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

Report Nos. 50-335/82-28 and 50-389/82-37

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, Fl 33101

Facility Name: St. Lucie 1 and 2

Docket Nos. 50-335 and 50-389

License Nos. DPR-67 and CPPR-144

Inspection at St. Lucie site near Ft. Pierce, Florida

Inspector: W. E. Cline 9/2/82
for G. N. Huffman Date Signed

Approved by: W. E. Cline 9/2/82
for G. R. Jenkins, Chief Date Signed
Emergency Preparedness Section
Division of Emergency Preparedness
and Operational Support

SUMMARY
Inspection on August 9-13, 1982

Areas Inspected

This routine, unannounced inspection involved 40 inspector-hours on site in the area of follow-up on emergency preparedness appraisal and exercise findings.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. H. Barrow, Operations Superintendent
*H. E. Buchanan, Health Physics Supervisor
*A. W. Bailey, QA Operations Supervisor
H. Johnson, Emergency Planning Supervisor (Corp.)
*P. G. Bailey, Plant Supervisor, II
R. Maisler, Radiological Emergency Planning Engineer (Corp.)
S. Perle, Nuclear Energy Specialist (Corp.)
J. Danek, Health Physicist (Corp.)
R. Cox, Plant Supervisor, II
A. Hall, Training Coordinator
D. McAfee, Senior QA Engineer
H. Mercer, Assistant Health Physics Supevisor
M. Olin, Plant Coordinator

Other Organizations

C. Larnola, R. N., Lawnwood Medical Center
P. J. Rodi, Director of Disaster Preparedness, St. Lucie County
J. Lawson, Emergency Planner, St. Lucie County

NRC Resident Inspector

*S. A. Elrod, Senior Resident Inspector
*H. E. Bibb, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 13, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

(Open) Unresolved (335/82-06-10; 389/82-05-10): Conduct accountability drill for both Units 1 and 2. An inspector reviewed and verified that the applicable procedures are in draft pending completion of the installation of the Unit 2 computer badging system. (Details, paragraph 11)

(Closed) Deficiency (335/81-13-03): Develop an offsite augmentation plan assuring an initial response within 30 and 60 minutes. An inspector reviewed and verified the corrective actions taken are as stated in FP&Ls letter of July 22, 1982. (Details, paragraph 5)

(Closed) Deficiency (335/81-13-15): Provide instrumentation capable of measuring radioiodine concentrations of at least 1.0E-7 microcuries per cubic centimeter. This item was addressed in part 5 of the Region II Confirmation of Action Letter (CAL) dated June 30, 1981. An inspector reviewed and verified that adequate equipment has been provided. (Details, paragraph 9)

(Closed) Deficiency (335/81-13-23): (1) Implement an overall operational and radiological accident assessment procedure; and (3) Review EPIP 3100021E so as to not "override" EPIP 3100033E. An inspector reviewed these items and verified that corrective actions had been taken as stated in items 2.a. and 2.b. of FP&Ls letter of March 5, 1982; (2) Implement procedures defining the source term; (4) Modifying the procedures and instrumentation to provide 15 minute averages for delta T (temperature) meteorological data; and (5) Developing a procedure for verification of the post LOCA monitors readings. These 3 items were addressed as items 3, 1 and 2, respectively, of the Region II CAL dated June 30, 1981. An inspector reviewed and verified that corrective actions had been taken which appear to be adequate. (Details, paragraph 9)

(Closed) Deficiency (335/81-13-24): Define the methods and equipment for detection of radioiodines down to 1.0E-7 microcuries per cubic centimeter in the presence of noble gases. This item was addressed in part 5 of the Region II CAL dated June 30, 1981. An inspector reviewed and verified that the equipment and developed procedures appear to be adequate.

(Closed) Deficiency (335/81-13-26): Provide procedures defining methods, equipment, communications and radiation protection guidance for on-site out-of-plant radiological surveys. An inspector reviewed and verified that the corrective actions had been taken as stated in item 2.c. of FP&Ls letter of March 5, 1982. (Details, paragraph 9)

(Closed) Deficiency (335/81-13-27): Provide procedures defining methods, equipment, communications and radiation protection guidance for in-plant radiological surveys. An inspector reviewed and verified that the corrective actions had been taken as stated in item 2.c. of FP&Ls letter of March 5, 1982. (Details, paragraph 9)

(Closed) Deficiency (335/81-13-30): Develop an integrated radiological and environmental monitoring program which interfaces with off-site support. This item was addressed in part 4 of the Region II CAL dated June 30, 1981 and part 2.d. of Appendix B to Emergency Preparedness Appraisal Report No. 335/81-13. An inspector reviewed and verified that the corrective actions had been taken as stated in item 2.d. of FP&Ls letter of March 5, 1982. (Details, paragraph 9)

(Closed) Deficiency (335/81-13-42): Provide a coordinated public information program. An inspector reviewed and verified that corrective actions had been taken as stated in item 3 of FP&L's letter of March 5, 1982. (Details, paragraph 14)

In addition to the above, the inspector reviewed actions taken by the licensee on emergency preparedness improvement items as addressed in FP&Ls letter of March 5, 1982. The status of these items is discussed in the details of this report.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Organization

The inspector reviewed the licensee's program for establishing the on-site and off-site emergency organization. This included discussion with licensee personnel and a review of selected procedures, the Radiological Emergency Plan (REP) and applicable correspondence.

Since the appraisal, an Emergency Plan Coordinator (EPC) has been appointed. For administrative purposes, he reports to the Health Physics Supervisor at the site. Most of his direction for emergency planning comes from the Emergency Plan Supervisor (EPS) in the corporate office.

The original title of the EPS was Emergency Plan Administrator (EPA). Section 7.0 of the REP has been revised to reflect the change in title and specify the responsibilities of the EPS. Offsite Emergency Organization Procedure 1107 (GO-1107) "Duties of the Emergency Plan Administrator" provides the authority needed for the EPS to carry out his responsibilities, but GO-1107 has not been revised to reflect the change in title. Also, neither the REP or GO-1107 reflect the establishment of the EPC position at the site or the fact that the many of the responsibilities of the EPS are delegated to the EPC.

A previous inspection revealed the need for a full time EPC who serves as a member of the Facility Review Group (FRG) so that emergency planning is factored into this function. The EPC has been in his position about 5 months. FP&L has responded that with such limited experience, they feel the EPC can neither contribute or learn much from participation in the FRG. It was stated that participation by the EPC in the FRG would be reconsidered after he has at least one year site experience. FP&L also responded that the position of EPC does not require full-time involvement at this time. The EPC stated he spends 70% of his time in emergency planning, 20% as a technical advisor in health physics and 10% in health physics training and that his health physics functions have caused no conflicts with his EPC duties to date. Based on the above findings, the improvement items in this area (335/81-13-01 and 335/81-13-02) are closed. However, an inspector follow-up item is identified based on FP&L's commitment to complete a formal job description for the EPC, and revise the REP and applicable procedures to

reflect the present emergency planning organization and include the responsibilities of the EPC (335/82-28-01 and 389/82-37-01).

During the appraisal and in the REP Plan Review for the St. Lucie site, a deficiency was identified in the plans for augmenting the on-site emergency organization wherein FP&L failed to meet the 30 and 60 minute criteria specified in Table B-1 of NUREG-0654 (See Table 2-2a of the REP). An exchange of correspondence resulted in a letter dated July 22, 1982 (L-82-303) which specified an augmentation plan which meets the Table B-1 criteria. As a follow-up, the inspector reviewed informal documentation of a call-in drill which validates FP&Ls letter of July 22, 1982. Also reviewed was the priortization plan for staff augmentation call-in contained in an internal FP&L memo (Ltr. Bk. #422) dated July 12, 1982. In addition, the licensee stated that the installation of an automatic dialer system, to increase the speed of call-ins, is expected to occur by the end of the calendar year. Based on the above, the deficiency in this area (335/81-13-03) is closed. However, an inspector follow-up item is identified based on FP&L's commitment in their letter of July 22, 1982, to complete the installation of the automatic dialer system, perform three call-in drills and submit documentation of the drills to Region II, and their commitment to the inspector to revise the REP to meet the criteria of NUREG-0654 (335/82-28-02 and 389/82-37-02).

6. Emergency Response Facilities

The inspector reviewed portions of the licensee's program for implementing and operating selected emergency response facilities. This included discussions with licensee personnel, a review of applicable procedures, a tour of the facilities and an inspection of equipment and supplies.

a. Interim Technical Support Center (TSC)

The TSC consists of 6 rooms. Two larger rooms used almost daily for training and 4 smaller offices along one side of the two larger rooms. The main TSC has a window on one end which looks into the control room for Unit 1. Eventually, this will be the permanent TSC for both Units 1 and 2.

During a recent exercise, communications with the Control Room presented a significant problem. The main TSC room now has a tie-line with the Control Room and EOF, two red phones (an HPN and an ENS) and two pushbutton phones with 5 lines apiece, plus two extension phones on each line. In addition, a Kick panel exists which allows for adding 2 more phones, as needed. Under the present system, a communicator will be placed by the push botton phones for the purpose of taking messages and directing calls to the proper TSC personnel.

The second large TSC room has two more phones on separate lines with a Kick panel for 2 more phones. The first small room has a Pax phone, capable of accessing the Gaitronics System. The next two offices have one phone apiece and the last office, designated for the use of the

NRC, has a ENS phone, a Pax phone, two commercial phones and plug-ins for two "direct-outside-line" phones. Based on the above, improvement items in this area (335/81-13-19, 335/82-06-02 parts a and b and 389/82-05-02 parts a and b) are closed.

b. Operational Support Center (OSC)

The OSC is located in the first floor maintenance area of the Service Building at Unit 1. The main room is regularly used as a classroom. There are several offices adjacent which can be used as needed and a change room which is used for storage of the kit, since it is a convenient location to dress out for re-entry operations. There are ample telephones and the Gaitronics available for communications. Radios are also provided for emergency communications. During the recent exercise, it was observed that the OSC supervisor lost contact with some teams for long periods of time. FP&L responds that the teams had radios, but some teams split, leaving half the team without radios. Since these teams are not always sent to areas where telephones and the Gaitronics system are readily available, the licensee is purchasing more radios.

Based on the above, the inspector follow-up item for this area (335/82-06-02 part d and 389/82-05-02 part d) is closed.

The REP and Emergency Plan Implementing Procedure (EPIP) 3100023E have been revised to specify who will act as the OSC Supervisor and who may act as his alternate. The responsibilities of the OSC staff are also specified. Based on the above. the improvement item in this area (335/81-13-07) is closed.

A previous inspector identified the need to specify a back-up location for the OSC. FP&L responded that section 2.4.6 of the REP and EPIP 3100032E state that if the OSC becomes untenable, the Emergency Coordinator (EC) shall designate an alternate location. Although not specified, they have identified the best potential alternate location as the Steam Generator Treatment Facility (Blowdown Building), which is described in the REP. Based on the above, the improvement item in this area (335/81-13-09) is closed.

c. Interim Emergency Operations Facility (EOF).

The EOF is located in a building near Unit 2. It consists of a large conference room with several nearby offices that can be utilized as needed. Each office has from one to three telephones. The main conference room has a tie-line with the Control Room and EOF, a ENS red phone, and a commercial telephone extension. There are also six plug-ins for direct outside lines in the main conference room. The telephones for the plug-ins are locked in a cabinet in the EOF. During the recent exercise, an inspector identified the need for more telephones in the main conference room. FP&L responded that 50-60 telephones are planned for the permanent EOF and that additional phones

can not be justified in the interim facility, since there are adequate telephones in the building. Based on the above, the inspector follow-up item in this area (335/82-06-02 part c and 389/82-05-02 part c) is closed.

During the recent exercise, an inspector identified the need for improvement in both the content and timeliness of information placed on the status boards. This problem was identified at both the EOF and the TSC. FP&L has acknowledge the problem by designing a new permanent status board which is presently being manufactured for installation at both facilities. The corporate office has also committed to provide more manpower to assure that the status boards are properly maintained during an emergency. Based on the above, the inspector follow-up items related to this area (335/82-06-04, 389/82-05-04, 335/82-06-05 and 389/82-05-05) will remain open for review during the next exercise.

d. Facilities Integration

The Nuclear Plant Supervisor (NPS), a licensed Senior Reactor Operator (SRO), assumes the position of Emergency Coordinator in the Control Room promptly upon declaration of an emergency condition. Once in this position, existing procedures allow him to estimate radioactive releases and make protective action recommendations to offsite agencies. When the TSC is activiated, based on existing procedures, the EC will request that dose assessment personnel perform more rigorous calculations based on sample data and he may relinguish his responsibilities for offsite contacts to the TSC Supervisor. These actions are based on an FP&L emergency management philosophy that the NPS should retain the EC function, rather than transfer it to the TSC Supervisor. However, when the EOF is established, based on existing procedures, the EOF staff assumes the lead for dose assessment and the Recovery Manager, as Emergency Coordinating Officer (ECO), assumes the responsibility for contacting offsite agencies and providing the State with protective action recommendations.

During the recent exercise, the need was identified for a transfer of the EC function from the NPS to the TSC Supervisor. An inspector also noted that the lead dose assessment responsibiliiy was not transferred from the TSC to the EOF. On the first issue, FP&L reviewed their actions during the exercise and responded that a transfer of the ECs functions to the TSC Supervisor would be detrimental to their emergency response since the TSC Supervisor and his alternate are not licensed SROs. In addition, they point out that procedurally, the EC may transfer the responsibility for contacting offsite agencies to the TSC, but even if he chooses not to, the ECO will assume these functions approximately one hour after the declaration of an emergency.

On the second issue, FP&L responds that the dose assessment functions were transferred and because the sampling information is routed through the TSC to the EOF, the inspector misinterpreted what he saw. However, the licensee has agreed to assure the transfer of this function in the

future. Based on the above, the inspector follow-up items in this area (335/82-06-01. 389/82-05-01, 335/82-06-08 and 389/82-05-08) will remain open for review during the next exercise.

7. Procedures: General Content

The inspector reviewed selected procedures for implementing the licensee's REP. This included discussions with licensee personnel.

A previous inspector identified the need to clarify EPIP 3100021E, "Duties and Responsibilities of the Emergency Coordinator" so as not to "override" the instructions of EPIP 3100033E. Although the licensee expressed some confusion about the source of the "override", the procedures were revised to respond to other portions of the same deficiency (See section 9). A review of the revised procedures revealed that they are integrated as appropriate and no "override" could be identified. Based on the above, the deficiency in this area (335/81-13-23 part 3) is closed.

A previous inspector identified eight Emergency Operations Procedures (EOPs) and one Off-Normal Operations Procedure (OOP) that failed to reference the EPIPs. The EOPs were revised, but it was found that referencing the EPIPs was not appropriate for OPP 1300030 "Loss of Containment Integrity-Off-Normal Operation".

Based on the above, the improvement item in this area (335/81-13-21) is closed.

8. Emergency News Centers

The licensee's program for establishing Emergency News Centers was reviewed including a review of the REP, applicable procedures and a tour of the on-site facilities.

The primary ENC is in a trailer adjacent to the Health Physics trailers on the north side of the Unit 1 parking lot and this location is now clearly described in the REP and GO-1201, "Activation and Use of the Emergency News Center (St. Lucie)".

The ENC trailer is divided into two rooms: the Press Preparation Room and the Press Briefing Room. The briefing room has two telephones in place with jacks for 12 more, all direct off-site commercial lines. The preparation room has plug-ins for 12 additional direct outside line telephones. The facility is also equipped with slide projectors, tape recorders, a motion picture projector, a videotape system and a plug-in for a copy machine.

A trailer adjacent to the ENC is designated for ENC Operations. This trailer will be utilized by NRC, FEMA, State and licensee personnel for the development of press releases. This trailer has plug-ins for the Note Pad computer, a facsimile machine and 12 direct outside line telephones.

The alternate ENC is at the Holiday Inn, Jensen Beach, about 8 miles south of the ENC. There are jacks for 26 telephones at this facility, plus provisions for providing 2 copy machines and slide projector.

Based on the above, the improvement item in this area (335/81-13-14) is closed. However, based on FP&Ls commitment to include provisions for media badging and crowd control at the ENC in applicable procedures an inspector follow-up item is identified (335/82-28-03 and 389/82-37-03).

9. Radiological Assessment and Protective Actions

The inspector reviewed the licensee's program for radiological assessment and protective actions. The review included discussions with licensee personnel and a review of the REP, selected procedures and documents.

The REP now provides an overall operational and radiological assessment and protective action program which integrates with the State and other agencies. This program is implemented through a number of procedures which were revised or developed. EPIP 3100021E, "Duties and Responsibilities of the Emergency Coordinator" guides the EC through the implementation of the REP including classification of the accident, definition of the source term, dose assessment and protective action recommendation. The classification of the accident is accomplished through reference in EPIP 3100021E to EPIP 3100022E "Classification of Emergencies" which also provides for emergency action level escalation and de-escalation through the use of Classification Tables. Source term definition (in terms of curies/second) and dose assessment is contained in EPIP 3100033E, "Off-site Dose Calculations". This data is then used in either Table A-2 or A-3 of EPIP 3100021E to obtain guidance for protective action recommendations. When an accident occurs so fast that liquid and gaseous sample data are not available to define the source term, the EC can develop protective action recommendations by using Table A-1 and the Containment High Range Radiation Monitor.

Although the calculations in EPIP 3100033E can be performed by hand, they have been computer programmed. The procedure considers possible combinations of accident radiation sources and the vent monitor detecting the release. It also can factor in plume monitoring data and uses 15 minute average wind and temperature difference data. Where source term and other data are not availabe, default values are used on a worst case basis. Alternate means of verifying data are also considered in EPIP 3100033E, e.g. verification of the Post Loca Monitor readings with a portable dose rate instrument is required prior to performing dose calculations. Based on the above, the deficiency in this area (335/81-13-23 parts 1, 2, 4 and 5) is closed.

During the recent exercise, an inspector noted that liquid and gaseous effluent data was not used to refine the computer generated dose assessment calculations. FP&L responded that during the exercise, they received and factored in data from the Containment High Range Monitor, the Post LOCA Monitor, Steam Generator Dumps A and B, and Samples from Steam Generators A and B. They also received data from two Reactor Coolant System samples, but

the scenario did not allow for using this data. In addition, the scenario was designed to rely heavily on synthesized plume monitoring data using actual meteorological data. However, on the day of the exercise the wind speed was one mile per hour and in a direction which allowed for a closest approach to the source by the off-site monitoring teams of about 3 miles. Consequently, plume data was not available until the exercise was nearly over. Based on the above, the inspector follow-up item in this area (335/82-06-07 and 389/82-05-07) is closed.

Training in EPIP 3100033E, "Offsite Dose Calculations", has been included in the requirements for Nuclear Plant Supervisors and Nuclear Watch Engineers by making it a requirement for their requalification training along with a review of the REP and the remaining EPIPs. However, AP 0005720, "Licensed Operator Requalification Program," does not specifically list the REP and EPIPs as a requalification training requirement. Based on the above, the improvement item related to this area (335/81-13-05) is closed. However, based on FP&Ls commitment to revise AP 0005720 to include training in the REP and all EPIPs, an inspector follow-up item is identified (335/82-28-04 and 389/82-37-04).

Sampling and analysis to support the source term definition is performed by chemistry and health physics technicians. An overview of the integrated radiological and environmental program, including interfaces with offsite support, is in Section 2.0 of the REP. The program is implemented through a number of procedures. Chemistry Procedure C-110 "Collecting Initial Sets of Post Accident Samples and Guidelines for Establishing Post Accident Water and Gas Inventory Control", provides specific instructions for effluent sampling, including limits, precautions, and guidelines for possible concerns associated with long term post accident surveillance. C-111, "Establishing Remote Analysis Laboratory, Counting Laboratory and Counting Procedures for Accident Samples", provides guidelines for assaying post accident samples for chemical and radioactive content. Health Physics Procedure HP-200, "Health Physics Emergency Organization", defines the responsibilities of Health Physics Department personnel in implementing the REP. HP-201, "Emergency Personnel Exposure Control", provides the radiological guidance for protective action measures for re-entry teams and HP-203, "Personnel Access Control During Emergencies", provides additional safety limitations and guidelines applied to re-entry operations. HP-204, "In-plant Radiation and Contamination Surveys During Emergencies", and HP-205, "Emergency In-Plant Air Sampling", provide procedures as entitled. However, HP-203 through HP-205 also contain floor plans of the Radiation Control Area with maps of the expected dose levels at 1, 10, 100 and 1000 hours after a serious fuel damage accident. HP-202 "Offsite Environmental Monitoring During Emergencies", also provides from sample analysis and includes a map specifying pre-selected monitoring sites. Finally, HP-206, "Analysis of Emergency Air Samples," provides for both the sampling and analysis of in-plant air samples.

While the above procedures define the methods and provide radiation protection guidance, HP-90, "Emergency Equipment" specifies the equipment required for these operations and provides for quarterly inventory and operational checks. The Health Physics department also keeps 3 portable radios on chargers in their office for emergency use. In addition, re-entry terms have the use of the Gaitronics, Pax telephone system which accesses the Gaitronics system and commercial telephones at many locations within the plant. Both the off-site and on-site out-of-plant monitoring teams are directed by HP-202 to use radio equipped vehicles. However, a portable radio in also available to the on-site team at the Site Assembly Station.

Chemistry and Health Physics technicians are trained in the above procedures as applicable to their function in the emergency organization. In addition, section 7.2.1 of the REP requires training in the REP and EPIPs as appropriate, which provides an overview of the operational aspects of the emergency organization and the relationships between the various functional areas. Based on the above, the deficiencies in this area (335/81-13-26 and 335/81-13-27) are closed. Also, the related improvement items in this area (335/81-13-04, 335/81-13-06 and 335/81-13-29) are closed.

Section 5.1.6, "Off-site Monitoring", of the REP states, under a part entitled "Coordination of Sampling Data," that arrangements have been made for a State representative to be stationed in the EOF to assure a free exchange of radiological assessment data. It further states that the Division of Health and Rehabilitative Services has the responsibility for recommending that the Bureau of Diaster Preparedness request DOE off-site monitoring, and as such, will provide for information coordination if this group's support is utilized. A review of the State Plan confirms that the State of Florida has taken full responsibility for coordination between the licensee, the State, the US DOE and other possible participants in off-site radiological and environmental monitoring. To support the State, the licensee stated that when the State representative arrives at the EOF, their off-site monitoring team will offer to accept direction from the State. However, it was noted during the recent exercise the information feedback problems arose because the licensee directs their off-site teams from the TSC while the State directs their teams from the EOF and Mobile Environmental Monitoring Laboratory. FP&L responded by stating they will place a representative in the EOF to interface with the State representative. The licensee representative will then communicate the State's directions to the TSC by telephone and the TSC will relay those directions to the off-site teams by FM radio. Based on the above, the deficiency in this area (335/81-13-30) is closed. However, the inspector follow-up item related to this area (335/82-06-06 and 389/82-05-06) will remain open for review during the next exercise.

During the inspection, the Health Physics staff set-up a Ludlum Model 2218 Dual Analyzer and Demonstrated that the Minimum Detectable Activity (MDA) for the instrument was 1.04E-9 microcuries per cubic centimeter versus a criteria of 1.0E-7 microcuries per cubic centimeter. All parameters and efficiencies were listed on the instrument and HP-202, "Off-site Environmental Monitoring During Emergencies" specifies the use of silver

zeolite cartridges for radioiodine sampling which eliminates the problems associated with the presence of noble gases. Further, section 8.10.9 of HP-202 requires moving to a location with a background of less than 100 cpm for sample analysis if the radiation background where the counter is located exceeds 100 cpm.

This action assures that the MDA for the instrument will not fall below 1.0 E-7 microcuries per cubic centimeter. Based on the above, the deficiencies in this area (335/81-13-15 and 335/81-13-24) are closed.

10. Evacuation of Owner Controlled Area

The inspector reviewed the licensee's program for assembly within and evacuation of the owner controlled area. The review included discussions with licensee representatives, a review of the REP and procedures, and a tour of selected assembly areas.

When a local evacuation is initiated by an alarm or the EC, affected personnel will report to assigned assembly areas. When a site evacuation is announced, Unit 1 personnel from outside the protected area will assemble at Jaycee Park about 8 miles north. Personnel from inside the protected area will report to the Site Assembly Station near the northern property line. Although this site is small, after personnel monitoring and accountability are completed, all non-essential personnel will be released to go home. The remaining emergency response personnel will be on call for re-entry, decontamination and monitoring assignments. To support their efforts, the SAS contains monitoring and decontamination kits plus large stores of equipment and materials. If a release precluded use of the SAS, the EC or ECO would announce on alternate assembly location. Alternate sources of kits, equipment and materials are available for use at the alternate assembly site. Based on the above, the improvement items related to this area (335/81-13-10 and 335/81-13-13) are closed.

Unit 1 personnel are covered by EPIP 2100026E "Criteria for and Conduct of Evacuations" as described above. Unit 2 personnel are covered by Administrative Site Procedure ASP-5, "Emergency Evacuation of Site Personnel." All Unit 2 personnel, except those with emergency response responsibilities, are directed to the Jaycee Park, north of the site. ASP-5 also provides for monitoring, accountability, decontamination and first aid treatment.

There are only three exits from Hutchinson Island, one is about 10 miles north of the site. The other two are about 8 and 16 miles south of the site, respectively. If congestion required use of the southern route, the evacuation announcement would provide the route and assembly point. In addition guards would be posted at the exits to the site and at the assembly points to guide evacuation and reassembly. Because of the limited alternatives, only one road going north and south, FP&L does not feel it is necessary to post evacuation route signs, especially when the local sheriff's department will assure that civilian traffic is also directed away from the site. Based on the above, the improvement items related to this area (335/81-13-11, 335/81-13-31 and 335/81-13-32) are closed.

11. Personnel Accountability

The licensee's personnel accountability program was reviewed. This included discussions with licensee representatives, and a review of selected procedures. A previous inspection identified conflict between EPIP 3100026E (due to a typographical error Report No. 335/82-06; 389/82-05 said 3100021E) and Security Procedure (SP) 0006123 concerning the responsibility for personnel accountability. This was further complicated by an observation that both the Site Assembly Station supervisor and a guard were performing the personnel accountability function at the SAS. A review of the procedures revealed that SP 006123 applies only to accountability within the protected area, which is the responsibility of the Security Supervisor and guard force. EPIP 3100026E designates the SAS Supervisor as responsible for accountability at the SAS. However, he may delegate this to security personnel present. Based on the above, the inspector follow-up item in this area (335/82-06-09 and 389/82-05-09) is closed. However, based on FP&Ls commitment to revise EPIP 3100026E to further clarify the responsibility of the SAS Supervisor for accountability at the SAS and his authority for delegating this responsibility, an inspector follow-up item is identified (335/82-28-05 and 389/82-37-05).

Two other improvement items (335/81-13-33 and 335/81-13-34) related to the need for procedures outlining specific actions by the security force during radiological emergencies and an unresolved item (335/82-06-10 and 389/82-05-10) concerned with the need to perform a full site accountability will remain open. The procedures are in draft and are awaiting test through the performance of an accountability drill. The drill was originally scheduled for late August or early September, as per an internal memo from P. G. Bailey to H. C. Buchanan dated March 19, 1982 (Ltr. Bk. #411). The postponement results from delays in the installation of the computer badging system, which is a key factor in Unit #2 accountability, since an accountability drill at Unit #2 will involve over 3,000 construction workers.

12. Repair Corrective Actions

The licensee's program for repair and corrective actions was reviewed. This included discussions with licensee personnel and a review of the REP and a review of the REP and applicable procedures.

A previous inspector identified the need for a procedure defining repair corrective actions. FP&L responded the EPIP 3100027E "Re-entry", provides for repair/corrective actions in that it applies to performing "operations which may decrease the severity of the emergency." Although written in general terms, it was found that the procedure does provide reasonable guidance, such as team composition, radiation protection, safety, a re-entry briefing and pre-planning of actions. Also, since radiation protection is under the direction ofthe Radiation Team Leader and the procedure requires a health physicist on the team, the protective actions and guidance of the HP-200 series will apply (see section 9). Based on the above, the improvement item in this area (335/81-13-35) is closed.

13. Inventory and Operational Checks

The inspector reviewed the licensee's program for inventory and operational checks of emergency equipment and materials. This included a review of the REP and applicable procedures, discussions with licensee personnel and a tour of the facilities to inspect emergency kits. Most of the emergency kits at St. Lucie are in the form of large locked cabinets. A few kits, in the form of foot lockers, are used by mobile monitoring and decontamination teams. Kits of this type are only present at the interim EOF and SAS. However, the SAS station and all other locations appear to have ample supplies in locked cabinets.

A previous inspector identified the need for operability check sheet in HP-90, "Emergency Equipment." FP&L responded that a check sheet is not needed since the procedure requires an operability check of applicable equipment as part of the procedure for the quarterly inventory. A previous inspector also identified the need to include stop watches, appropriate procedures and high range dosimeters in the kits. These and other items, such as calculators and fresh batteries, were observed during the tour. Based on the above, the improvement item in this area (335/81-13-38) is closed.

14. Public Information

The inspector reviewed the licensee's participation in the State plan for the dissemination of information to the public. The review included a review of the REP, the State Plan, and discussions with the licensee and St. Lucie County Bureau of Diaster Preparedness personnel.

Section 6.1 of the REP acknowledges that the State of Florida Bureau of Disaster Preparedness and the St. Lucie County and Martin County Disaster Preparedness agencies have the responsibility for conducting the public information program. It also states that FP&L will support the program by supplying information as requested by those agencies.

A conprehensive overview of the State Plan for the dissemination of public information is contained in Annex E to the State Plan. It provides for cooperation between the licensee, risk counties, host counties, and State in the development of an information package which will be updated annually. The information package is a pamphlet which provides guidance for persons within the 10 mile EPZ on hurricanes, tornadoes, floods, fires, lightning and thunderstorms, hazardous materials, wars, and radiation. County personnel indicated this approach served the dual purpose of providing information on their other functions, as well as putting a radiological emergency into proper perspective with other risks.

Also developed was a poster which was distributed to all hotels, motels, restaurants, parks and other locations where a transient population is likely to encounter them. The poster lists seven radio stations in the two risk counties and a television station which covers both counties. The

poster instructs people to tune-in these stations when the sirens are sounded.

As a first step in disseminating the above information, a media briefing was conducted on January 27, 1982. Everyone interviewed felt that the media's cooperation is excellent. Both the State and licensee's REPs now require these briefings annually.

Some problems were encountered in dissemination of the booklets within the EPZ. A mailing company was placed under contract to reach all homes within the EPZ. However, a sampling of employees and other persons within the EPZ revealed that a significant number of people never received a copy. FP&L is withholding payment to the mailing company pending resolution of the problem. Also, although local hotels, motels and restaurants did receive copies of the posters, which were distributed using mailing lists from local trade associations, they have generally refused to display the posters because the economy in the area is dependent on tourism and the businessmen feel the posters will frighten tourists to other areas. The licensee, State and county representatives are now seeking other means of contacting the transient population. Based on the above, the deficiency (335/81-13-42) and the improvement item related to this area (335/81-13-43) are closed. However, based on the need to upgrade the means for contacting the transient and resident populations within the EPZ, an inspector follow-up item is identified (335/82-28-06 and 389/82-37-06).

During an actual emergency, the State maintains the lead for the dissemination of information and rumor control. State and County officials are notified of the declaration of an emergency at the site and are notified again each time the emergency action level is escalated or de-escalated. However, the State has responsibility for the further dissemination of information. To encourage information flow, both the State and Counties have representatives in the Emergency News Center (ENC). Consequently, when information is received by the Emergency Information Manager, it is disseminated to all parties present at the same time. Therefore, FP&L does not feel detailed plans for disseminating information to State andlocal county personnel are required.

During the recent exercise, several problems were observed in the rumor control system which resulted from multiple sources. The rumor control function is located at the State EOC in Tallahassee, Florida. As information became available on the accident situation, a licensee communicated this to a State representative in the EOF. The State representative then prepared a written message which was given to a second representative who used a telephone, radio or the Note Pad computer link to contact the State field EOC in Jupiter. The Jupiter station then relayed the message to Tallahassee. Problems arose because many of the people involved were not familiar with the technical jargon common to describing reactor problems. Consequently, the messages were garbled or the technical implications were misunderstood. Attempts at sending hard copies of the messages by the Note Pad system were frustated by disconnects. The system uses a computer in California and some outages lasted up to two hours.

Attempts to communicate by conference calls were frustated by poor quality and disconnects. To correct the situation, FP&L has installed a hard wire ring-down telephone system similar to the NRC ENS system. The system provides for 2-digit dialing to achieve point-to-point contact, calls can be grouped, or all stations can be contacted simultaneously. Parties connected are the Tallahassee EOC, State field EOC in Jupiter, both risk county EOC's, the Unit 1 Control Room, the TSC, the EOF, the State's Division of Radiological Health Services in Orlando and the FP&L Corporate EOF.

FP&L plans to replace the Note Pad system with an electronic mail system that uses a locally based computer. They also plan to program this system for message prioritization. It should also be noted that the State has established a toll-free 800 number telephone system for rumor control. In addition, to reduce misinterpretation of messages, the State has established an emergency response training program in which the licensee will participate by teaching the basics and technical language associated with power reactors. Based on the above, the improvement item (335/81-13-36) and inspector follow-up item (335/82-06-03 and 389/82-05-03) related to this area are closed.

15. Drills and Exercises

The inspector reviewed portions of the licensee's program for drills and exercises including selected procedures and supporting documents.

A previous inspector identified the need for FP&L to document the daily communications tests of the NAWAS telephone and LGR (FM) radio. Although FP&L responded that these tests would only be documented once each month, a review of the log in the Control Room revealed that the LGR system, which operates on two frequencies to local government agencies, has been tested about 9:00 a.m. daily through a roll-call from the Civil Defense Office in Jupiter, Florida. The log also revealed that the NAWAS telephone is tested each morning around 10:20 a.m., except holidays and week-ends, by a roll-call from NAWAS. Other systems, such as the red phone to the Florida Office iof Disaster Preparedness and the corporate Radiological Emergency Communications Systems radio are only tested once each month. Based on the above, the improvement item in this area (335/81-13-39) is closed.

16. Reviews and Audits

The inspector reviewed the licensee's program for annual reviews and audits. This included disucssions with licensee representatives, a review of the REP, applicable procedures and supporting documents.

Section 7.3.1 of Revision 12 of the REP, still in draft form, will require an annual review of the REP and EPIPs. A previous inspector identified the need to revise EPIP 3100024E and EPIP 3100031E. FP&L revised EPIP 3100024E and deleted EPIP 3100031E, "Oil Spills", as not applicable to the REP. However, the inspector found that the last review of EPIP 3100024E was 6/16/81 and four other procedures were last reviewed as listed: 3100025E, 4/15/81; 3100027E, 5/28/81; 3100029E, 3/20/81; and 3100050E, 3/20/81. Based

on the above, the improvement item in this area (335/81-13-40) will remain open pending completion of the REP and EPIP review presently being conducted by FP&L.

Section 7.3.4 of the REP was revised to require annual audits of the emergency preparedness program. A review of the last three audit dates revealed that audits have been conducted on an average spacing of 11 months. A review of the last two audit reports revealed an apparently comprehensive audit program and the follow-up on the audit findings appears to be adequate. Based on the above, the improvement item in this areas (335/81-13-41) is closed.

17. Coordination with Offsite Agencies

The inspector reviewed the licensee's program for coordination with offsite agencies with respect to the Lawnwood Medical Center. The review included a tour of the Medical Center and discussions with licensee and Medical Center personnel.

A need to replace outdated procedures in the emergency kit at the Center and place a roll of blotter paper on the inventory list for the kit was identified by a previous inspector. These actions have been completed and consequently, the improvement item in this area (335/81-13-16) is closed.

18. Public Notification System (PNS)

The inspector reviewed this area of the licensee's program for the purpose of collecting experience data on the installation and operation of the Public Notification System.

The PNS system for the St. Lucie facility was designed by Accoustical Technology Incorporated using a computer program which defined the locations of the sirens through an accoustical contour mapping approach. The computer used a criteria of 70 db in densely populated areas and 60 db in sparesly populated areas. Once the maps were defined, it was found that it was necessary to go through a second iteration due to the fact that available power was as far as two miles from some of the intial site selections. The final system has 57 sirens within the ten mile EPZ plus one mobile system mounted on a truck at the site. The mobile system is to be used primarily on Hutchinson Island as a supplement to the existing system. It was found that the computer system had some defects and these were compensated for prior to installation of the PNS. FP&L states that they have confirmed that the system meets the accoustical criteria in NUREG-0654, Appendix 3 through field measurements, although they stated that they will be adding more sirens in the next few months due to recent growth in the EPZ. Documentation of the test results was not reviewed.

Of the 57 sirens, 13 are located in Martin County while the balance are in St. Lucie County. The sirens in St. Lucie county are powered by the Ft. Pierce Utility Company. However, in a power failure at Ft. Pierce, St. Lucie Station would feed into the grid, assuring power to the County and the sirens. The sirens in Martin County are powered by the St. Lucie Station

and backed up by the Ft. Pierce Utility Company. In the event of a complete power failure, the sirens are backed up by a 30-minute battery system which would allow for the system to be cycled about eight times.

The Counties have control of the PNS. The Control Points (CPs) are the St. Lucie County EOC, within the EPZ in Ft. Pierce, Florida and the Martin County EOC outside the EPZ just south of Stuart, Florida. St. Lucie County would normally take the lead in using the PNS, but if it were necessary to evacuate the EOC, Martin County has the same capability to activate all or part of the system. The CP consists of a map with a light and numerical designation for each siren, a compass indicating the direction that the operating sirens are facing, and an encoder. Use of a Dual Tone Multiple Frequency (DTMF) radio signal, allows each siren to have a unique code. Consequently, the sirens can be set off individually, in preselected groups, or all together. Theoretically, the DTMF system assures random radio waves can not set off the sirens. Several sirens have gone off for unknown reasons. Most of these cases were traced to lightning and FP&L is now experimenting at their corporate laboratory with lightning arrestor connectors as a possible means to avoid accidental starts. FP&L installed the system and intends to maintain ownership and maintenance until the system is operating trouble free.

The PNS can be operated in four modes. The light for each siren activated on the map is color coded to relfect the mode of operation. A wailing siren (red) warns of a possible nuclear attack. A warbling tone (amber) warns that the attack is imminent. A steady tone (green) warns of an emergency at the St. Lucie reactor site and the public address mode (white) provides for actual instructions to be given directly to people within the EPZ. In the first three modes, the sirens rotate constantly. In the fourth mode, the operator must stop the siren through eight points of the compass, repeating his message each time. A recorded message system is on order to simplify this process.

The system was tested, during the February, 1982 exercise; however, spotters were placed at only a few locations and some unconfirmed reports came in that the sirens could not be heard. These reports may have been due to the fact that the local television station made a statement implying that the sirens were about to be sounded when they had been sounded ten minutes earlier.