant Quality Assurance (QA) Department during the period August 29, 1988 to May 16, 1989, and was documented in Audit Report No. QAO-PTN-88-935, dated May 19, 1989. An audit to evaluate the licensee's interfaces with State and local government agencies will be conducted during the next annual exercise, scheduled for November 1989. Audit findings and recommendations were presented to plant and corporate management.

The REP and EPIP-20113 required critiques following exercises and drills. Licensee documentation showed that critiques were held following periodic drills as well as annual exercises, that deficiencies and weaknesses were identified in the critiques, and that recommendations for corrective action were made.

The licensee's program for follow-up action on findings from audits, drills, and exercises was reviewed. Findings from NRC inspections and QA audits were included in a plant-wide tracking system known as CTRAC. Findings from exercises and drills were entered into the Emergency Planning Commitment Tracking System Report. The latter report showed that 27 of 44 emergency preparedness items generated during 1988 were closed as of July 14, 1989. The licensee was actively pursuing resolution of the remaining open items. The inspector determined that the licensee was effectively using the referenced tracking systems as management tools for



ensuring the completion of required corrective actions in the area of emergency preparedness.

No violations or deviations were identified.

8. Action on Previous Inspection Findings (92701, 92702)

- a. (Open) Inspector Follow-up Item (IFI) 50-250, 50-251/88-01-03: Evaluation of the accessibility of the Post-Accident Sampling System (PASS) station.

The licensee planned to complete the specified evaluation in the near future.

- b. (Closed) IFI 50-250, 50-251/88-01-05: Completion of documentation regarding validation and verification of the dose assessment computer code.

The inspector was provided copies of the following two documents: (1) "User's Manual for Emergency Dose Code System," dated March 29, 1989; and (2) "Code Specifications for Dose Assessment Software (IBM PC Version) for St. Lucie/Turkey Point," dated April 1989. These documents satisfactorily addressed the subject finding.

- c. (Closed) IFI 50-250, 50-251/88-01-12: Installation of a differential-pressure (DP) indicator so that positive pressure in the TSC can be verified during operation of the emergency ventilation system.

The inspector verified the installation of a DP meter in the management area of the TSC, on the west wall near the north end of the facility. During a 3-minute demonstration of the operation of the emergency ventilation system, the inspector observed that the DP meter reading changed from zero to +0.03 inch of water.

- d. (Closed) Violation 50-250, 50-251/89-02-01: Failure on January 7, 1989 to promptly declare an Alert and provide notification to the State, counties, and NRC.

The inspector reviewed the licensee's March 27, 1989 response to the Notice of Violation, and independently confirmed the satisfactory completion of selected portions of the corrective action program. On April 18, 1989, the NRC requested a supplemental response in light of further problems in this area which were identified by NRC license examiners. Additional corrective actions undertaken by the licensee were reviewed during the inspection, and a supplemental response summarizing those corrective actions was issued on July 21, 1989.

- e. (Open) IFI 50-250, 50-251/89-02-02: Implementing a program for periodically testing the capability to augment the emergency response organization during off-hours.

On June 29, 1989 at 4:00 a.m., the licensee initiated an unannounced call-in drill in which emergency response personnel reported to the plant. The TSC and OSC were fully activated 77 minutes after the "declaration," according to licensee records. Although this was a good first step, no program had been established to address the subject finding (i.e., no periodic testing was planned). Licensee management representatives confirmed the original commitment to implement suitable corrective action for this item.

9. Exit Interview

The inspection scope and results were summarized on July 14, 1989, with those persons indicated in Paragraph 1. The inspector informed licensee management that five previous inspection findings were reviewed, and that conclusions regarding their status were as reported in Paragraph 8 above. Proprietary information is not contained in this report.

11

