



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report Nos. 50-335/82-06 and 50-389/82-05

Licensee: Florida Power and Light Company
P. O. Box 529100
Miami, FL 33152

Facility Name: St. Lucie

Docket Nos. 50-335 and 50-389

License Nos. DPR-67 and CPPR-144

Inspection at the St. Lucie site on Hutchinson Island, Florida

Inspectors: W. E. Clive
for D. L. Andrews

3/1/82
Date Signed

W. E. Clive
for W. W. Stansberry

3/1/82
Date Signed

C. R. McFarland
C. R. McFarland

3/1/82
Date Signed

Approved by: G. R. Jenkins

G. R. Jenkins, Chief, EP Section
EPOS Division

3/3/82
Date Signed

SUMMARY

Inspection on February 8-12, 1982

Areas Inspected

This routine, announced inspection involved 180 inspector-hours on site in the area of a full scale coordinated Radiological Emergency Exercise.

Results

In the area inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *K. N. Harris, Assistant Manager Nuclear Energy
- *C. M. Wethy, Plant Manager
- *R. Uhrig, Advanced Systems
- *J. W. Williams, Nuclear Energy Department
- *H. D. Johnson, Emergency Preparedness Supervisor
- *W. G. Walker, Government Affairs Officer
- *R. R. Jennings, Technical Supervisor
- *H. E. Buchanan, Health Physics Supervisor
- *T. Dillard, Assistant Plant Superintendent
- *J. Barrow, Site Fire Coordinator
- *N. Roos, QA Supervisor
- *C. F. Leppla, I&C Supervisor
- *H. Mercer, Assistant Physics Supervisor
- *R. J. Spooner, QA Engineer
- *T. A. Coleman, Health Physicist
- *J. J. Maisler, Nuclear Energy Department
- *B. Frechette, Chemistry Department Head
- *R. A. Storke, Fire Team Leader
- *M. B. Vincent, Assistant Superintendent, Electrical
- *B. Meck, Emergency Planning
- *J. Ford, Nuclear Energy Department
- *S. Pearle, Nuclear Energy Department
- *J. Danek, Health Physics
- *R. Cox, Health Physics

Other licensee employees contacted included several technicians, operators, security force members, and office personnel.

Other Organizations

- G. Woodard, Federal Emergency Management Agency
- J. Heard, Federal Emergency Management Agency
- *M. R. Knight, Public Service Company of Indiana
- *L. G. Larson, Director, Office of Inspection, Swedish NRC
- W. Johnson, Florida Department of Health and Rehabilitative Services

NRC Resident Inspector

- S. Elrod, Senior Resident Inspector
- H. Bibb, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on February 12, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

A previous unresolved item was inspected concerning the prompt notification system for the general public within the 10 mile plume exposure Emergency Planning Zone. This item is discussed in paragraph 10.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. An unresolved item identified during this inspection is discussed in paragraph 15.

5. Exercise Scenario

The emergency exercise scenario, developed by the licensee, met the requirements of 10CFR50.47(b)(14), 10CFR50, Appendix E, paragraph IV.F and specific criteria of NUREG 0654, Section N.3 and provided for a sequence of simulated events beginning with an Unusual Event and progressing through sequentially escalating classes to a General Emergency. The sequence of simulated events was coordinated in advance with State representatives to provide an opportunity for exercising the State and local emergency response organizations.

The scenario was reviewed in advance of the scheduled exercise date and was discussed with licensee representatives on February 9, 1982. The inspectors concluded that the scenario developed for this exercise was adequate to fully exercise the onsite and offsite emergency organizations of the licensee and provided sufficient emergency information to the State and local governmental agencies for their full participation in the exercise. The inspectors had no further questions in this area.

6. Assignment of Responsibility

This area was observed to determine that primary responsibilities for emergency response by the licensee have been specifically established and that adequate staff is available to respond to an emergency as required by 10CFR50.47(b)(1), 10CFR50, Appendix E, paragraph IV.A, and specific criteria in NUREG 0654, Section II.A.

The inspectors observed that specific emergency assignments had been made for the licensee's emergency response organization and there were adequate staff available to respond to the simulated emergency. The initial response organization was augmented by designated licensee representatives, however, due to the scenario conditions, long term or continuous staffing of the emergency response organization was not demonstrated. Discussions with licensee representatives indicated that sufficient technical staff was available to provide for continuous staffing of the augmented emergency organization if needed. The inspectors had no further questions in this area.

7. Onsite Emergency Organization

The licensee's onsite emergency organization was observed to determine that the responsibilities for emergency response are unambiguously defined, that adequate staffing is provided to insure initial facility accident response in key functional areas at all times, and that the interfaces among various onsite response activities and offsite support activities are specified as required by 10CFR50.47(b)(2), 10CFR50, Appendix E, paragraph IV.A, and specific criteria in NUREG 0654, Section II.B.

The inspectors observed that the initial onsite emergency organization was well defined and that adequate staff was available to fill key functional positions within the emergency organization. Augmentation of the initial emergency response organization was accomplished through mobilization of off-shift personnel and corporate assistance. Due to the scenario progression and a suspension of activities overnight on February 10, 1982, the timeliness of the augmented response was not observed.

The Nuclear Plant Supervisor (NPS) assumed the position of Emergency Coordinator promptly upon initiation of the simulated emergency condition and remained in that position throughout the exercise in accordance with the St. Lucie Emergency Plan and procedures; thus, direction and control of the onsite organization remained with the NPS in the Control Room and did not shift to the Technical Support Center (TSC) upon activation and staffing of that center. The failure to transfer direction and control of the onsite emergency organization to the TSC did not appear to affect the efficiency of either the Control Room or the operation of the TSC; however, the inspector noted that in some cases, emergency teams from the Operations Support Center reported information directly to the NPS in the Control Room rather than through the TSC as indicated by the Emergency Plan. In two instances the TSC did not receive the reported information promptly. The concept of the TSC as described in NUREG 0696 is, in part, to relieve the reactor operators of peripheral duties and communications not directly related to reactor systems manipulations, and to prevent congestion in the control room. Although the NPS, during this exercise, performed the functions of Emergency Coordinator very well and, there did not appear to be any distractions to the operators, the inspector was concerned that the NPS may have too many peripheral responsibilities assigned, which could be alleviated by transfer of the Emergency Coordinator function to the TSC supervisor when the TSC is activated and staffed. Plant management agreed to reevaluate the Emergency Coordinator concept at St. Lucie to determine if a transfer of some of the functional responsibilities for the Emergency Coordinator position should be made from the NPS to the Technical Support Supervisor, when he becomes available to assume that position (50-335/82-06-01, 50-389/82-05-01).

8. Emergency Response Support and Resources

This area was observed to determine that arrangements for requesting and effectively using assistance resources have been made, that arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and that other organizations capable of augmenting the planned response have been identified as required by

10CFR50.47(b)(3), 10CFR50, Appendix E, paragraph IV.A, and specific criteria in NUREG 0654, Section II.C.

Offsite assistance resources utilized during this exercise included the Fort Pierce Rescue Squad, Lawnwood Memorial Hospital and the Fort Pierce Fire Department. The inspectors observed that assistance resources were called upon and responded promptly to the assistance request as stated in the agreements between FP&L and the various offsite organizations. State and local governmental representatives were accommodated at the interim Emergency Operations Facility (EOF). The EOF is discussed further in paragraph 13. The Fort Pierce Fire Department responded promptly to the request for assistance by the Emergency Coordinator and appeared to have a good understanding of their role in supplementing the onsite fire team. The inspectors had no further questions in this area. Medical support is discussed in paragraph 17.

9. Emergency Classification System

This area was observed to determine that a standard emergency classification and action level scheme is in use by the nuclear facility licensee as required by 10CFR50.47(b)(4), 10CFR50, Appendix E, paragraph IV.C, and specific criteria in NUREG 0654, Section II.D.

The inspectors observed that the emergency classification system was in effect as stated in the Radiological Emergency Plan and in the Implementing Procedures. The system appeared to be adequate for the classification of the simulated accident and the emergency procedures provided initial and continuing mitigating actions taken during the simulated emergency. The inspectors had no further questions in this area.

10. Notification Methods and Procedures

This area was observed to determine that procedures had been established for notification by the licensee of State and local response organizations and emergency personnel, and that the content of initial and followup messages to response organizations has been established; and means to provide early notification to the populace within the plume exposure pathway have been established as required by 10CFR50.47(b)(5), 10CFR50, Appendix E, paragraph IV.D, and specific criteria in NUREG 0654, Section II.E.

The inspectors observed that notification methods and procedures have been established and were used to provide information concerning the simulated emergency conditions to Federal, State and local response organizations and to alert the licensee's augmented emergency response organization. The public prompt warning system (PNS) was in place and had been tested. This system was utilized during the exercise to warn the public within the Emergency Planning Zone. Unresolved Item 50-335/81-13-22 is closed. The inspectors had no further questions in this area.

11. Emergency Communications

This area was observed to determine that provisions exist for prompt communications among principal response organizations and emergency

personnel as required by 10CFR50.47(b)(6), 10CFR50, Appendix E, paragraph IV.E, and specific criteria in NUREG 0654, Section II.F.

The inspectors observed emergency communications among the onsite emergency response centers, the onsite and licensee's offsite support groups and between the onsite emergency centers and the interim Emergency Operations Facility (EOF). Several communications related weaknesses in the licensee's facilities were noted:

- a. Communications between the Control Room and the Technical Support Center (TSC) were poor and resulted in most information being passed between these areas by copied data sheets or face to face verbal communications between TSC and Control Room personnel. The close proximity of the TSC to the Control Room prevented this communications weakness from becoming significant during the exercise.
- b. The TSC did not have a dedicated communicator and the various telephones appeared to be set around the TSC at random. This contributed to some confusion in communications among the TSC and other emergency centers.
- c. There were inadequate numbers of telephones in the interim EOF to accommodate the various organizations represented at that facility. The building housing the EOF had adequate numbers of telephones but there were not enough in the main conference room used as the command center of the EOF. This resulted in considerable movement of personnel into and out of the EOF causing some confusion and inefficiency in EOF operations.
- d. Teams dispatched into the plant for damage surveys and repair and corrective actions did not have portable radios and contact with these teams by the OSC supervisor was lost for long periods.

The licensee identified the inadequate communications during the exercise critique on February 12, 1982. The area of emergency communications and licensee's corrective actions in this area will be reviewed during a subsequent inspection (50-335/82-06-02; 50-389/82-05-02).

12. Public Education and Information

This area was observed to determine that information concerning the simulated emergency was made available for dissemination to the public as required by 10CFR50.47(B)(7), 10CFR50, Appendix E, paragraph IV.D, and specific criteria in NUREG 0654, Section II.G.

Public information brochures had been distributed throughout the 10 mile Emergency Planning Zone (EPZ) around the St. Lucie site; however, there were some indications, primarily newspaper articles, that some residents within the EPZ did not receive the brochure in a timely manner. FP&L has committed to increasing their efforts to insure that all permanent and transient residents within the EPZ receive emergency information on an annual basis. Distribution of the public information brochure is the primary responsibility of the Florida Bureau of Disaster Preparedness.

During the exercise the inspectors observed the operation of the Emergency News Centers at the St. Lucie Site and at the Jensen Beach Holiday Inn. There appeared to be a need for an alternate spokesman for FP&L at the News Center as the primary spokesman spent most of his time at the EOF. During interim periods, when the primary spokesman was at the EOF, very little information was available concerning the simulated emergency at the News Center. In addition, there were delays in releasing technical information concerning dose rates and monitoring data to the news media for dissemination to the public. The delays appeared to be due to the lack of a technical advisor to the spokesman at the news center. FP&L identified this need at the exercise critique and will take action to provide more prompt and factual information in this area.

The rumor control mechanism was operated by State representatives with support by FP&L through contacts at the EOF. The arrangement appeared to be cumbersome and resulted in delays in providing prompt and accurate information through the rumor control mechanism. This system needs to be reevaluated to increase efficiency in providing rumor control during an emergency (50-335/32-06-03; 50-389/82-05-03).

13. Emergency Facilities and Equipment

This area was observed to determine that adequate emergency facilities and equipment to support an emergency response are provided and maintained as required by 10CFR50.47(b)(8), 10CFR50, Appendix E, paragraph IV.E, and specific criteria in NUREG 0654, Section II.H.

The inspectors observed the activation, staffing and operation of the emergency response facilities and evaluated equipment provided for emergency use during the exercise.

- a. Control Room - The inspectors observed that control room personnel acted promptly to initiate emergency response to the simulated emergency. Emergency procedures were readily available to the Emergency Coordinator and the response to the simulated emergency condition was prompt and effective. The inspectors had no further questions in this area.
- b. Technical Support Center (TSC) - The TSC was activated and staffed promptly upon notification by the Emergency Coordinator of the simulated emergency conditions leading to an Alert emergency classification. The TSC staff appeared to be knowledgeable concerning their emergency responsibilities and TSC operations proceeded smoothly; however, several problems related to the TSC were observed:
 - (1) Due to the arrangement of the TSC, with several operations being conducted in the main room of the center, along with radios, telephones, line printers and computer operations, there was excessive noise at times which detracted from overall TSC operational efficiency. FP&L identified this problem during the exercise critique and will consider some rearrangement of TSC functions within the center.

- (2) Status boards and displays were inadequate and were not kept current throughout the exercise. Log books were not kept current and did not appear to contain sufficient information. There did not appear to be an effort to maintain a complete accident historical record during the simulated emergency. This area needs improvement (50-335/82-06-04; 50-389/82-05-04).
 - (3) The maps used to direct offsite monitoring teams and to identify various measured parameters in the environment were not large enough and should be posted for better dissemination of information. Additional fixed monitoring points should be considered for more effective team direction and data recording. This problem was identified by FP&L during the exercise critique.
 - (4) Communications from the TSC to the other response facilities were inadequate and there was an evident need for a dedicated communicator. This area is discussed in paragraph 11.
- c. Operations Support Center (OSC) - The OSC was staffed promptly upon activation by the Emergency Coordinator. The inspector observed that teams were formed promptly, briefed and dispatched efficiently. Overall, OSC Operations were considered adequate with the exception of team communication inadequacies which are discussed in paragraph 11. Communications from the OSC to the Emergency Coordinator were adequate. Item 50-335/81-13-08 is closed.
- d. Emergency Operations Facility (EOF) - The EOF was adequately staffed and appeared to operate efficiently throughout the exercise. A few problems in the EOF operation were noted by the inspectors:
- (1) EOF communications systems were inadequate for the arrangement of the EOF staff during the exercise. FP&L identified the communication inadequacy during the exercise critique.
 - (2) Status boards and information displays were inadequate in that they were not kept up-to-date, erroneous information was presented at times, and there was not sufficient data displayed concerning the simulated emergency. This area needs improvement and will be reviewed during a subsequent inspection (50-335/82-06-05; 50-389/82-05-05).
 - (3) There appeared to be a lack of adequate data flow between the TSC and the engineering assessment group at the EOF. As a result, the engineering group was not fully utilized in accident assessment and advisory functions to the Emergency Coordinator and the Emergency Control Officer. Discussions with licensee representatives indicated that this problem should be resolved with the establishment of FP&L's permanent EOF facility. The inspectors stated that part of the problem appeared to be related to inadequate communications, discussed in paragraph 11.
 - (4) There was a lack of information feedback from the dose assessment and offsite monitoring group to the TSC. All FP&L teams for

offsite monitoring were directed from the TSC, while the State's monitoring teams were directed from the EOF and the State's Mobile Environmental Radiological Laboratory (MERL). The lack of information feedback to the TSC prevented the most effective use of the combined efforts of FP&L and State Teams. While the concept of operations for offsite monitoring is that FP&L teams may not be utilized following the deployment of the State teams, there is a definite possibility that the State would request supplemental teams from FP&L to remain in the field during a serious emergency. To ensure effective use of offsite teams, the teams should be dispatched and coordinated with the State from the EOF when that facility is activated and staffed. In addition, offsite monitoring information should be utilized to modify offsite dose projections, both by comparing projected and actual exposure rates within the plume exposure pathway and by factoring measured radioiodine concentrations into the dose assessment calculation. Dose projections are discussed further in paragraph 14. The direction and control of offsite monitoring teams will be reviewed during a subsequent inspection (50-335/82-06-06, 50-389/82-05-06).

- e. Emergency kits - During and following the exercise it was observed that the inventory list and procedures for emergency kits had been revised to accurately reflect kit contents. Item 50-335/81-13-37 is closed.

14. Accident Assessment

This area was observed to determine that adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use as required by 10CFR50.47(b)(9), 10CFR50, Appendix E, paragraph IV.B, and specific criteria in NUREG 0654, Section II.I.

The accident assessment program includes both an engineering assessment of plant status and an assessment of the radiological hazards to both onsite and offsite personnel resulting from the accident. At the St. Lucie Plant the engineering accident assessment team functioned to analyze the plant equipment status during the accident and to make recommendations to the Site Emergency Coordinator concerning mitigating actions to reduce damage to plant equipment, to prevent release of radioactive materials and to terminate the emergency condition. The radiological assessment group provided continuous updates on inplant radiation hazards and potential releases of radioactive materials. This group was supplemented by field teams prepared to measure actual radiation, levels in the environment during releases of radioactive materials.

The dose assessment procedure utilized in both the TSC and EOF incorporated detailed meteorological parameters which were available from the onsite meteorological instruments. Default values were available for use should there be any question concerning the reliability of the meteorological instrumentation. The inspectors observed that the data used was appropriate.

Items 50-335/81-13-17 and 50-335/81-13-18 are closed. The inspectors observed that the offsite dose projections made in the TSC were initially calculated using empirical data for radioisotope mixtures available for release to the environment during the simulated emergency; however, there did not appear to be an effort to substitute actual radioisotope data, from inplant sampling and offsite monitoring, into the dose projection scheme until late in the exercise. In addition, there did not appear to be a mechanism to calculate dose projections based on worst case potential releases using containment activity concentrations and measured radioisotope mixtures. The inspectors stated that dose projections should be made for actual releases and for worst case potential releases using all available information, including containment activity concentrations, measured radioisotope mixtures and offsite monitoring data when available. FP&L representatives agreed to review their dose assessment procedures and take appropriate action to provide the most accurate information available to the Emergency Coordinator and the Emergency Control Officer (50-335/82-06-07; 50-389/82-05-07).

Dose assessment capability was available, during the exercise, in the EOF; however, this group served as a back-up and to verify information passed from the TSC dose assessment group. The inspectors stated that when the EOF is activated and staffed, the primary responsibility for offsite dose assessment should be transferred to the EOF group, both to relieve the TSC group from the responsibility and to take advantage of all monitoring information being accumulated offsite by the State and FP&L teams. FP&L representatives agreed to review this area and to take appropriate corrective actions (50-335/82-06-08; 50-389/82-05-08).

Offsite survey teams were dispatched promptly and appeared to have adequate equipment and supplies for initial offsite monitoring requirements. Vehicles were provided for three teams initially and others were readily available should additional teams be dispatched. It was noted that the battery powered instruments used by the offsite teams for assessment of radioiodine are designed to last about 6-8 hours on a single recharge; however, no provision for additional instruments were observed. A licensee representative stated that the teams expect to be in the field only until the State teams arrive in the area, about 4 hours maximum; however, a resupply vehicle was available, which could distribute additional supplies and equipment to the teams if necessary. The resupply operation was demonstrated during the exercise. Items 50-335/81-13-20 and 50-335/81-13-25 are closed. Although radioiodine measurement capability was demonstrated during the exercise, the inspector did not observe that the minimum detection capability was at least $10E^{-7}$ $\mu\text{Ci}/\text{MI}$. Item 50-335/81-13-15 shall remain open pending review of the monitoring procedure and instrument sensitivity. The inspectors had no further questions in this area.

15. Protective Responses

This area was observed to determine that guidelines for protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for emergency workers, including evacuation of nonessential personnel, are implemented promptly as required by 10CFR50.47(b)(10) and specific criteria in NUREG 0654, Section II.J.

The inspectors observed that protective responses to the simulated emergency conditions were taken promptly by plant personnel.

When the emergency alarm was sounded and Owner Controlled Area Evacuation was announced over the PA system, approximately 25 licensee personnel evacuated through the Unit 1 main gate without undue delay. Evacuees departed to the Site Assembly Station via privately owned vehicles. At the Site Assembly Station personnel were monitored and accounted for. The Assembly Area Supervisor directed the accountability at this area. Accountability notifications were made to the Assembly Area Supervisor by radio transmission on the Security Radio and a report by a messenger from the JC Park Assembly Area. All personnel were accounted for and a report was given to the Emergency Coordinator in approximately 25 minutes from the time the alarm was sounded.

The inspectors noted that there is a conflict in the EPIP's (3100021E) and security procedures (0006123) concerning the individual responsible for assuring accountability of evacuated personnel. A licensee representative stated that the Security Team Leader is intended to be a back-up or alternate for the Assembly Area Supervisor and, that the procedures would be clarified to reflect this fact (50-335/82-06-09; 50-389/82-05-09).

The inspectors also noted that a complete site accountability (Unit 1 and Unit 2) was not conducted during the exercise. The inspectors notified FP&L representatives at the exit meeting that an accountability drill, in which all personnel onsite for both Unit 1 and Unit 2 are accounted for within about 30 minutes, must be conducted prior to full power operation of Unit 2. The drill is to be conducted subsequent to the implementation of the Unit 2 Site Security Plan. This is an unresolved item (50-335/82-06-10; 50-389/82-05-10).

16. Radiological Exposure Control

This area was observed to determine that means for controlling radiological exposures, in an emergency, are established and implemented for emergency workers and that they include exposure guidelines consistent with EPA recommendation as required by 10CFR50.47(b)(11) and specific criteria in NUREG 0654, Section II.K.

The inspectors observed that exposure control measures were utilized throughout the exercise and included dosimetry distribution to offsite support groups participating in onsite activities. Radiation surveys were conducted in the emergency facilities on a routine basis. Offsite surveys were conducted downwind from the plant during the simulated release of radioactive materials. Exposure guidelines were considered in all emergency team operations. Although inplant and onsite, out-of-plant surveys were observed and were determined to be adequately performed using correct instrumentation, the procedures for these surveys were not reviewed during the exercise. Items 50-335/81-13-26 and 50-335/81-12-27 shall remain open pending procedure review.

At the radiochemical analysis laboratory it was observed that a shielded container for samples had been provided in response to a previous appraisal

finding. Item 50-335/81-13-28 is closed. The inspectors had no further questions in this area.

17. Medical and Public Health Support

This area was observed to determine that arrangements are made for medical services for contaminated injured individuals as required by 10CFR50.47(b)(12), 10CFR50, Appendix E, paragraph IV.E and specific criteria in NUREG 0654, Section II.L.

A simulated medical emergency was initiated during the exercise which included a contaminated person with a contusion to the forehead and a compound fractured leg which initiated a request for offsite assistance. The Fort Pierce Rescue Squad and the Lawnwood Memorial Hospital participated. The inspectors observed the medical drill on and offsite. The First Aid and Decontamination Team responded without delay and rendered appropriate first aid to the simulated victim. HP personnel monitored the area and the victim prior to removing the victim from the contaminated area. No decontamination of the victim appeared to be done onsite due to the simulated serious injuries. The compound fracture was rendered immobile with a standard splint. The First Aid Team appeared to contain contamination to the area and themselves effectively prior to leaving the area, except for their gloves that were not removed upon leaving the contaminated area. Apparently gloves were retained due to potential contamination of the stretcher. An offsite ambulance responded to the site and entered and exited the protected area without undue delay. Upon arrival at the hospital the victim was moved directly to a treatment room in the Emergency Room.

The Emergency Room supervisor had put up barrier ropes and signs, and blotter paper was put down on the floor from the entrance to the Emergency Room to the treatment room used. The three radioactive sources used on the victim to simulate contamination were found by hospital and plant HP personnel accompanying the victim. During the dress-down and clean-up phase of this drill, the inspector observed that hospital personnel did not appear to be familiar with the proper methods of removing contaminated clothing, and hospital technicians did not appear to be familiar with proper area survey techniques.

The FP&L technician who accompanied the patient did a thorough job of checking the ambulance, people and floor surface for contamination prior to releasing the ambulance and termination of the medical drill.

The inspectors identified a need for additional training for hospital personnel in appropriate procedures in handling contaminated victims (50-335/82-06-11, 50-389/82-05-11). This area will be reviewed during a subsequent inspection.

18. Exercise Critique

The licensee's critique of the emergency exercise was observed to determine that deficiencies identified as a result of the exercise and weaknesses noted in the licensee's emergency response organization were formally

presented to licensee management for corrective actions as required by 10CFR50.47(b)(14), 10CFR50, Appendix E, paragraph IV.F, and specific criteria in NUREG 0654, Section II.N.

A formal FP&L critique of the emergency exercise was held on February 12, 1982 with exercise controllers, key exercise participants, licensee management and NRC personnel attending. Deficiencies and weaknesses in the emergency preparedness program, identified as a result of this exercise, were presented. Followup of corrective actions taken by FP&L for identified deficiencies and weaknesses will be accomplished through subsequent NRC inspections.

19. Federal Evaluation Team Report

The report of deficiencies noted by the Federal Evaluation Team (Regional Assistance Committee and Federal Emergency Management Agency Region IV staff) concerning the activities of offsite agencies during the exercise is included as an attachment to this report.



Federal Emergency Management Agency

Region IV 1375 Peachtree Street, NE Atlanta, Georgia 30309

February 25, 1982

Mr. Robert S. Wilkerson
Director, Division of Public Safety
Planning and Assistance
1720 Gadsden Street
Tallahassee, Florida 32301

Dear Mr. Wilkerson:

Enclosed is a list of deficiencies concerning the Plant St. Lucie Exercise conducted during the period February 10-12, 1982. Although many specific items of the Exercise were observed to be proficient, only deficiencies are identified in the attached list for reviewing ease and corrective action.

In particular, the members of the Regional Assistance Committee (RAC) and FEMA regional staff gave high marks to the involved emergency response personnel for their overall enthusiasm and seriousness of purpose. The Exercise was certainly a successful one in that it adequately tested the State and local Radiological Emergency Preparedness Plans and revealed areas of proficiency and deficiency.

We are aware that, as a result of the Exercise and critique conducted for St. Lucie, revisions are possibly being made in the State and Site-Specific Plans. Therefore, at the earliest convenience, please provide the FEMA Regional Director a report on how and when the noted deficiencies will be corrected. After receipt of this report, the process of plan review and acceptance may proceed.

We compliment the State of Florida on its excellent Radiological Emergency Preparedness effort and assure you that the RAC and FEMA staff are committed to the future support of these activities in your state.

Sincerely yours,

A handwritten signature in dark ink, which appears to read "Glenn C. Woodard, Jr.", is written over the typed name.

Glenn C. Woodard, Jr.
Chairman, RAC IV

Enclosure

RADIOLOGICAL EMERGENCY PREPAREDNESS EXERCISE
PLANT ST. LUCIE - FORT PIERCE, FLORIDA
February 10-12, 1982

Deficiencies Observed by FEMA/RAC

I. Emergency Operation Facilities and Resources

(Working space, internal communications and displays, communications, security).

1. State EOC: Point to point communications between State and other facilities need to be improved. Ring down circuit would alleviate information flow problems. Media center co-located with State EOC created problems.
2. FEOC: Internal communications system needs improvement; message circulation inadequate; status boards, charts and maps were not being kept current.
3. St. Lucie County EOC: Inadequate operating space and poorly designed structure. Internal flow of information was inadequate; message board not posted promptly or accurately; sector map not delineated to show evacuation sectors; no population map.
4. Martin County EOC: Internal communications inadequate; no oral briefings; security inadequate.

II. Alerting and Notification of Officials and Staff

(Staffing, 24-hour capability, alerting timeliness)

1. Martin County EOC: Did not demonstrate provisions for 24-hour capability.

III. Emergency Operations Management

(Organization, control, leadership, support by officials, information flow between levels and organizations, decision making, checklists and procedures).

1. FEOC: Transition from local control to State control was not clearly defined. Leadership was hampered by frequent involvement in telephone conference line network.
2. St. Lucie County EOC: Leadership hampered by frequent involvement in telephone conference line network. School system not represented in response organization. Operations room staff, at times, did not have clear picture of situation; i.e., staff, at 12:05 p.m., did not realize that the EOC had been moved to Martin County at 11:30 a.m. Only one elected official present for Exercise (for 1/2 day).

3. Martin County EOC: Leadership hampered by frequent involvement in telephone conference line network. School system not represented in response organization.

IV. Public Alerting and Notification

(Means of notification, e.g., sirens, vehicles, or other systems, notification timeliness).

1. Local Function: adequate

V. Public and Media Relations

(Publications, press facilities, media briefings, news release coordination).

1. State EOC: Multiple sources of news releases created confusion.
2. FEOC: Physical accommodations inadequate for media visitors. Only one telephone and one typewriter available in one small room. No procedures established to permit PIO and/or EOC Director to respond spontaneously to media queries without time-consuming clearance procedures with Tallahassee and with on-scene representatives. Rumor control centers were not established in affected areas.
3. St. Lucie County EOC: Exercise did not demonstrate public information functions at the local level.
4. Martin County EOC: Exercise did not demonstrate public functions information at the local level.

VI. Accident Assessment

(Staff and field operations, monitoring, adequacy of equipment, technical calculations, use of PAGs, issuance of timely recommendations).

1. State: MERL, while at Stuart, experienced communications problems with their radio frequency. MERL then switched to the LGR and seriously interfered with other response organizations' clear reception.

VII. Actions to Protect the Public

(Sheltering, evacuation, reception and care, transportation).

1. FEOC: An extended delay was noted in announcing protective actions.
2. St. Lucie County EOC: Protective actions for special populations, i.e., schools, hospitals, nursing homes, handicapped, were not addressed. The one reception center, in Indian River County, was deficient in that: the map indicating center location was inaccurate; no signs were posted on approach to reception center; one-lane dirt roads ran through the center grounds; no plan

was evident for providing clothing to those persons decontaminated; procedures for processing evacuees not well organized; no equipment available for vehicle decontamination; no containers available for personal clothing; and initial checkpoint needed a recorder.

3. Martin County EOC: Protective actions for special populations were not addressed.

VIII. Health, Medical, and Exposure Control Measures

(Access control, adequacy of equipment and supplies, dosimetry, use of KI, decontamination, medical facilities and treatment).

1. State EOC: The order to issue, and the administration of, KI was not made clear to State EOC staff.
2. FEOC: Administration and distribution of KI procedures were not clear. Exposure control procedures for monitoring team were inadequate.
3. St. Lucie County EOC: Although the Sheriff's Department had a system for determining dosage and had record forms, there was no overall system of exposure control measures for the county's emergency workers.
4. Martin County EOC: Measures for effective exposure control for emergency workers were inadequate. A log book for recording the dosage of workers was not observed. Appropriate action levels for determining need for decontamination were not specified. Measures for decontamination of emergency personnel and equipment, and for waste disposal, were inadequate.

IX. Recovery and Reentry Operations

1. State: Premature termination of Exercise precluded the observation of recovery and reentry operations.
2. Local: Same comment as above.

X. Relevance of the Exercise Experience

(Benefit to participants, adequacy of scenario).

The purpose of the Exercise was accomplished; however, scenario did not stress importance of terminating Exercise only after all phases, including recovery and reentry, had been completed.

Questionnaires returned by Exercise participants indicated that the Exercise was very worthwhile and provided a basis for improvement of response capability.