



November 8, 2004

L-2004-262  
10 CFR 50.54(q)  
10 CFR 50 Appendix E

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Re: St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
Radiological Emergency Plan - Revision 44

In accordance with 10 CFR 50.54(q) and 10 CFR 50 Appendix E, enclosed is one copy of the St. Lucie Plant Radiological Emergency Plan Revision 44. The plan, as revised, continues to meet the standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E.

Enclosure 1 provides a summary of the changes to the plan and the documentation of Florida Power & Light Company's (FPL) conclusion that the revision does not represent a decrease in the effectiveness of the plan. Enclosure 2 is Revision 44 of the St. Lucie Plant Radiological Emergency Plan.

Please contact us if there are any questions regarding this revision.

Very truly yours,

A handwritten signature in black ink, appearing to read 'WJ', is written over the words 'Very truly yours,'.

William Jefferson, Jr.  
Vice President  
St. Lucie Plant

WJ/tlt

Enclosures

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**ENCLOSURE 1**

**CHANGE DOCUMENT**

**ST. LUCIE PLANT**

**RADIOLOGICAL EMERGENCY PLAN**

**REVISION 44**

## **CHANGE DOCUMENT FOR REVISION 44**

This document provides a review of the changes incorporated into revision 44 of the St. Lucie Plant Radiological Emergency Plan. This review is divided into two parts. The first part, "Administrative/Editorial Changes" lists minor changes. The second part, "Significant Changes" discusses details of changes in aspects of emergency response incorporated into this revision. The significant changes were evaluated relative to the requirements of 10 CFR 50.54(q). Revision 44 does not reduce the effectiveness of the Emergency Plan.

Note: All page and section references apply to revision 43.

### **Administrative/Editorial Changes**

1. Title page changed to reflect new revision number.
2. Typographical errors were corrected on pages (4), 2-3, 3-20, 5-7, 5-8 and 5-11.
3. The titles of Nuclear Plant Supervisor and Assistant Nuclear Plant Supervisor were revised to Shift Manager and Unit Supervisor, respectively, throughout the Emergency Plan.
4. Page 4-9, Section 4.6, Company Radio, second sentence, removed the words "and numerous automobiles, trucks,". This is an editorial change and does not change the information regarding the company radio system.
5. Page 5-7, Section 5.1.6, Field Monitoring – State, paragraph two was revised to delete references to Chapter 9 of Annex A regarding field team transportation and deployment times. These changes reflect changes in the approved State of Florida Radiological Emergency Management Plan (= State Plan).
6. Page 5-28, Section 5.4.2, Off-site, references to sections within State Plan were revised per changes made in the approved State Plan.
7. Page 7-16, Section 7.3.6, Document Distribution, corrects the title of the State Plan. This change is also in accordance with the approved State Plan.
8. Page (APP-1), Appendix A, same change as #7 above.

## Significant Changes

1. The Emergency Classification Table has been revised for the Event/Class of Security Threat. Additional Emergency Action Levels (EALs) have been added to the Initiating Condition under Unusual Event based on the October 29, 2004 Safeguards Contingency Plan approved by the NRC. The EALs are Attack Threat with added subcategories (land/vehicle, waterborne, airborne and insider), Extortion/Coercion/Hostage Threat against the plant and Sniper Attack. Also, the wording of the Initiating Condition under General Emergency was revised to be consistent with wording for Alert and Site Area Emergency. Specifically, "(as per the Security Plan)" was changed to "as defined in the Safeguards Contingency Plan."

The newly issued Security Safeguards Contingency Plan, in response to the NRC Order, provided more detail regarding security threats. These changes to the Emergency Plan EALs are incorporated to ensure compatibility with the Safeguards Contingency Plan. The changes will ensure that the Emergency Plan is properly implemented in response to a security threat. This change does not decrease the effectiveness of the classification table because no existing EALs were eliminated and the added EALs are an enhancement. Therefore, this change may be implemented under 10 CFR 50.54(q).

2. Use of Potassium Iodide (KI) has been changed to allow for prophylaxis. Details for implementation of KI use are provided in plant procedures.

The Emergency Plan had previously considered the use of KI only after exposure. With the recent changes in the use of KI in off-site plans, consideration of use by on-site emergency workers is appropriate. The Emergency Plan is revised to allow for KI to be available prior to exposure. Use of KI prior to exposure allows for prophylaxis and is an enhancement to radiation protection. Therefore, this change may be implemented under 10 CFR 50.54(q).

**ENCLOSURE 2**

**ST. LUCIE PLANT**

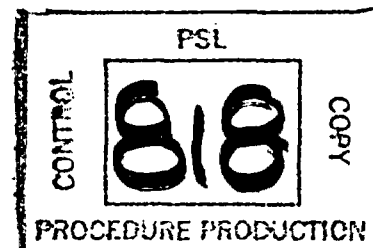
**RADIOLOGICAL EMERGENCY PLAN**

**REVISION 44**



**FPL**

**ST. LUCIE PLANT**  
**RADIOLOGICAL EMERGENCY PLAN**  
**REVISION 44**



Approved by:   
Chief Nuclear Officer

Date: 10/28/04

Effective Date: 10/29/04

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## 1. GENERAL INFORMATION

### 1.1 Purpose

This Emergency Plan contains Florida Power & Light Company's plans for coping with radiological emergencies at the St. Lucie Plant, a facility with two commercial power reactors, Units 1 and 2 located in St. Lucie County, Florida.

The plan has been designed to preclude or mitigate the adverse health and safety effects of an emergency. Four general objectives have been considered in the development of this plan:

1. Timely and accurate assessment of off-normal or emergency conditions, and proper notification of responsible authorities.
2. Effective coordination of emergency actions among all organizations having a response role.
3. Continued assessment of actual or potential consequences both on-site and off-site.
4. Continuing maintenance of an adequate state of emergency preparedness.

### 1.2 Definitions

**Annual** - Occurring once per calendar year (January 1 through December 31).

**Assessment Actions** - Those actions taken during or after an emergency event to obtain and process information necessary to make decisions to implement specific emergency measures.

**Company** - Florida Power & Light Company (FPL)

**Corrective Actions** - Those measures taken to mitigate or terminate an emergency situation at or near the source of the problem in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release, e.g., shutting down equipment, firefighting, repair and damage control.

**Duty Call Supervisor** - A designated and trained supervisor assigned from the nuclear plant staff to provide 24-hour response to any emergency upon notification by the Shift Manager. The Duty Call Supervisor (DCS) is responsible for notifying the Emergency Response Organization and, as requested, plant management in the event of an emergency.

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## 1. GENERAL INFORMATION (continued)

### 1.2 Definitions (continued)

**Emergency** - Any off-normal event or condition which is classified into one of the four event categories of Table 3-1, Emergency Classification Table. A radiological emergency at the Plant is classified in accordance with Section 3, Emergency Classification System and Emergency Plan Implementing Procedure EPIP-01, Classification of Emergencies, as an (Notification of) Unusual Event, an Alert, a Site Area Emergency, or a General Emergency.

**Emergency Action Levels (EALs)** - Plant specific values (such as radiological dose rates, contamination levels, or specific instrument indications); states (such as containment integrity breached or confirmed hurricane warning); or combinations of values and states that may be used as thresholds for initiating specific emergency measures (i.e., designating a particular class of emergency, or initiating a particular protective action).

**Emergency Control Officer (ECO)** - A designated company officer or senior manager who will act as the chief nuclear officer. He/she will serve as the official spokesperson for the Nuclear Division.

**Emergency Coordinator (EC)** - The title assumed by the Shift Manager, until relieved by plant management through proper turnover, in the event of emergency conditions at the plant that trigger the Emergency Plan. The EC is responsible for notifying off-site authorities, emergency responders both inside and outside the company, and has full authority and responsibility for on-site emergency response actions. The EC is also responsible for Protective Action Recommendations during the initial stages of an emergency.

**Emergency Information Manager (EIM)** - A senior manager or designated member of the Corporate Communications Department who directs the operation of the Emergency News Center, develops news releases, and serves as a spokesperson for the company.

**Emergency News Center (ENC)** - A designated facility for use by the EIM and his staff in communicating with the news media. Public information officers from State, local, and federal response agencies would also function from the ENC.

**Emergency Operations Center (EOC)** - Separate designated off-site facilities from which the St. Lucie County, Martin County and State of Florida Emergency Response Organizations will direct necessary assessment and protective actions for off-site areas.

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1. GENERAL INFORMATION (continued)

1.2 Definitions (continued)

**Emergency Operations Facility (EOF)** - A designated off-site facility from which FPL emergency activities including assessment, protective action recommendations, and coordination with state and county officials is conducted.

**Emergency Operating Procedures (EOPs)** - Specific procedures that provide instructions to guide plant operations to terminate or mitigate the consequences of an accident during potential or actual emergency situations.

**Emergency Plan Implementing Procedures (EPIPs)** - A set of emergency response procedures initiated and followed by the FPL Emergency Response Organization to implement the appropriate sections of the Emergency Plan, assess and classify the emergency, notify the appropriate authorities, and provide continuing response capability.

**Emergency Planning Zone (EPZ)** - That area, in which emergency planning for plume and/or ingestion exposure has been given consideration, in order to assure that prompt and effective actions can be taken, to protect the public in the event of a radiological emergency at the plant.

**Emergency Response Organization (ERO)** - That portion of the FPL organization assigned responsibilities upon initiation of the St. Lucie Plant Radiological Emergency Plan.

**Emergency Security Manager (ESM)** - A designated company manager, supervisor, or specialist who will have the responsibility for security aspects of the emergency response.

**Emergency Technical Manager (ETM)** - A designated company manager who will be responsible for providing technical support for emergency response actions.

**Expanded Emergency Response Organization** - A group of designated individuals from within the normal company organization who may cease normal activities and assume responsibility for augmenting FPL corrective, assessment and protective actions in the event of a radiological emergency at the plant.

**Governmental Affairs Manager (GAM)** - A designated senior manager who has the responsibility for liaison between the Recovery Manager/ Emergency Control Officer and political officials of the State and Federal Governments during an emergency.

## 1. GENERAL INFORMATION (continued)

### 1.2 Definitions (continued)

**Ingestion Exposure Pathway Emergency Planning Zone** - That area, approximately 50 miles in radius from the center of the plant, for which plans are made to protect people from ingestion of food-stuffs and water contaminated by radioactive materials released from the plant.

**National Oceanic and Atmospheric Administration (NOAA)** - Governmental agency responsible for the forecasting of weather conditions. The National Weather Service (NWS) is a branch under NOAA that provides weather information and warning of severe weather situations, such as hurricanes and tornadoes.

**Nuclear Division Duty Officer (NDDO)** - A designated member of the FPL Nuclear Division staff with responsibility for responding to radiological emergencies or incidents on a 24 hours per day basis. The NDDO may carry out the functions of the ECO on an interim basis until the primary or an alternate can be notified.

**Nuclear Division Management Center** - A designated area in the Juno Beach office for use by management and technical personnel to assess conditions during the initial phases of an emergency, prior to activation of the Emergency Operations Facility.

**Operational Support Center (OSC)** - An on-site emergency response facility area where FPL Operations, Maintenance, Health Physics, Security, and Chemistry support personnel can report in an emergency and await assignment.

**Plant** - The St. Lucie Plant, Units 1 and 2.

**Plume Exposure Pathway Emergency Planning Zone** - That area, approximately 10 miles in radius from the center of the plant, for which detailed plans are made to protect people from exposure to a plume containing radioactive materials.

**Protective Actions** - Those measures taken for the purpose of preventing or minimizing radiological exposure to persons.

**Quarterly** - Occurring once per calendar quarter with quarters ending on March 31, June 30, September 30, and December 31 in a year.

**Radiation Controlled Area (RCA)** - The area (within the Protected Area) wherein personnel access is restricted for the purpose of monitoring and controlling exposure to radiation.

1. GENERAL INFORMATION (continued)

1.2 Definitions (continued)

**REAC/TS** - The Radiological Emergency Assistance Center/Training Site is operated by the Oak Ridge Associated Universities for the Department of Energy. REAC/TS serves as backup medical support for the St. Lucie Plant.

**Recovery Actions** - Those actions taken after an emergency to restore the plant as nearly as possible to its condition before the emergency.

**Recovery Manager (RM)** - A designated company officer or senior manager, who will have responsibility for the direction and control of the EOF. He/she has the authority to establish policy and to expend funds necessary to cope with emergency situations that trigger the implementation of the Emergency Plan.

**Site** - A general term referring to the location of the St. Lucie Nuclear Power Plant. Other terms related to the site are given below:

**On-Site** - A relative term meaning those persons, things, locations, etc., which are associated with the "site."

**Off-Site** - A relative term meaning those persons, things, locations, etc., which are not directly associated with the "site." For example, this term is used to describe the State and local government groups as "off-site" agencies.

**Owner Controlled Area** - That portion of FPL property surrounding and including the St. Lucie Nuclear Power Plant which is subject to limited access and control as deemed appropriate by FPL.

**Protected Area** - The area (within the Owner Controlled Area) occupied by the nuclear units and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency.

**State** - The State of Florida.

**State Plan** - The State of Florida Radiological Emergency Management Plan (Annex A).

**System Operations Power Coordinator** - An FPL System Operations position which is staffed 24 hours/day for uninterrupted coordination of electrical power distribution. Communication is maintained with all FPL plants, service centers, and the General Office.



## 1. GENERAL INFORMATION (continued)

### 1.2 Definitions (continued)

**Technical Support Center (TSC)** - A designated on-site facility that serves as a work area for use by technical and management personnel. The TSC provides technical support to Control Room personnel in the event of an emergency.

**Technical Support Center Supervisor** - The person assigned to supervise the personnel and direct the technical support activities in the TSC.

**Thyroid Dose (CDE)** - The thyroid exposure from inhaled radioiodines - Committed Dose Equivalent. Thyroid Dose (CDE) is used in Protective Action determination.

**Total Dose (TEDE)** - The total exposure from both external and internal (weighted) sources - Total Effective Dose Equivalent.

### 1.3 Scope and Applicability

The Emergency Plan describes Florida Power & Light Company's plans for responding to emergencies that may develop at the St. Lucie Plant. The plan has been prepared to meet the requirements of 10 CFR 50.47, 10 CFR 50.72, and 10 CFR 50 Appendix E. The purpose of this plan is to define and assign authority and responsibility in order to protect the health and safety of the public and plant personnel. This plan applies to all plant emergencies which have resulted in, or which increase the risk of the accidental release of radioactive materials to the environment.

Plans have been developed based upon knowledge of the potential consequences, timing, and release characteristics of a spectrum of events. Emergency Planning Zones have been defined. **Figure 1-1** illustrates the Plume Exposure Pathway Emergency Planning Zone for the St. Lucie Plant. The map (**Figure 1-1**) does not specifically include the area of ocean east of the plant. Since there are no islands in that direction, any evacuation of boating traffic would be addressed on a best effort basis. A key component of this plan is coordination with federal, state, and county authorities who contribute to the overall response effort. This plan outlines company responsibilities within the framework of the overall emergency response organization, and provides a conceptual basis for the development of the detailed procedures necessary to implement the plan.

## 1. GENERAL INFORMATION (continued)

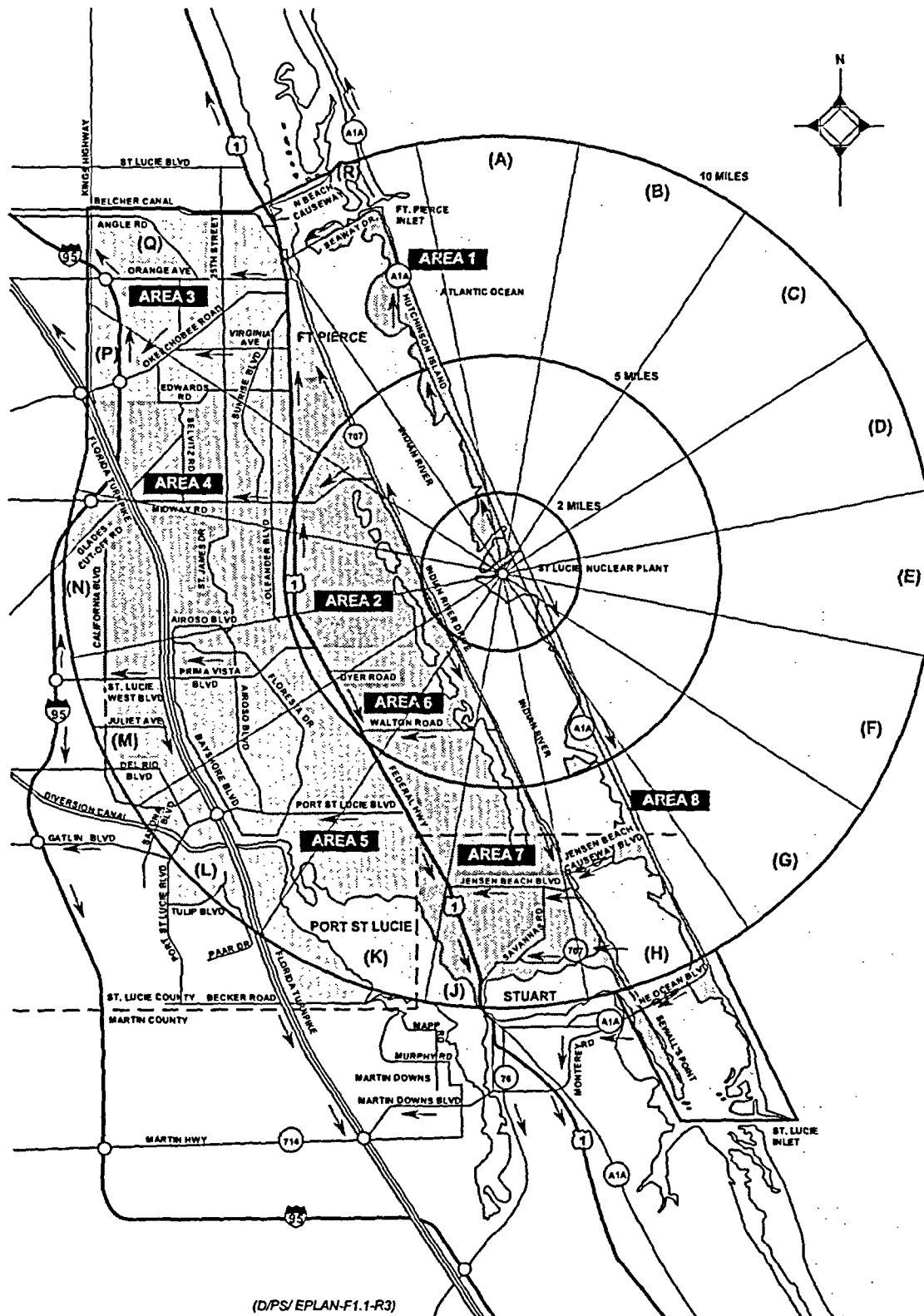
### 1.4 Concept of Operations

The Emergency Plan defines emergency conditions and delineates the responsibilities and duties of the FPL Emergency Response Organization. The Emergency Plan is concerned with the following basic activities, which are discussed in the Plan in detail:

1. Organization and resources adequate to detect the presence of an emergency condition, assess the condition, and respond in an appropriate manner (Chapter 2).
2. Assignment of an off-normal event to its proper emergency classification (Chapter 3).
3. Notification of off-site authorities, as required, and continuing communications (Chapter 4).
4. Gathering and interpreting data to determine appropriate actions (Chapter 5).
5. Assisting governmental agencies in the development of information for the public both in terms of preparatory education and emergency response information (Chapter 6).
6. Maintaining the FPL Emergency Preparedness Program in a state of readiness (Chapter 7).

Associated with this Emergency Plan are implementing procedures which provide a source of pertinent information and data required by the response organization during an emergency. These procedures are listed in Appendix C.

**FIGURE 1-1  
PLUME EXPOSURE PATHWAY EMERGENCY PLANNING ZONE**



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1. GENERAL INFORMATION (continued)

1.4 Concept of Operations (continued)

Off-normal events have been separated into the following four classifications of emergencies:

- A. Notification of Unusual Event
- B. Alert
- C. Site Area Emergency
- D. General Emergency

These four classes represent emergency conditions which trigger activation of emergency plans and procedures. When an emergency is declared in connection with one of these four classes, individuals assume new titles with special responsibilities.

Each emergency class is characterized by abnormal plant events detected by Control Room instrumentation and/or routine or directed surveillance activities.

The company's response to an emergency condition consists of an on-shift (immediate) response and an expanded (augmented) response Emergency Response Organization (ERO) which can readily adapt to an emergency condition as it develops. The immediate response phase encompasses the period of time and sequence of actions associated with the initial detection of an off-normal event, classification as an emergency, and activation of the Emergency Response Organization, if required. During this phase, the Shift Manager assumes responsibility as the Emergency Coordinator and initiates the following general activities:

- 1. Diagnosis of the emergency
- 2. Initiation of corrective actions
- 3. Classification of the emergency
- 4. Notification of appropriate FPL authorities
- 5. Notification of appropriate off-site authorities

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## 1. GENERAL INFORMATION (continued)

### 1.4 Concept of Operations (continued)

During the expanded response phase, the Emergency Coordinator will assess the situation and expand, as necessary, the Emergency Response Organization. All available company resources (on-site and off-site) can be mobilized as needed during this period. State, county and federal response organizations can become fully operational, as required. Continuing corrective, assessment, and protective actions are underway as required.

**Table 1-1** summarizes the sequence of actions taken during the phased response. **Figure 1-2** delineates the initial notification flow.

As discussed throughout this plan, FPL maintains adequate facilities and equipment for detecting, assessing, and responding to emergencies. Redundant means of communications among key response participants are maintained. FPL also maintains agreements that will provide emergency medical, rescue, or fire support on-site, if needed. The training program is designed to maintain the proficiency of the Emergency Response Organization.

The FPL individual in charge of on-site emergency response during the immediate and expanded response phases is the Emergency Coordinator. The senior company official involved in emergencies, with responsibility for policy and authority to expend funds, is the Recovery Manager. The Recovery Manager is also responsible for Emergency Operations Facility operation during the expanded response phase.

In St. Lucie and Martin Counties, the individual responsible during emergencies is the Chairperson, County Board of Commissioners or his/her designate (Director of County Department of Public Safety). In both counties, the Chairperson, County Board of Commissioners, is responsible for direction and control during emergencies.

As indicated in Annex A (Chapter 2) of the State Plan, the State Emergency Response Team (SERT) will operate from the State Emergency Operations Center in Tallahassee led by a Governor-appointed State Coordinating Officer (SCO), usually the Director of the Division of Emergency Management.

1. GENERAL INFORMATION (continued)

1.5 Supporting Plans and Agreements (continued)

Supporting plans and agreements are included in the Appendices of this plan. Additional material utilized in the preparation of the St. Lucie Plan are:

1. NUREG-0654, Rev. 1, FEMA REP.1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants; November, 1980.
2. NUREG-0578, TMI-2 Lessons Learned Task Force: Status Report and Short-Term Recommendations; July, 1979.
3. NUREG-0737, Clarification of TMI Action Plan Requirements; November, 1980.
4. 10 CFR 20, Standards for Protection Against Radiation.
5. 10 CFR 50, Domestic Licensing of Production and Utilization Facilities.
6. EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents; October 1991.
7. Reg. Guide 1.97, Revision 2, Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident; December, 1980.
8. NUREG-0845, Agency Procedures for the NRC Incident Response Plan: Final Report; February, 1983.
9. NUREG/BR-0150, Vol. 1, Response Technical Manual (USNRC).
10. UFSAR - Unit 1, Section 13.3, Emergency Planning
11. UFSAR - Unit 2, Section 13.3, Emergency Planning
12. Fire Protection Plan (AP 1800022)
13. St. Lucie Security Plan
14. Nuclear Energy Policy on Exposure Limits for Emergency Response Personnel, Revision to Policy Statement, Ltr. No. JNO-HP-94-056, 26 October, 1994.

**TABLE 1-1  
TYPICAL SEQUENCE OF ACTIONS**

**FPL RESPONSE**

**Detection of Off-Normal Conditions**

- Individual identifies off-normal condition.
- Individual immediately notifies Shift Manager (SM).

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**Response Actions**

- SM diagnoses condition and directs initial corrective action to control or mitigate the condition.
- SM classifies condition in accordance with plant procedures. If the condition is classified as an emergency, the SM implements the Emergency Plan and becomes the Emergency Coordinator (EC).
- The EC mobilizes on-site response teams as necessary to assess and control the emergency.
- EC initiates necessary protective actions for on-site personnel, and evaluates need for protective action recommendations for the general public.
- EC notifies state and county in accordance with plant procedures.
- Duty Call Supervisor (DCS) makes notifications as requested by the EC.
- The EC orders mobilization of the Emergency Response Organization (ERO) required for Alert classification or higher classification, in accordance with plant procedures.
- EC notifies NRC via Emergency Notification System (ENS) communications link, in accordance with plant procedures.

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**TABLE 1-1**  
**TYPICAL SEQUENCE OF ACTIONS**  
(continued)

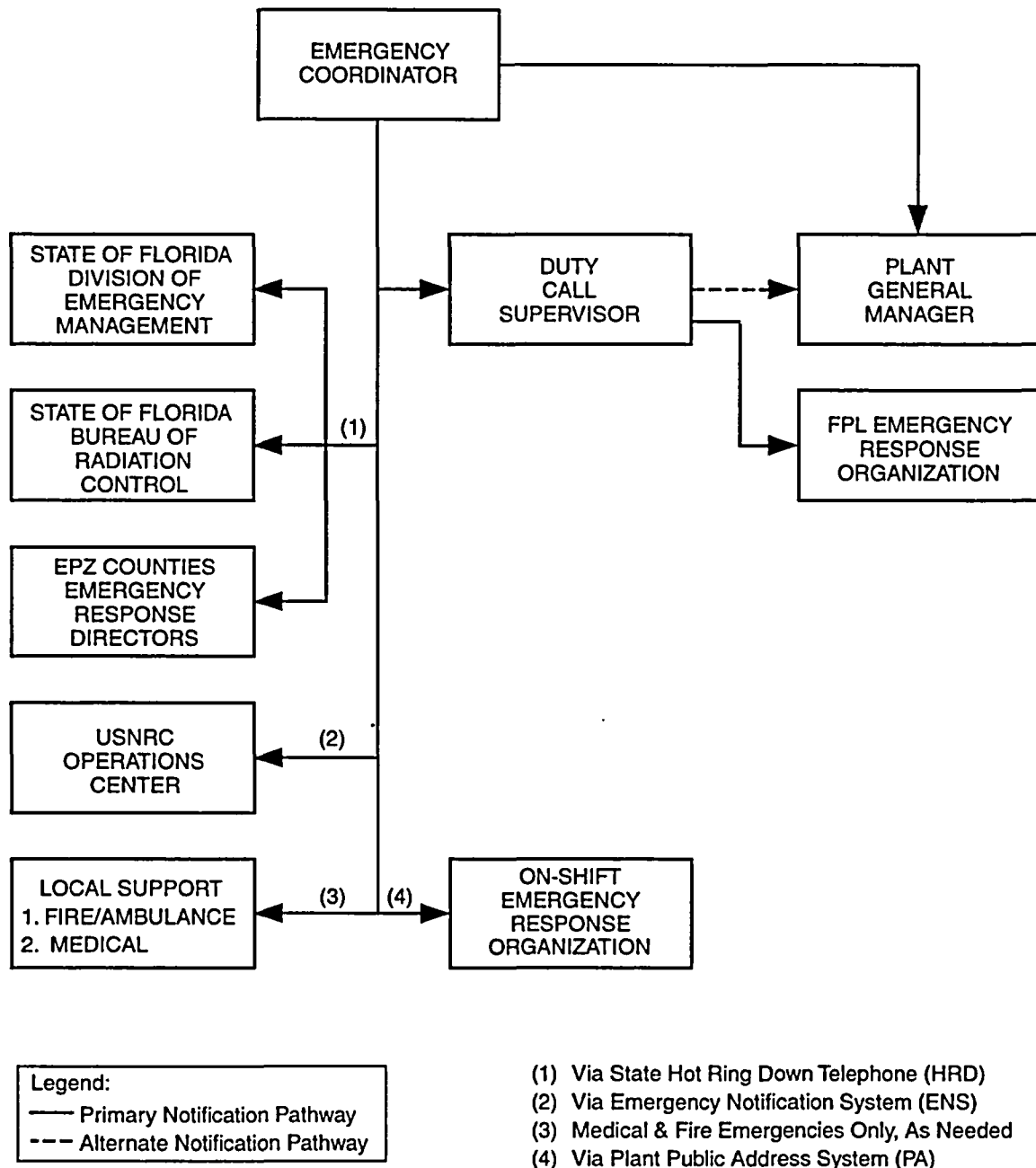
**FPL RESPONSE (continued)**

**Expanded Response** (as appropriate)

- The Technical Support Center (TSC) and the Operational Support Center (OSC) are staffed and declared operational assuming command and control of the emergency. This includes Protective Action Recommendations (PARs), notifications, and classification.
- The Emergency Control Officer (ECO) and Recovery Manager (RM) proceed to the Emergency Operations Facility (EOF). RM notifies EC when EOF is operational and assumes responsibility for recommending off-site protective actions and for communications with off-site organizations. The EC can now devote his/her attention to control of the power plant.
- RM (or designated response staff) receives and assesses periodic plant status, radiological data, and meteorological data, and continues communications and coordination with the state and county authorities.
- RM continues assessment of conditions and control of FPL response until plant conditions stabilize then closes out with summary to off-site authorities (Alert or higher classification) or prepares for further long-term activities.
- Emergency Information Manager (EIM) proceeds to the Emergency Operations Facility (EOF) as appropriate and establishes communications with the Emergency Control Officer (ECO) and the Emergency News Center (ENC).



**FIGURE 1-2  
INITIAL NOTIFICATION**



(D/PS/ EPLAN-F1.2-R35)

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES

### 2.1 Elements of the Emergency Response Organization

This section defines the primary components of the overall Emergency Response Organization and the relationship of each component to the total effort.

#### 1. Florida Power & Light Company

Florida Power & Light Company (FPL) is the licensed operator of the St. Lucie Plant. As the licensed operator, FPL has developed this Emergency Plan (and associated procedures) to specify actions and provide a framework for emergency response. FPL's primary responsibilities include the following:

1. Diagnosis and corrective action.
2. Emergency classification.
3. Notification of appropriate outside response organizations and continuing communication.
4. Initiation of protective actions for employees and others on-site.
5. Recommendation of protective actions, for the public.
6. Mobilization of Florida Power & Light Company Emergency Response Organization.
7. Continuing data collection, dose projection, and assessment actions.
8. Owner Controlled Area recovery and re-entry.

The Florida Power & Light Company Emergency Response Capability is described in detail in Section 2.2 and illustrated in **Figure 2-1**.

#### 2. State of Florida Emergency Response Organization

As stated in Appendix III, Section III, St. Lucie and Martin Counties are responsible for initial radiological emergency response operations. Should the scope of the emergency exceed the response capability of the risk counties, increased State action will be warranted. The Governor may transfer responsibility for overall emergency management to the State by issuing an Executive Order under the provisions of Section 252.35, Florida Statutes. Upon issuance of such an Executive Order, the risk, host and ingestion counties will continue to coordinate county response operations.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.1 2. State of Florida Emergency Response Organization (continued)

#### **State of Florida Division of Emergency Management**

The Division of Emergency Management (DEM) is the state agency authorized to receive initial notification from Florida Power & Light Company and is responsible for mobilizing the state and county emergency response agencies. Specific discussion on transportation of state emergency response personnel to the vicinity of the plant is discussed in Annex A (Chapter 8) of the State Plan. This emergency response is conducted in accordance with the State Plan prepared by the DEM, in coordination with other State and County emergency response agencies. The locations where State Plan copies are kept appear in Appendix A.

The DEM's defined responsibilities include:

1. Overall responsibility for coordinating the development and implementation of state and county emergency response plans.
2. Command and control of State emergency response resources.
3. Notification of state and county response agencies.
4. Coordination among state, federal (i.e., FEMA, EPA, DOE), and local agencies.

#### **State of Florida Department of Health**

The Department of Health is the state agency authorized to provide the DEM with technical support and expertise in public health matters.

Department of Health defined responsibilities include:

1. Emergency medical services, public health, and sanitation.
2. Economic and social services.

Through the Bureau of Radiation Control

3. Radiological monitoring, off-site.
4. Off-site radiological exposure control and protective response recommendations for plume and ingestion pathway counties.

2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

2.1 2. State of Florida Emergency Response Organization (continued)

**Department of Highway Safety and Motor Vehicles, Division of  
Florida Highway Patrol**

The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services.

1. Traffic control
2. Communications (support)
3. Law enforcement coordination
4. Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary
5. Within their authority, evaluate and exclude individuals from designated public areas.

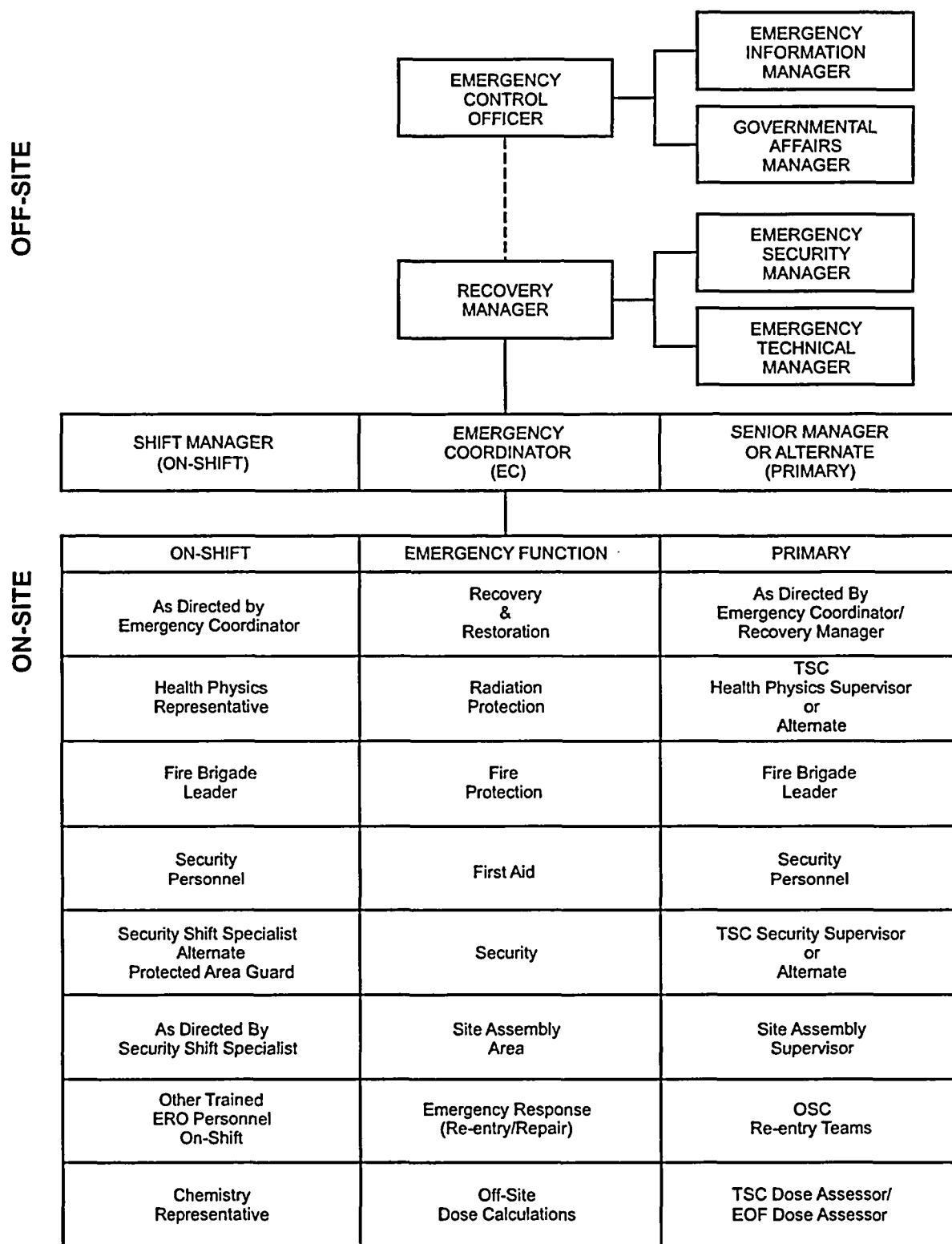
These services will be provided in accordance with the State Plan (Annex A Chapter 2).

**Other State Agencies**

As defined in the State Plan (Annex A Chapter 2), the DEM can request support as necessary from the following state agencies.

1. Department of Transportation
2. Department of Military Affairs
3. American Red Cross

**FIGURE 2-1  
FPL EMERGENCY RESPONSE CAPABILITY**



(D/PS/EPLAN-F2.1-R36)

/R44

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES

### 2.1 3. County Emergency Response Agencies

Counties that fall within the plume exposure pathway EPZ include St. Lucie County and Martin County. Counties that fall within the ingestion pathway EPZ include St. Lucie County, Martin County, Indian River County, Brevard County, Palm Beach County, Osceola County, Okeechobee County, Highlands County and Glades County. The responsibility for hosting evacuees rests on Palm Beach, Indian River, and Brevard Counties.

The county emergency response agencies are described in Appendix III of the State Plan.

Annex A (Chapter 10) of the State Plan addresses short term actions required in the plume exposure pathway EPZ and ingestion pathway EPZ. State agencies take the lead in controlling ingestion pathway response. Appendix III establishes procedures to protect citizens of St. Lucie County and visitors to the County from the effects of an accident at the St. Lucie plant. Section II A of Appendix III includes the St. Lucie County Radiological Emergency Organization. Section II B of Appendix III establishes procedures to protect citizens of Martin County and visitors to Martin County from the effects of an accident at the St. Lucie plant. Section II B of Appendix III describes the Martin County Radiological Emergency Organization. Section II C, II D, and II E to Appendix III include host plans for Indian River County, Palm Beach County, and Brevard County, respectively.

Boards of County Commissioners will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power accidents. During radiological emergencies, resources and personnel of St. Lucie, Martin, Indian River, Palm Beach, and Brevard Counties will be reserved and available for use by County Commissioners. Decision to implement protective action recommendations will be made jointly by the Chairpersons, Boards of County Commissioners (of the affected counties), and the Governor or State Director, Division of Emergency Management. If time does not permit State involvement in initial decision making, the decision to take protective actions may be made by the Chairperson, Board of County Commissioners (for the respective affected county), or designated alternate. All County personnel and resources will be under the control of the County Commissioners. Federal and State resources will also be available to the Counties.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.1 3. County Emergency Response Agencies (continued)

Alerting, warning, and evacuation of populations will be in accordance with procedures prescribed in Sections VI and VII of Appendix III and in Chapters 5 and 11 of Annex A. Sections IX and XII of Appendix III describe hosting responsibilities, including shelter location and operation, and evacuee registration, monitoring, and decontamination.

Responsibility for direction and control of emergency response of each county rests with the Chairperson, Board of County Commissioners, unless a disaster declaration under provisions of Florida Statutes, Chapter 252 is in effect. If a disaster has been declared, responsibility for direction and control rests with the Governor or authorized representative.

County Departments of Public Safety report to the Boards of County Commissioners. This is also true for other County resources, including the Sheriffs' Offices, Engineers' Offices, Fire Departments, Public Health Offices, School Boards, and other county organizations.

The Chairperson, Board of County Commissioners, has responsibility for overall emergency response planning. County Public Safety Directors are responsible for actual plan development and updating. St. Lucie County, Palm Beach County, Martin County, Indian River County, and Brevard County each have an Emergency Operations Center (EOC).

#### **St. Lucie and Martin County Public Safety Directors**

The Public Safety Directors for St. Lucie and Martin Counties have the major responsibility for coordinating emergency operations including communicating with the County Board and State DEM. The County Public Safety Directors receive initial notification from Florida Power & Light Company simultaneously with DEM via the State's Hot Ring Down telephone for all radiological emergencies. The St. Lucie and Martin County Public Safety Directors then have responsibility for initiating any necessary protective actions for off-site areas (including off-site evacuations) based upon available information from the FPL Emergency Coordinator, Recovery Manager, and Bureau of Radiation Control. The St. Lucie County and Martin County plans are a part of the State Plan. In addition to overall responsibility, the Public Safety Directors have responsibility for the following:

2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

2.1 3. County Emergency Response Agencies (continued)

**St. Lucie and Martin County Public Safety Directors (continued)**

1. Coordination of county resources
2. Protective response for off-site areas including warning and evacuation
3. Communications
4. Public information
5. Off-site radiological exposure control
6. Coordination of arrangements for shelter and feeding of evacuees

**County Sheriffs (St. Lucie and Martin Counties)**

At the request of the respective Public Safety Director, the County Sheriffs can provide the following support services:

1. Law enforcement
2. Warning and evacuation (implementation)
3. Traffic control
4. Communications (support)
5. Rescue (support)

**Other Local Agencies**

As defined in the County plans, the Public Safety Director can request support as necessary from the following:

1. County Engineer's Department
2. County Road Department
3. County Public Health Departments
4. Public School Boards
5. County Fire/Rescue Department



## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.1 3. County Emergency Response Agencies (continued)

#### **Other Local Agencies (continued)**

St. Lucie County-Fort Pierce Fire District by agreement with Florida Power & Light Company (Appendix B) will respond to emergencies on-site upon request.

### 4. Federal Response Agencies

#### **U.S. Nuclear Regulatory Commission**

The Nuclear Regulatory Commission (NRC) will be notified via a dedicated telephone line (ENS) from the Control Room to the Operations Center in Maryland within one hour after classifying an emergency condition. NRC is responsible for coordination of the Federal Government's technical response activities.

#### **U.S. Coast Guard**

At the request of Florida Power & Light Company (on-site activities) and the DEM (off-site activities), the Coast Guard can provide rescue assistance in accordance with their general authority as described in Appendix B.

#### **U.S. Department of Energy (DOE)**

Upon request by the Department of Health, DEM can request that the DOE provide a Radiological Assistance Team to aid in evaluating radiological hazards. This support would be provided out of DOE's Savannah River Operations Office, Aiken, South Carolina. This provision is described in Annex A, Chapter 9, Section IV, of the State Plan. DOE is responsible for coordinating the off-site radiological monitoring and evaluation activities of the Federal Government.

#### **Federal Emergency Management Agency (FEMA)**

FEMA has the responsibility for coordinating all non-technical response activities of the Federal Government off-site. They serve as the primary point of contact for requests for federal assistance from state and local officials and other federal agencies.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.1 5. Private Sector Organizations

#### **Institute of Nuclear Power Operations (INPO)**

INPO maintains industry source lists for personnel and equipment which can be made available for support services during an emergency.

#### **Westinghouse Electric**

ABB/Combustion Engineering (CE), now Westinghouse Electric, is the Nuclear Steam Supply System vendor for the St. Lucie Plant. Upon request, CE can supply emergency technical services and resources as provided by the Purchase Order listed in Appendix B.

#### **Washington Group**

Ebasco/Raytheon, now Washington Group, is the Architect/Engineer for the St. Lucie Plant. Upon request, Washington Group can supply emergency technical services as provided by the Purchase Order listed in Appendix B.

### 2.2 Florida Power & Light Company Emergency Response Organization (ERO)

The purpose of this section is to describe FPL's Emergency Response Organization. The Emergency Response Organization is defined relative to the two phases of response and actions which are anticipated. This approach recognizes that the organization will be a dynamic one, dependent upon response time and the severity of the emergency. The "on-shift" response consists of shift operators, the plant duty shift and other trained plant personnel as available who are responsible for diagnosing the emergency and taking corrective actions. Along with the required shift operations personnel, the "expanded" response includes personnel necessary to man the TSC, OSC, and EOF. The ERO includes plant and corporate personnel who are available, as the emergency warrants, to assist in assessment actions, control, and stabilization.

#### 1. Normal On-site Operating Organization

The normal operating organization chart for St. Lucie Plant is shown in **Figure 2-3**. The plant is staffed with qualified personnel prepared to take necessary actions to implement the Emergency Plan and to initiate the necessary immediate response actions.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 1. Normal On-site Operating Organization (continued)

During normal hours, the operating staff at the St. Lucie Plant consists of approximately 775 people. During off-hours approximately 76 employees are on-site. Key operating positions are described below:

#### **Vice President - St. Lucie Plant**

The Vice President - St. Lucie Plant, reports to the Chief Nuclear Officer and has the direct responsibility for the operation and maintenance of the St. Lucie Plant in a safe, reliable, and efficient manner.

#### **Plant General Manager**

The Plant General Manager reports to the Vice President - St. Lucie Plant and is responsible for overall operation and control over those on-site activities necessary for safe operation and maintenance of the plant.

#### **Operations Manager**

The Operations Manager reports directly to the Plant General Manager and has the overall responsibility for directing the day-to-day operation of the plant. The Operations Manager coordinates operations-related maintenance activities with the Maintenance Manager. The Operations Manager is responsible for directing supervisory activities in the areas of Operations and Chemistry.

#### **Operations Supervisor**

The Operations Supervisor reports directly to the Operations Manager. He/she has responsibility for directing the activities of the nuclear plant operating shifts, including the Shift Manager and Unit Supervisors. He/she holds an NRC Senior Reactor Operator License. He/she is also responsible for supervision of fuel handling operations.

#### **Shift Manager (SM)**

The Shift Manager reports directly to the Operations Supervisor. He/she is responsible for the actual operation of the nuclear plant and fuel handling operations on his/her assigned shift. He/she holds an active NRC Senior Reactor Operator License. He/she directs the activities of the personnel on his/her shift and is cognizant of maintenance activities being performed while on duty.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 1. Normal On-site Operating Organization (continued)

#### **Unit Supervisor (US)**

The Unit Supervisor reports directly to the Shift Manager. He/she holds an active NRC Senior Reactor Operator License. He/she directs the activities of the Operators on his/her assigned Unit and remains cognizant of all maintenance activities performed on that Unit while on duty.

#### **Nuclear Watch Engineer (NWE)**

The Nuclear Watch Engineer (NWE) reports directly to both Unit Supervisors. He/she is the operating shift foreman and is responsible for plant operations on his/her shift. The NWE holds an active NRC Senior Reactor Operator License. The NWE directs the activities of the licensed and non-licensed operators on his/her shift. He/she is the designated alternate for the US. He/she routinely relieves the US of the control room command function to enable the US to leave the control room. He/she is authorized to direct new and spent fuel handling operations.

#### **Chemistry Supervisor**

The Chemistry Supervisor is responsible for administrative oversight of the Chemistry Control Program. He/she serves as a member of the St. Lucie Plant Emergency Response Organization.

#### **Health Physics Supervisor**

The Health Physics Supervisor is responsible for administrative oversight of the Radiation Protection Program. He/she serves as a member of the St. Lucie Plant Emergency Response Organization.

#### **Reactor Engineering Supervisor**

The Reactor Engineering Supervisor reports to the Engineering Manager. He/she supervises the Reactor Engineering Department. He/she is responsible for monitoring day-to-day reactor operation, nuclear physics testing, fuel burnup calculations, fuel shuffles during refuelings, and various administrative duties.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 1. Normal On-site Operating Organization (continued)

#### **Maintenance Manager**

The Maintenance Manager reports directly to the Plant General Manager. He/she supervises the Electrical Maintenance, Mechanical Maintenance, and Instrument and Control (I&C) Departments. He/she is responsible for the maintenance of mechanical, electrical, and I&C equipment in the nuclear units.

#### **System Engineering Manager**

The System Engineering Manager reports directly to the Engineering Manager. He/she supervises general plant engineers and technicians.

#### **Quality Control Supervisor**

The Quality Control Supervisor reports directly to the Site Quality Manager. He/she supervises the Quality Control (QC) Department. He/she is responsible for directing the activities of the QC Inspectors who perform surveillance and inspection of nuclear safety related activities to monitor for technical specification and regulatory compliance.

#### **Fire Brigade Leader**

The Fire Brigade Leader reports to the SM, US or EC. The Fire Brigade Leader is a designated on-shift Operations Department individual who has the knowledge or has received sufficient training in plant safety-related systems to understand the effects of fire and fire suppressants on safe shutdown capability and advises the Control Room as required in the FSAR and 10 CFR 50, Appendix R.

#### **Facility Review Group (FRG)**

The Facility Review Group functions to advise the Plant General Manager on all matters related to nuclear safety. Specific responsibilities of the FRG are identified in Technical Specifications.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 (continued)

#### 2. On-shift Response Phase

Initiating Event (Unusual Event, Alert, Site Area Emergency or General Emergency)

The emergency response is initiated by any individual who discovers an emergency condition. This person notifies the Shift Manager by the fastest means possible. This first phase is characterized by diagnosis and immediate action by the plant operators on shift.

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#### Organization

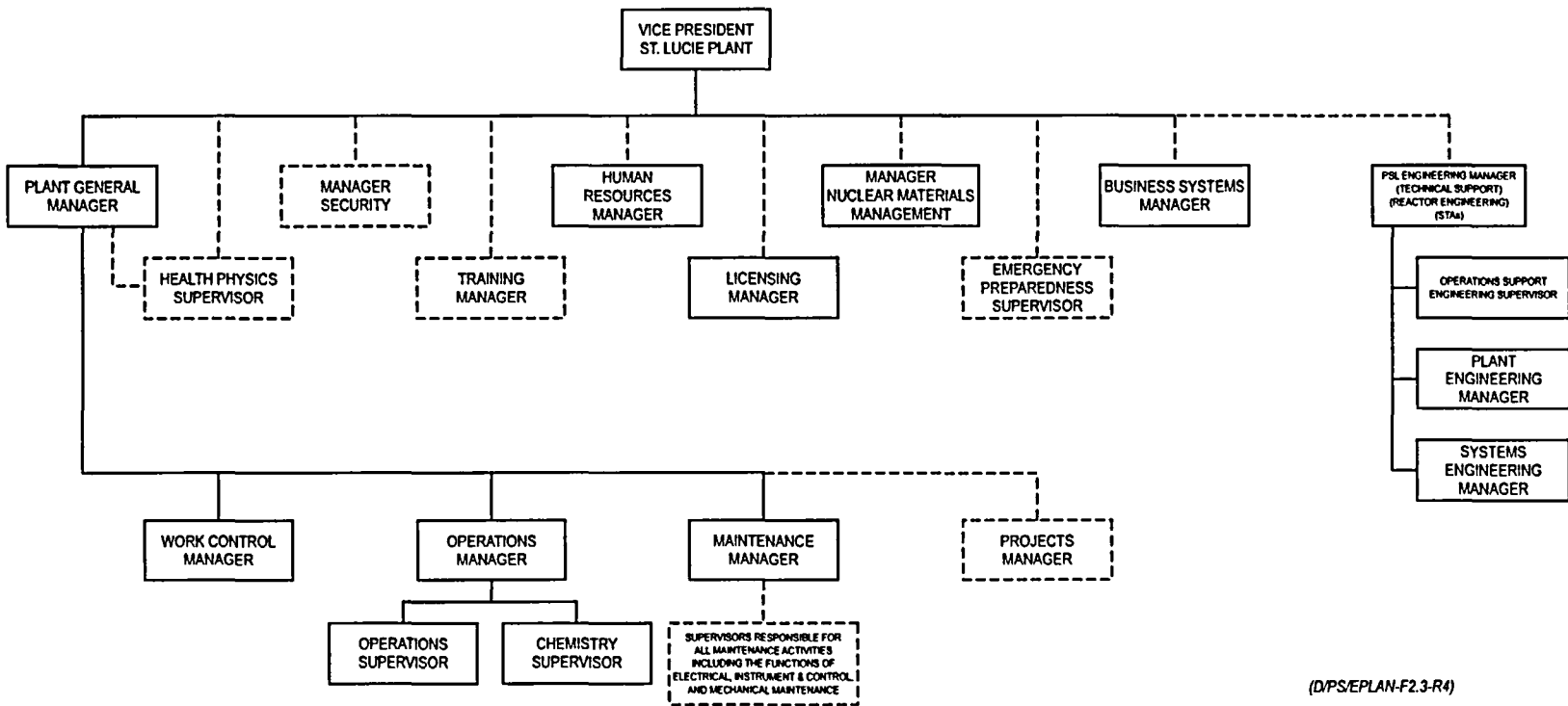
If the diagnosis indicates that the condition should be classified as an Unusual Event, Alert, Site Area Emergency, or General Emergency, the Shift Manager declares an emergency.

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The Shift Manager becomes the Emergency Coordinator and, as such, directs the On-shift Emergency Response Organization. Initially, shift operators and the plant duty staff constitute the response organization. Emergency requirements take immediate precedence over normal operating responsibilities (as determined by procedure or at the direction of the Emergency Coordinator). The Plant Staff Emergency Assignments section describes the emergency services that can be provided initially by shift operators and the plant duty staff. **Figure 2-4** shows the On-shift Emergency Response Capability.

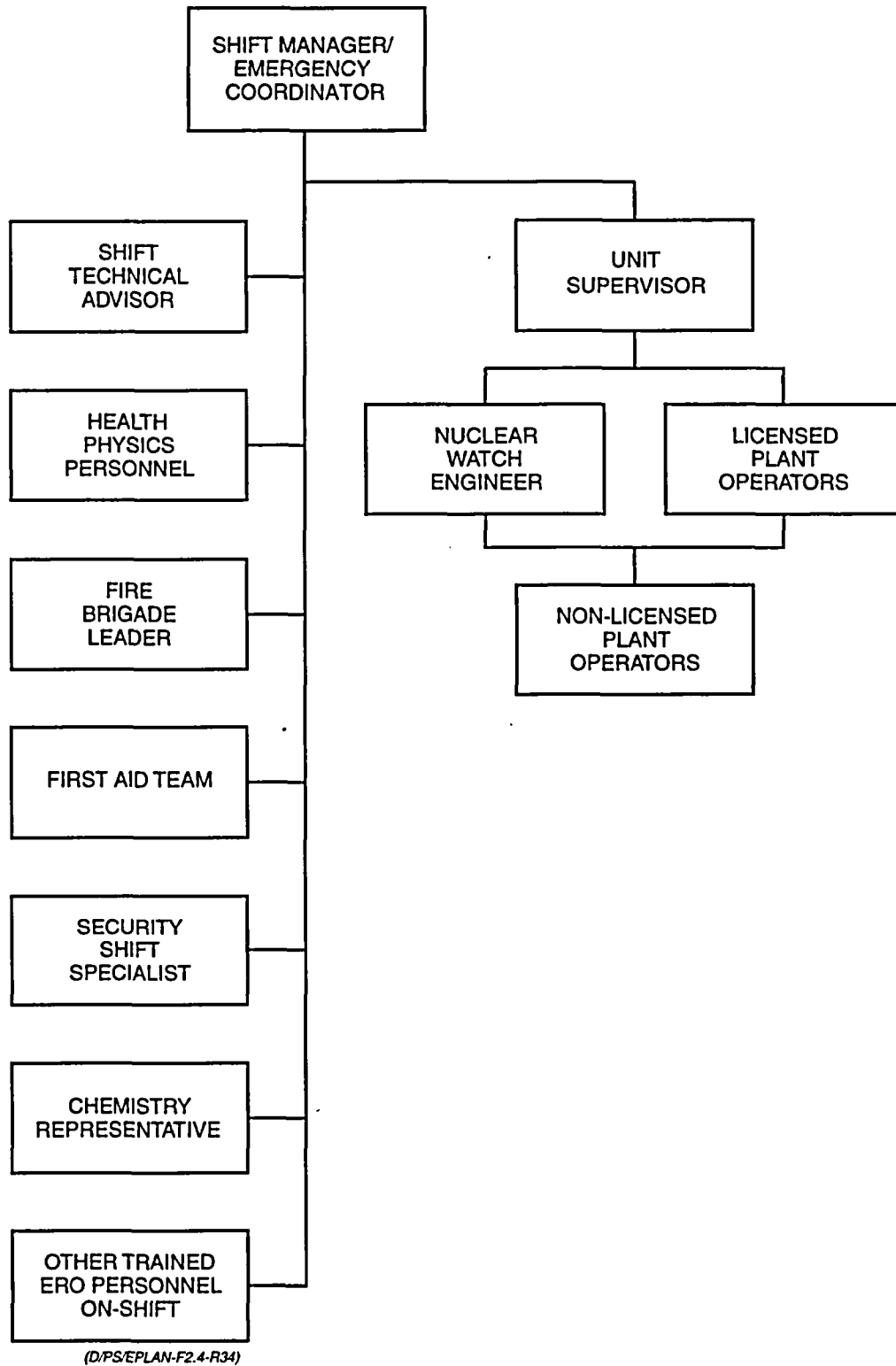
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FIGURE 2-3  
ST. LUCIE PLANT NORMAL OPERATING ORGANIZATION



(DPS/EPLAN-F2.3-R4)

**FIGURE 2-4  
ON-SHIFT EMERGENCY RESPONSE CAPABILITY**



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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 2. On-shift Response Phase (continued)

#### **Line of Succession**

In the event the Shift Manager is incapacitated, the Emergency Coordinator will be (in order of succession):

1. Unit Supervisor (from the affected Unit)
2. Nuclear Watch Engineer
3. Any other member of the plant staff with an active Senior Reactor Operator license.

It is the responsibility of the new Emergency Coordinator to ascertain the status of all Emergency Coordinator responsibilities prior to assumption of duty. The Emergency Coordinator can grant permission for watch relief, including his/her own, when it is safe in his/her judgement to do so.

The Plant General Manager, Operations Manager, or Operations Supervisor should assume the Emergency Coordinator function from the Shift Manager following proper turnover. Other senior managers who have extensive plant or industry operating experience or knowledge and Emergency Coordinator qualifications may assume the Emergency Coordinator function.

#### **Actions**

The Emergency Coordinator initiates the following actions per plant procedures and using his judgement:

1. Orders corrective actions to bring the emergency under control.
2. Mobilizes the Emergency Response Organization.
3. Notifies the State Division of Emergency Management State Warning Point Duty Officer and County Public Safety Directors, in accordance with plant procedures.
4. Provides recommendations for off-site protective action as discussed in Chapter 5.
5. Notifies NRC via ENS within one hour of declaration of an emergency condition.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 2. On-shift Response Phase (continued)

#### **Delegation**

The Emergency Coordinator shall not delegate the following responsibilities prior to the EOF being declared operational:

1. Classification of Emergencies
2. Decision to notify off-site organizations and the content of those notifications.
3. Recommendation of protective actions for the public (off-site).

The EC may delegate the completion of certain tasks, but is responsible to ensure that all tasks are completed and logged.

#### **Turnover**

Once the Emergency Operations Facility (EOF) is operational and proper turnover has been conducted, the Recovery Manager will assume responsibility for notification of off-site organizations and for recommending protective actions.

#### **Plant Staff Emergency Assignments**

##### A. On-shift Emergency Response Organization

1. The On-shift Emergency Response Organization is composed of operators, the plant duty staff and other trained ERO personnel on-shift. All are qualified in procedures and practices required for the performances of their duties as ERO members. The On-shift Emergency Response Organization takes action until the emergency condition is mitigated or until relieved.
2. Members of the On-shift Emergency Response Organization may consider themselves relieved only upon the specific instructions of the EC or appropriate facility supervisor. Merely knowing that a replacement is present does not constitute a release from emergency duties and responsibilities.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 2. On-shift Response Phase (continued)

#### B. Expanded Emergency Response Organization

1. The Expanded Emergency Response Organization is composed of operations personnel and ERO personnel to man the TSC, OSC, and EOF, as necessary.
2. With the knowledge of the appropriate facility supervisor, alternate ERO members may relieve their counterpart on the On-shift Emergency Response Organization.

#### C. Functional Areas of Emergency Activity

1. Plant Operations and Assessments of Operational Aspects

The Shift Manager (SM) on duty becomes the Emergency Coordinator (EC) in the event of an emergency. His/her normal alternate is the Unit Supervisor (US) from the affected unit. The SM and US positions are constantly manned. The Plant General Manager, Operations Manager, Operations Supervisor, or another EC-trained person should assume the Emergency Coordinator function following proper turnover.

If the Technical Support Center (TSC) is activated, the EC should direct the on-site Emergency Response Organization (ERO) from the TSC. The SM will remain in the control room to control and monitor plant conditions.

2. Emergency Direction and Control

Emergency Coordinator as previously discussed.

3. Notification and Communication

Emergency Coordinator as previously discussed.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 2. C. Functional Areas of Emergency Activity (continued)

#### 4. Radiological Accident Assessment and In-Plant Protective Actions

The primary TSC Health Physics Supervisor is the Health Physics Supervisor. He/she directs the radiological surveillance performed by the Health Physics technicians under the orders of the Emergency Coordinator. Prior to the availability of the TSC Health Physics Supervisor, the Health Physics technicians on-site will provide assistance to the EC in recommending protective actions based on radiological assessments.

The Chemistry Department performs off-site radiological dose assessment until the EOF is manned and operational and the Recovery Manager, through his/her staff, relieves them of this responsibility. The TSC Chemistry Supervisor will continue to monitor dose assessment results with personnel performing dose calculations in the EOF.

#### 5. Plant System Engineering, Repair, and Corrective Actions and Support of Operational Accident Assessment

The Shift Technical Advisor will provide the initial technical support necessary for repair, corrective actions, and operational accident assessment.

#### 6. Firefighting

The Fire Brigade provides first line response to a fire on-site. The Fire Brigade is under the direction of the Fire Brigade Leader. The St. Lucie County - Ft. Pierce Fire District can respond to fires on-site, if requested.

#### 7. Rescue Operations and First Aid

A. Rescue Operations involve the First Aid Team and Health Physics personnel as necessary. Under the control of the Emergency Coordinator/TSC Health Physics Supervisor, entry to potentially hazardous areas will be made by the First Aid Team with assistance from Health Physics personnel. Upon notification of the injury, the team will respond per the Emergency Coordinator's instructions.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 2. C. Functional Areas of Emergency Activity (continued)

7. B. An Operations Department representative, trained in first aid will act as the on-shift team leader for the First Aid Team. Security personnel, also trained in first aid will serve as the First Aid Team members and be the primary care provider.

#### 8. Access Control and Personnel Accountability

The TSC Security Supervisor will ensure personnel control and accountability. It is estimated that personnel accountability can be accomplished within 30 minutes following the declaration of an evacuation by the EC. Notification of occupants in the Owner Controlled Area, outside the Protected Area, will be accomplished by security sweeps.

#### 9. Repair and Damage Control

Repair and damage control will be performed by assigned teams. These teams may be composed of members from any plant discipline and may be augmented by non-Florida Power & Light Company support personnel. Under the direction of the Emergency Coordinator or his/her designee, these teams are used to mitigate the consequences of the accident and to help restore the normal operation of the plant. Actions include, but are not limited to, the movement and set-up of portable shielding, tools, emergency equipment, the repair of equipment and the operation of plant systems.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 3. Expanded Response Phase

#### Initiating Action

This phase is initiated by the Emergency Coordinator (EC). Notification by the EC provides the basis for mobilization of the Florida Power & Light Company Emergency Response Organization (ERO) as well as state, local, and federal emergency response organizations. Activation of FPL personnel proceeds to the degree necessary, as determined by the EC, in response to the severity of the emergency.

In an Alert or higher emergency, the Technical Support Center (TSC) and the Operational Support Center (OSC) shall become operational. The Emergency Operations Facility (EOF) shall become operational in a Site Area Emergency and/or General Emergency. **Figure 2-5** shows the response organization that can develop during this period.

**TABLE 2-1  
MINIMUM SHIFT CREW COMPOSITION FOR A TWO UNIT SITE  
WITH SEPARATE CONTROL ROOMS**

**With Other Unit in Mode 5 or 6 or Defueled**

<b><u>Position</u></b>	<b>Number of Individuals Required to Fill Position</b>	
	<b><u>Mode 1, 2, 3, or 4</u></b>	<b><u>Mode 5 or 6</u></b>
Shift Supervisor (SRO)	1 <sup>a</sup>	1 <sup>a</sup>
Senior Reactor Operators	1	None
Reactor Operators	2	1
Auxiliary Operators	2	2 <sup>b</sup>
Shift Technical Advisor*	1	None

**With other Unit in Mode 1, 2, 3, or 4**

<b><u>Position</u></b>	<b>Number of Individuals Required to Fill Position</b>	
	<b><u>Mode 1, 2, 3, or 4</u></b>	<b><u>Mode 5 or 6</u></b>
Shift Supervisor (SRO)	1 <sup>a</sup>	1 <sup>a</sup>
Senior Reactor Operators	1	None
Reactor Operators	2	1
Auxiliary Operators	2	1
Shift Technical Advisor*	1 <sup>c</sup>	None

<sup>a</sup> Individual may fill the same position on the other unit

<sup>b</sup> One of the two required individuals may fill the same position on the other unit

<sup>c</sup> If the Shift Technical Advisor (STA) is filled by a STA-qualified Shift Supervisor or dedicated STA, then the individual may fill the same position on the other Unit.

\* A single, on-site STA position shall be manned in Mode 1, 2, 3 and 4 unless the Shift Supervisor meets the qualifications for the STA as required by Technical Specification 6.3.1 or an individual on each unit with a Senior Reactor Operator's license meets the qualifications for the STA as required by Technical Specification 6.3.1.

**ADDITIONAL SHIFT STAFFING FOR ALL MODES OF OPERATION**

<b><u>Position</u></b>	<b><u>Number on Shift</u></b>
Health Physics Technicians	1 per Unit
Rad/Chemistry Technicians	1
Fire Brigade	5 (from designated on site staff)
Security	Per Security Plan

**TABLE 2-1 (continued)**  
**SHIFT STAFFING AUGMENTATION AND EMERGENCY CAPABILITIES**

**NOTE**

Augmented staffing capabilities are routinely tested to ensure timely response is maintained with respect to the goals identified in NUREG 0654.

<u>Major Functional Area</u>	<u>Augmented Staffing Capabilities/ NUREG-0654 Goal</u>	
	<u>30 min.</u>	<u>60 min.</u>
1. Notification/Communication	1	2
2. Radiological Accident Assessment and Support of Operational Accident Assessment/Protective Actions (In-Plant)		
A. Activate EOF (Sr. Mgt. Rep.)	---	1
B. Off-site Dose Assessment and Rad/Chem technician <sup>1</sup>	1 <sup>2</sup>	1
C. Health Physics Technicians <sup>1</sup>	6 <sup>3</sup>	6
3. Plant System Engineering, Repair and Corrective Actions		
A. Core/Thermal Hydraulics	1	---
B. Electrical (TSC)/ Mechanical (TSC)	--- ---	1 1
C. Mechanical Maintenance/ Radwaste Operator	--- ---	1 1
D. Electrical Maintenance	1	1
E. I&C Technician	1	---

---

<sup>1</sup> Combines all qualified individuals for similar functions from Table B-1 of NUREG-0654, Rev. 1

<sup>2</sup> On-shift

<sup>3</sup> Two are on-shift



**TABLE 2-2**  
**FLORIDA POWER & LIGHT EMERGENCY RESPONSE ORGANIZATION**  
**FUNCTIONS AND RESPONSIBILITIES**

<b><u>RESPONSIBILITY</u></b>		
<b><u>Function</u></b>	<b><u>On-shift</u></b>	<b><u>Expanded</u></b>
Command and Control	Emergency Coordinator (Shift Manager)	Emergency Coordinator/ Recovery Manager
Warning	Emergency Coordinator	Emergency Coordinator/ Recovery Manager
Notification Communications	Emergency Coordinator	Emergency Coordinator/ Recovery Manager
Public Information	Emergency Coordinator	Emergency Information Manager
Accident Assessment	Emergency Coordinator (assisted by Shift Technical Advisor)	Recovery Manager (assisted by Emergency Technical Manager and his/her staff, Emergency Coordinator and TSC Technical Staff)
Fire	Fire Brigade Leader	Fire Brigade Leader
Rescue	Emergency Coordinator	Emergency Coordinator
Traffic Control (on-site)	Security Shift Specialist	TSC Security Supervisor
Emergency Medical Services	On-shift First Aid Team	On-shift First Aid Team
Transportation	Security Shift Specialist	Emergency Security Manager
Protective Response (on-site)	Emergency Coordinator	Emergency Coordinator/ TSC HP Supervisor
Radiological Exposure Control (on-site)	Emergency Coordinator (assisted by Health Physics Department representative)	TSC HP Supervisor
Radiological Dose Assessment	Emergency Coordinator (assisted by Chemistry Department representative)	Recovery Manager (assisted by Recovery Manager's Staff)

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 4. Key Emergency Operations Facility Positions

#### **Emergency Control Officer (ECO)**

The ECO is a designated company officer or senior manager who will act as the chief nuclear officer. He/she will serve as the official spokesperson for the Nuclear Division.

#### **Recovery Manager (RM)**

The RM is the Vice President - St. Lucie Plant or a senior manager who has knowledge of nuclear plant operations and design and who will be responsible for declaring the EOF operational and directing the Company's expanded emergency response organization in conjunction with the Emergency Coordinator. He/she has the authority to establish policy and to expend funds necessary to cope with any emergency situations that arise. The Recovery Manager reports initially to the EOF. The following specific responsibilities are assumed by the RM in the EOF.

1. To inform the Emergency Control Officer periodically of the on-site status of the emergency and immediately of any significant changes.
2. To provide support and data as necessary to the Emergency Coordinator.
3. To obtain information on diagnosis and prognosis of the emergency, estimates of radioactive releases, prevailing meteorological conditions, projected radiological exposures, and recommended off-site protective actions.
4. To assume from the EC, the responsibility for communicating such information to and coordinating with off-site organizations, and the issuance of Protective Action Recommendations (PARs) for the public.
5. To assure continuity of technical and administrative support, and material resources.
6. To request additional support from FPL and others as necessary.
7. To provide logistical support for emergency personnel (e.g., transportation, communications, temporary quarters, food, water and sanitary facilities in the field, and procurement of special equipment and supplies).

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 4. Key Emergency Operations Facility Positions

#### **Emergency Information Manager (EIM)**

The EIM is a senior manager or designated member of the Corporate Communications Department experienced in disseminating information to the public via the news media. The EIM operates from the Emergency Operations Facility. The EIM will have the following responsibilities:

1. To serve as a public spokesperson for FPL.
2. To disseminate available information from the ECO to the news media and to provide periodic updates.
3. To work with federal, state and county public information representatives to effect joint releases and public appearances.
4. To provide for dispatching a company representative to the St. Lucie County and Martin County EOCs, if appropriate.

#### **Emergency Security Manager (ESM)**

The ESM is a company supervisor, manager, or specialist with security experience and will be responsible to the RM for providing liaison with county law enforcement and rescue agencies. The ESM also provides for and manages security personnel at the EOF/ENC.

#### **Emergency Technical Manager (ETM)**

The ETM is a manager or senior engineer with detailed knowledge of nuclear plant design and who will be responsible for providing technical support and information regarding engineering design for the plant.

#### **Governmental Affairs Manager (GAM)**

The GAM is a member of the Governmental Affairs staff experienced in interfacing with political officials of local, state, and federal governments. He/she acts as liaison between the ECO and these political officials.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.2 4. Key Emergency Operations Facility Positions (continued)

#### **Lines of Succession**

Lines of succession for the Recovery Manager and Managers of the Expanded Emergency Organization are controlled by procedures which are maintained by the Manager, Plant Services through the Emergency Preparedness Supervisor.

#### **Delegation**

Delegation authority is controlled by procedure.

### 2.3 Emergency Response Support and Resources

This section describes the arrangements that Florida Power & Light Company has made for assistance to augment the Emergency Response Organization.

#### 1. Response Organization Representatives

Florida Power & Light Company has provided facilities in the Emergency Operations Facility for representatives from FPL, state, local, and federal response organizations.

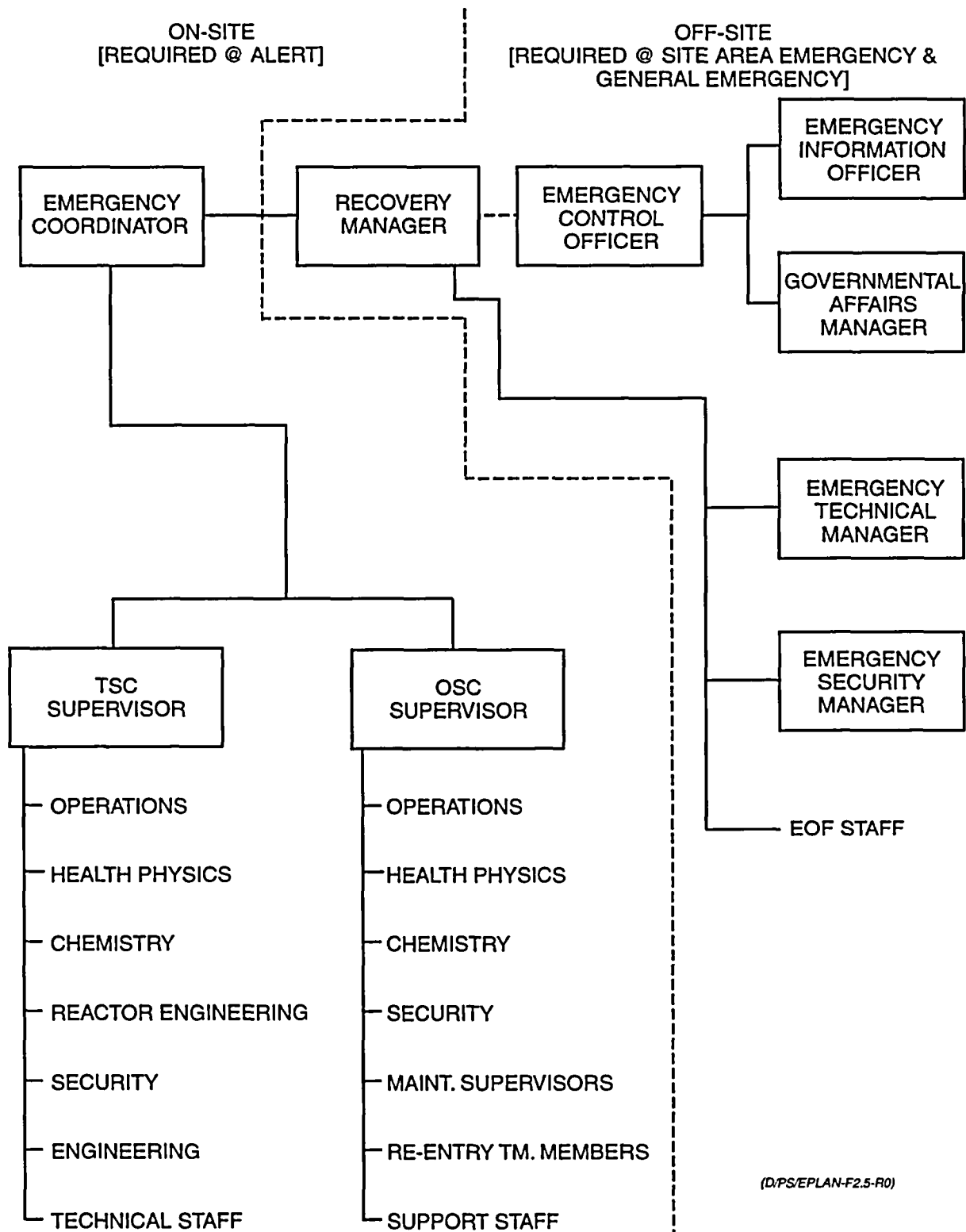
#### 2. Radiological Laboratories

Florida Power & Light Company has primary and backup radiological laboratory facilities on-site. A hot lab backup will be provided by portable equipment described in procedures. Environmental sampling will be augmented by the State's Radiological monitoring team and the Mobile Emergency Radiological Laboratory (MERL) within approximately three hours of activation. If required, the laboratory facilities at FPL's Turkey Point Plant can be used; appropriate arrangements will be made on an as-needed basis.

#### 3. Additional Assistance

The Institute of Nuclear Power Operations (INPO) maintains industry source lists for personnel and equipment which can be made available for support services during an emergency. Additional technical assistance can also be obtained directly from the Nuclear Steam System Supply (NSSS) vendor (ABB/Combustion Engineering Co., now Westinghouse Electric).

**FIGURE 2-5  
EXPANDED RESPONSE ORGANIZATION**



## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.3. 4. Support to Federal Assistance Teams

The Recovery Manager has the authority to request Federal assistance. It is expected that such assistance will be provided primarily by the NRC. Also, FEMA may send a representative to the EOF for near-site coordination of federal resources. It is expected that NRC personnel will begin to arrive at the site within 6 hours after declaration of a Site Area Emergency or General Emergency.

Requests for assistance from the Department of Energy's Savannah River Operations office in Aiken, South Carolina can be made by the State under the Federal Radiological Monitoring and Assessment Plan (FRMAP). Such requests are the responsibility of the Director of the Division of Emergency Management in consultation with the Department of Health.

Federal assistance teams can achieve access to the plant area through the Stuart, Florida airfield, approximately one half hour from the plant. The company may assign an individual to meet such assistance teams and to escort them to the appropriate facilities, if necessary.

Florida Power & Light has reserved adequate space and facilities for the staff of the NRC and FEMA at the EOF. Designated phone lines, workspace and support services (reproduction, office supplies, etc.) will be arranged through Florida Power & Light. Similar arrangements have been made in the TSC for the NRC. These provisions are routinely exercised and evaluated for adequacy by the NRC.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.4 Emergency Facilities and Equipment

This section describes the facilities and equipment that Florida Power & Light Company maintains in readiness for an emergency situation.

Figure 2-6 shows the locations of the on-site facilities.

#### 1. Control Room

For any emergency response, the Control Room of the affected unit serves as the initial point of control. The Shift Manager (SM) stations himself in the affected unit's Control Room when he/she assumes the role of Emergency Coordinator (EC). The EC can leave the Control Room if necessary, after a proper turnover to a qualified alternate EC, to make a personal assessment regarding plant safety.

The Control Rooms are designed to remain tenable under accident conditions described in the Updated Final Safety Analysis Report (UFSAR). All plant related operations are directed from the Control Room. Nuclear plant instrumentation, including area and process radiation monitoring system instrumentation, is provided in the Control Room to give early warning of a potential emergency and to provide for continuing indication of an emergency situation. The Control Rooms contain the controls and instrumentation necessary for operation of the reactor under normal and emergency conditions.

A supply of radiological emergency equipment is maintained in each of the Control Rooms. Table 2-3 provides an example list of emergency equipment maintained for the two Control Rooms and the Technical Support Center (TSC) use.

Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Warning Point (SWP), ESATCOM (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial (Bell) telephones, Florida Power & Light Company radio system, public address system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications.

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## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.4 2. Technical Support Center (TSC)

The company maintains an on-site Technical Support Center to provide the Control Room with in-depth diagnostic and engineering assistance without adding to congestion within the Control Room. The TSC interfaces with the EOF regarding those diagnostic and engineering decisions. This assistance can help determine the operational decisions that would be appropriate to best control and mitigate the consequences of the emergency. The TSC is located adjacent to the Unit 1 Control Room.

Activation of the Technical Support Center will be initiated by the Emergency Coordinator in the event of an Alert, Site Area Emergency or General Emergency. Arrangements have been made to staff the TSC in a timely manner.

The Technical Support Center contains pertinent records and drawings.

The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS).

### 3. Operational Support Center (OSC)

The company maintains an on-site Operational Support Center (OSC) to serve as an assembly point for auxiliary operators, health physics technicians, maintenance personnel, and other plant personnel available to support the emergency response. Required staff will be assigned to appropriate activities by the Emergency Coordinator or his/her designee.

Equipment that can be used by personnel dispatched from the OSC is stored in the South Service Building. **Table 2-4** indicates the types of material and equipment stored there.

Activation of the OSC will be initiated by the Emergency Coordinator. The OSC will be activated and in operation for an Alert, Site Area Emergency or General Emergency. Arrangements have been made to staff the OSC in a timely manner.

The OSC is maintained in the large conference room on the second floor of the South Service Building. Telephone communications are maintained between the OSC and the Technical Support Center.



## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.4 4. Alternate Operational Support Center

In the event that the OSC becomes untenable, the Emergency Coordinator will designate an alternate location in accordance with procedures.

### 5. Emergency Operations Facility (EOF)

The company maintains an Emergency Operations Facility from which evaluation and coordination of FPL activities related to an emergency can be carried out and from which FPL can provide information to federal, state, and local authorities.

The Emergency Operations Facility is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of the St. Lucie Plant. The EOF has sufficient space to accommodate the Florida Power & Light Company response organization and designated representatives of the federal, state, and local authorities. Alternate temporary locations for the Emergency Operations Facility may be designated by the Recovery Manager if a natural disaster or other (non-radiological) external event significantly affects the operational capability of the facility.

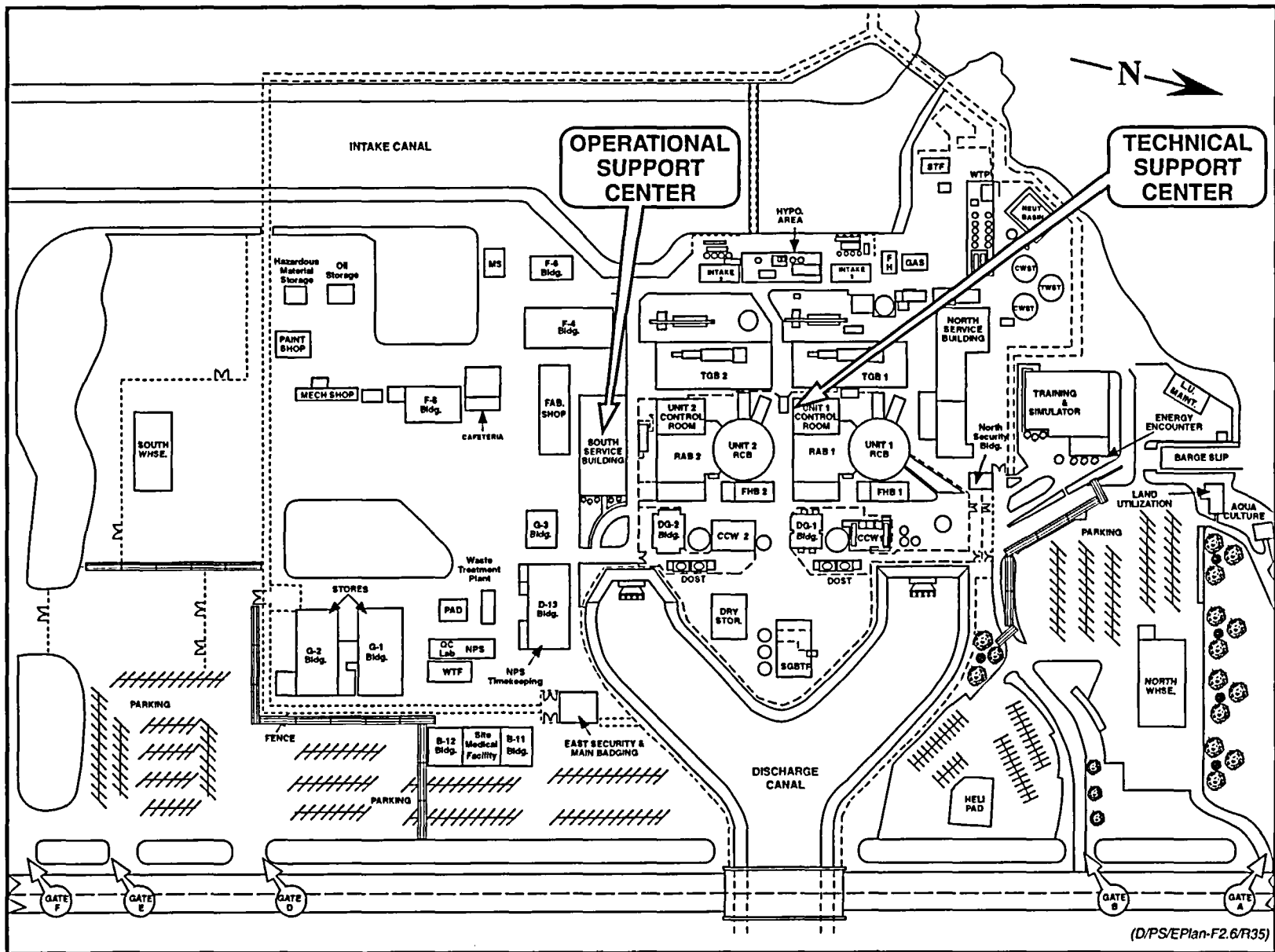
The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, ESATCOM (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems. Essential, precalculated emergency data and pertinent reports and drawings are readily available.

The RM is responsible for declaring the EOF operational. The EOF is required to be in operation for a Site Area Emergency or General Emergency, but may go operational for an Alert. Arrangements have been made to activate the EOF in a timely manner.

### 6. Emergency News Center (ENC)

An Emergency News Center (ENC) is provided to allow the news media access to information from the Emergency Operations Facility. The Emergency Information Manager will designate an individual to supervise the ENC. The ENC is co-located with the EOF (Midway Road/I-95 intersection).

FIGURE 2-6  
ST. LUCIE PLANT ON-SITE EMERGENCY FACILITIES LOCATION MAP



(D/PS/EPlan-F2.6/R35)

**TABLE 2-3  
RADIOLOGICAL EMERGENCY EQUIPMENT  
FOR CONTROL ROOMS AND TSC**

**Unit 1 Control Room/TSC Storage Locker**

1. Self Contained Breathing Apparatus
2. Pocket Dosimeters
3. Dosimeter Charger
4. TLDs
5. Coveralls
6. Hoods
7. Gloves
8. Shoe Covers
9. Full Face Respirators and Filters
10. Portable Count Rate Instrumentation
11. Portable Dose Rate Instrumentation
12. Contamination Smears and Envelopes
13. Radiation Tape/Rope
14. Radiological Signs
15. Step-Off Pads
16. Plastic Bags

**Unit 2 Control Room Storage Locker**

1. Self Contained Breathing Apparatus
2. Pocket Dosimeters
3. Dosimeter Charger
4. TLDs
5. Coveralls
6. Hoods
7. Gloves
8. Shoe Covers
9. Full Face Respirators and Filters
10. Portable Count Rate Instrumentation
11. Portable Dose Rate Instrumentation
12. Contamination Smears and Envelopes
13. Radiation Tape/Rope
14. Radiological Signs
15. Step-Off Pads
16. Plastic Bags

**TABLE 2-4  
RADIOLOGICAL EMERGENCY EQUIPMENT  
FOR THE OPERATIONAL SUPPORT CENTER**

1. Coveralls
2. Shoe Covers
3. Hoods
4. Gloves
5. Full Face Respirators and Filters
6. Self Contained Breathing Apparatus
7. Pocket Dosimeters
8. Dosimeter chargers
9. TLDs
10. Portable count rate instrumentation
11. Portable dose rate instrumentation
12. Radiological signs
13. Contamination smears and envelopes
14. Flashlights
15. Survey maps
16. Writing materials
17. Log Book
18. Decontamination kits
19. Radiological tape/rope
20. Selected procedures
21. Waste storage bags
22. Assorted batteries

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.4 7. Nuclear Division Management Center

The Nuclear Division Management Center is an area within the Nuclear Division offices at the Florida Power & Light Company Juno Beach location. The Emergency Control Officer and his staff may man the center to provide support and resources to the on-site organization until the EOF is declared operational.

### 8. St. Lucie County Emergency Operations Center

The St. Lucie County EOC will be the point from which county response activities will be controlled. The facility is located at 101 North Rock Rd., Ft. Pierce, Florida. Communications include Hot Ring Down (HRD) phone, ESATCOM (Satellite Communications System), Local Government Radio (LGR), teletype, police department and fire department networks, and commercial telephone.

### 9. Martin County Emergency Operations Center

The Martin County EOC will be the point from which county response activities will be controlled. This facility is located at 6000 S.E. Tower Drive, Stuart, Florida. Communications include Hot Ring Down (HRD) phone, ESATCOM (Satellite Communications System), Local Government Radio (LGR), teletype, police department and fire department networks, and commercial telephone.

### 10. Florida State Emergency Operations Center (State Warning Point)

The State's initial response comes from the State Emergency Operations Center (EOC) in Tallahassee. Initial notification goes to the State Warning Point (SWP) located in the State EOC. The location is 2555 Shumard Oak Boulevard, Tallahassee, Florida. Communications include Hot Ring Down (HRD), ESATCOM (Satellite Communications System), Local Government Radio (LGR), teletype and telephone. This facility is manned 24 hours a day by a duty officer.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.5 Medical and Health Support

This section describes the agreements and provisions that Florida Power & Light Company has made for emergency medical support.

#### 1. Plant First-Aid Facilities

The First-Aid Rooms on the ground floor of the Auxiliary Buildings are provided with first-aid supplies. The medical supplies in the First-Aid Rooms are checked on a two month basis and replenished as necessary. In addition, standard 24-unit First-Aid Kits are maintained at numerous locations throughout the St. Lucie Plant. The First-Aid Kits are checked once every two months and replenished as necessary. A commercial First-Aid Kit is maintained in the Site Assembly Station.

Personnel decontamination washrooms and shower rooms are provided on the ground floor of the Auxiliary Buildings. Accepted decontamination practices will be employed on-site and are described in a Health Physics procedure.

Life endangering injuries such as extensive burns, serious wounds or fractures shall receive prompt medical attention at off-site support medical facilities. Personnel with injuries involving radiation or radioactive contamination can also be handled by these off-site support medical facilities. The off-site support medical facilities are Lawnwood Regional Medical Center in Ft. Pierce, FL., and Martin Memorial Medical Center in Stuart, FL.

Both of these medical facilities are equipped and staffed with physicians and nurses capable of treating a contaminated injured individual(s). The physicians will provide for medical examinations, treatment, and laboratory services for those employees and other persons, designated by Florida Power & Light Company, who have been involved in a radiation accident.

The patient receiving areas are equipped for patient decontamination and the performance of emergency medical procedures for life-saving purposes. Additionally, these facilities have intensive care units available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposure. Both facilities are available on a 24-hour basis.

## 2. ORGANIZATION, FACILITIES, AND SUPPORT SERVICES (continued)

### 2.5 Medical and Health Support (continued)

#### 1. Plant First-Aid Facilities (continued)

##### Backup Facility

A letter of agreement between the Oak Ridge Associated Universities (ORAU) and Florida Power & Light Company provides backup support for the definitive care and treatment of seriously irradiated persons. The ORAU Medical and Health Sciences Division operates the Radiation Emergency Assistance Center/Training Site (REAC/TS) in Oak Ridge, Tennessee, for the U.S. Department of Energy. It studies radiation and radioactive materials in diagnosis, therapy, and research. Its specialized facilities are available for the care and treatment of possible radiation accident victims.

#### 2. Transportation of Injured Personnel

Ft. Pierce-St. Lucie County Fire District Rescue service, company, or private vehicle will provide transportation of personnel with injuries whether or not the injury is associated with radiation or contamination. The fire district rescue service is preferred, but in the case of injuries which require urgent transportation or external exposure without contamination, other transportation may be used.

#### 3. Communications

When injured personnel are transported to an off-site medical facility by county ambulance, radio contact, as well as telemetry, is normally maintained between the facility and the ambulance. In accordance with procedures, telephone notification is made by the Plant to the medical facility concerning the pending arrival of an injured person(s).

### 3. EMERGENCY CLASSIFICATION SYSTEM

The system which has been adopted for categorizing off-normal events or conditions at the Plant has four classes. In order of increasing severity, these are: Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency.

#### 3.1 Notification of Unusual Event

The Notification of Unusual Event (normally shortened to Unusual Event) category applies to off-normal events or conditions at the Plant for which no significant degradation of the level of safety of the plant has occurred or is expected. Any releases of radioactive material which have occurred or which may be expected are minor and constitute no appreciable health hazard. FPL actions in response to an Unusual Event will be:

1. Assess and respond as directed by the Emergency Coordinator.
2. Report the Unusual Event to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
3. Provide plant status updates in accordance with plant procedures.
4. Close out by verbal summary to off-site authorities, or escalate to a higher class.

#### 3.2 Alert

This classification is represented by events which involve an actual or imminent substantial degradation of the level of safety of the plant combined with a potential for limited uncontrolled releases of radioactivity from the plant.

FPL actions in response to this category will be:

1. Assess and respond as directed by the Emergency Coordinator.
2. The Emergency Coordinator will augment resources by activating the on-site Technical Support Center and Operational Support Center.
3. Report the Alert status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
4. Dispatch monitoring teams as directed by the TSC Health Physics Supervisor.
5. Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in plant conditions.



### 3. EMERGENCY CLASSIFICATION SYSTEM (continued)

- 3.2 6. Provide periodic meteorological assessments in accordance with plant procedures if releases are anticipated or occurring. If releases are occurring, provide dose estimates for actual releases.
7. Close out by verbal summary to off-site authorities, followed by a written summary within 24 hours, or escalate to a higher class.

#### 3.3 Site Area Emergency

This classification is represented by events which involve actual or likely major failures of plant functions needed for protection of the public combined with a potential for significant uncontrolled releases of radioactivity from the plant.

FPL actions in response to this category will be:

1. Assess and respond as directed by the Emergency Coordinator.
2. Augment resources as necessary by activating the on-site Technical Support Center, the on-site Operational Support Center, and the Emergency Operations Facility.
3. Report the Site Area Emergency status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
4. Dispatch monitoring teams as directed by the TSC Health Physics Supervisor.
5. Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in plant conditions.
6. Provide periodic meteorological assessments in accordance with plant procedures.
7. Provide release and dose projections based on available plant and meteorological information and foreseeable contingencies.
8. Close out or recommend a change in emergency class when appropriate by briefing off-site authorities.
9. Submit a brief written summary to off-site authorities within 24 hours after closing out the emergency.

### 3. EMERGENCY CLASSIFICATION SYSTEM (continued)

#### 3.4 General Emergency

This classification is represented by events which involve actual or imminent substantial core degradation and potential loss of containment integrity combined with a likelihood of significant uncontrolled releases of radioactivity from the plant.

FPL actions in response to this category will be:

1. Assess and respond as directed by the Emergency Coordinator.
2. Augment resources by activating the on-site Technical Support Center, the on-site Operational Support Center, and the Emergency Operations Facility.
3. Report the General Emergency status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
4. Dispatch monitoring teams as directed by the TSC Health Physics Supervisor.
5. Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in plant conditions.
6. Provide periodic meteorological assessments in accordance with plant procedures.
7. Provide release and dose projections based on available plant and meteorological information and foreseeable contingencies.
8. Provide off-site protective action recommendations to the State DEM.
9. Close out or recommend a reduction in emergency class when appropriate by briefing off-site authorities.
10. Submit a brief written summary to off-site authorities within 24 hours after closing out the emergency.

### 3. EMERGENCY CLASSIFICATION SYSTEM (continued)

#### 3.5 Emergency Action Levels

The Shift Manager (SM) uses the Emergency Action Levels (EALs) to evaluate plant conditions requiring declaration of an Emergency Class and initiation of the Emergency Plan. The EALs, listed in **Table 3-1**, are grouped into categories depending on the nature of the initiating condition and the impact on plant operation and safety. As the condition(s) of the plant degrade(s), increasing Emergency Action Levels are reached resulting in a higher (greater severity) class of emergency being declared.

**Tables 3-2 and 3-3** contain listings of Process and Effluent Monitors and Area Radiation Monitors that may be used to initiate emergency actions. These tables contain information regarding the type of monitor, range of the instruments, and typical setpoints (actual setpoints are defined by procedure).

**Table 3-4** contains a listing of non-radiological monitors, meters, or gauges that may be used to initiate emergency actions. This table contains information regarding the parameter measured and the range of the monitor, meter, or gauge.

Minor changes to correct parameter values or EAL wording without altering the intent of the reference may be made to EPIP-01, "Classification of Emergencies," throughout the year and incorporated in the annual revision of the Emergency Plan.

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**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

**CAUTION**

Section 1.A. should NOT be used for  
a steam generator tube leak/rupture.

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1.A. <u>ABNORMAL PRIMARY LEAK RATE</u>	<p><u>Reactor Coolant System (RCS) leakage</u></p> <ol style="list-style-type: none"> <li>RCS leakage GREATER THAN 10 gpm as indicated by: <ol style="list-style-type: none"> <li>Control Room observation <u>OR</u></li> <li>Inventory balance calculation <u>OR</u></li> <li>Field observation <u>OR</u></li> <li>Emergency Coordinator judgement <u>OR</u></li> </ol> </li> <li>Indication of leaking RCS safety or relief valve which causes RCS pressure to drop below SIAS setpoints: <ul style="list-style-type: none"> <li>- Unit 1 - 1600 psia</li> <li>- Unit 2 - 1736 psia</li> </ul> </li> </ol>	<p><u>RCS leakage GREATER THAN 50-gpm</u></p> <ol style="list-style-type: none"> <li>Unisolable RCS leakage as indicated by charging/ letdown mismatch greater than 50 gpm but less than available charging pump capacity. <u>OR</u></li> <li>Unisolable measured RCS leakage indicating greater than 50 gpm but less than available charging pump capacity.</li> </ol>	<p><u>LOCA GREATER THAN capacity of charging pumps</u></p> <ol style="list-style-type: none"> <li>RCS leakage greater than available charging pump capacity occurring with RCS pressure above HPSI shutoff head. <u>OR</u></li> <li>RCS leakage greater than available makeup occurring with RCS pressure below HPSI shutoff head. <u>OR</u></li> <li>Loss of RCS subcooled margin due to RCS leakage (saturated conditions). <u>OR</u></li> <li>Containment High Range Radiation Monitors indicate <math>7.3 \times 10^3</math> R/hr (If CHRRM inoperable, Post-LOCA monitors indicate between 100 and 1000 mR/hr).</li> </ol>	<p><u>A release has occurred or is in progress resulting in:</u></p> <ol style="list-style-type: none"> <li>Containment High Range Radiation monitor greater than <math>1.46 \times 10^3</math> R/hr (If CHRRM inoperable, Post-LOCA monitors greater than 1000 mR/hr). <u>OR</u></li> <li>Performance of EPIP-09 (Off-site Dose Calculations) or measured dose rates from off-site surveys indicate site boundary (1 mile) exposure levels have been exceeded as indicated by either A, B, C, or D below: <ol style="list-style-type: none"> <li>1000 mrem/hr (total dose rate)</li> <li>1000 mrem (total dose - TEDE)</li> <li>5000 mrem/hr (thyroid dose rate)</li> <li>5000 mrem (thyroid dose - CDE)</li> </ol> </li> </ol> <p><u>Loss of 2 of the 3 fission product barriers with imminent loss of the third (any two of the following exist and the third is imminent).</u></p> <ol style="list-style-type: none"> <li>Fuel element failure (confirmed DEQ I-131 activity greater than 275 <math>\mu</math>Cl/mL). <u>AND</u></li> <li>LOCA or Tube rupture on unisolable steam generator. <u>AND</u></li> <li>Containment Integrity Breached.</li> </ol>

**NOTE**

Also refer to "Potential Core Melt" Event/Class 6.A.

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1.B. <u>ABNORMAL PRIMARY TO SECONDARY LEAK RATE</u>	<u>RCS PRI/SEC leakage</u> 1. Measured RCS to secondary leakage exceeds Tech. Spec. limits. <u>AND</u> 2. Secondary plant activity is detected.	<u>Rapid gross failure of one steam generator tube (WITHIN charging pump capacity) with loss of off-site power</u> 1. Measured RCS to secondary leakage greater than Tech. Spec. Limits and within charging pump capacity. <u>AND</u> 2. Secondary plant activity is detected. <u>AND</u> 3. Loss of both Non-Vital 4.16 KV busses. <hr/> <u>Rapid failure of steam generator tubes (GREATER THAN charging pump capacity).</u> 1. Measured RCS to secondary leakage greater than charging pump capacity. <u>AND</u> 2. Secondary plant activity is detected.	<u>Rapid gross failure of steam generator tubes (GREATER THAN charging pump capacity) with a loss of off-site power</u> 1. Measured RCS to secondary leakage is greater than charging pump capacity. <u>AND</u> 2. Secondary plant activity is detected. <u>AND</u> 3. Loss of both Non-Vital 4.16 KV busses. <hr/> <u>Rapid failure of steam generator tube(s) (GREATER THAN charging pump capacity with steam release in progress).</u> 1. Measured RCS to secondary leakage greater than charging pump capacity. <u>AND</u> 2. Secondary plant activity is detected. <u>AND</u> 3. Secondary steam release in progress from affected generator (i.e., ADVs stuck, steam safety(s), or unisolable leak).	<u>Loss of 2 of the 3 fission product barriers with imminent loss of the third (any two of the following exist and the third is imminent).</u> 1. Fuel element failure (confirmed DEQ I-131 activity greater than 275 $\mu$ Ci/mL). <u>AND</u> 2. LOCA or Tube rupture on unisolable steam generator. <u>AND</u> 3. Containment integrity breached. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b> Also refer to "Potential Core Melt" Event/Class 6.A.</p> </div>

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1.C. <u>LOSS OF SECONDARY COOLANT</u>	<u>Rapid depressurization of secondary plant</u>  1. Rapid drop in either steam generator pressure to less than 600 psia.	<u>Major steam leak with GREATER THAN 10 gpm primary/secondary leakage</u>  1. Rapid drop in either steam generator pressure to less than 600 psia. <u>AND</u> 2. Known pri/sec leak of greater than 10 gpm. <u>AND</u> 3. Secondary plant activity is detected. <hr/> <u>Total loss of feedwater</u>  1. No main or auxiliary feedwater flow available for greater than 15 minutes when required for heat removal. <u>AND</u> 2. Steam Generator levels are less than 40% wide range.	<u>Major steam leak with GREATER THAN 50 gpm primary/secondary leakage and fuel damage indicated</u>  1. Rapid drop in either steam generator pressure to less than 600 psia. <u>AND</u> 2. Known pri/sec leak of greater than 50 gpm. <u>AND</u> 3. Secondary plant activity is detected. <u>AND</u> 4. Fuel element damage is indicated (Refer to "Fuel Element Failure" Event/Class 4.A.). <hr/> <u>TLOF with once-through cooling initiated</u>  1. No main or auxiliary feedwater flow available. <u>AND</u> 2. PORV(s) have been opened to facilitate core heat removal.	<u>A release has occurred or is in progress resulting in:</u>  1. Containment High Range Radiation monitor greater than $1.46 \times 10^5$ R/hr (if CHRRM inoperable, Post-LOCA monitors greater than 1000 mR/hr). <u>OR</u> 2. Performance of EPIP-09 (Off-site Dose Calculations) or measured dose rates from off-site surveys indicate site boundary (1 mile) exposure levels have been exceeded as indicated by either A, B, C, or D below:  A. 1000 mrem/hr (total dose rate) B. 1000 mrem/hr (total dose - TEDE) C. 5000 mrem/hr (thyroid dose rate) D. 5000 mrem (thyroid dose - CDE) <hr/> <u>Loss of 2 of the 3 fission product barriers with imminent loss of the third (any two of the following exist and the third is imminent).</u>  1. Fuel element failure (confirmed DEQ I-131 activity greater than 275 $\mu$ Ci/mL). <u>AND</u> 2. LOCA or Tube rupture on unisolable steam generator. <u>AND</u> 3. Containment Integrity Breached.
<div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b></p> <p>Also refer to "Potential Core Melt" Event/Class 6.A.</p> </div>				

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
2.A. <u>UNCONTROLLED EFFLUENT RELEASE</u>	<p><u>Radiological effluent limits exceeded</u></p> <ol style="list-style-type: none"> <li>Plant effluent monitor(s) exceed alarm setpoint(s). <b>AND</b></li> <li>Confirmed analysis results for gaseous or liquid release which exceeds ODCM limits.</li> </ol> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b></p> <p>If analysis is not available within one hour, and it is expected that release is greater than ODCM limit, classify as "<u>UNUSUAL EVENT</u>."</p> </div>	<p><u>A release has occurred or is in progress that is 10 times the effluent limit</u></p> <ol style="list-style-type: none"> <li>Plant effluent monitor(s) significantly exceed alarm setpoints. <b>AND</b></li> <li>Confirmed analysis results for gaseous or liquid release which exceeds <u>10 times ODCM limits</u>.</li> </ol> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b></p> <p>If analysis is not available within one hour, and it is expected that release is equal to or greater than <u>10 times ODCM limit</u>, classify as "<u>ALERT</u>."</p> </div>	<p><u>A release has occurred or is in progress resulting in:</u></p> <ol style="list-style-type: none"> <li>Containment High Range Radiation Monitor greater than <math>7.3 \times 10^3</math> R/hr (Post-LOCA monitors indicate between 100 and 1000 mR/hr, if CHRRM inoperable). <b>OR</b></li> <li>Measured Dose Rates or Off-site Dose Calculation (EPIP-09) worksheet values at one mile in excess of: <ol style="list-style-type: none"> <li>50 mrem/hr (total dose rate, or 250 mrem/hr (thyroid dose rate) for 1/2 hour. <b>OR</b></li> <li>500 mrem/hr (total dose rate) or 2500 mrem/hr (thyroid dose rate) for two minutes at one mile.</li> </ol> </li> </ol>	<p><u>A release has occurred or is in progress resulting in:</u></p> <ol style="list-style-type: none"> <li>Containment High Range Radiation monitor greater than <math>1.46 \times 10^5</math> R/hr (If CHRRM inoperable, Post-LOCA monitors greater than 1000 mR/hr). <b>OR</b></li> <li>Performance of EPIP-09 (Off-site Dose Calculations) or measured dose rates from off-site surveys indicate site boundary (1 mile) exposure levels have been exceeded as indicated by either A, B, C, or D below: <ol style="list-style-type: none"> <li>1000 mrem/hr (total dose rate)</li> <li>1000 mrem (total dose - TEDE)</li> <li>5000 mrem/hr (thyroid dose rate)</li> <li>5000 mrem (thyroid dose - CDE)</li> </ol> </li> </ol>

ODCM - Refers to Chemistry Procedure C-200, "Off-site Dose Calculation Manual (ODCM)."

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
2.B. <u>HIGH RADIATION LEVELS IN PLANT</u>	.	<p><u>High radiation levels or high airborne contamination which indicates a severe degradation in the control of radioactive materials</u></p> <p>1. Any valid area monitor alarm from an unplanned source with meter near or greater than full scale deflection (<math>10^3</math> mR/hr). <u>OR</u></p> <p>2. Unexpected plant iodine or particulate airborne concentration of 1000 DAC as seen in routine surveying or sampling. <u>OR</u></p> <p>3. Unexpected direct radiation dose rate reading or unexpected airborne radioactivity concentration from an unplanned source in excess of 1000 times normal levels.</p>		
3. <u>FIRE</u>	<u>Uncontrolled fire within the Power Block lasting more than 10 minutes.</u>	<p><u>Uncontrolled fire.</u></p> <p>1. Potentially affecting safety systems. <u>AND</u></p> <p>2. Requiring off-site support in the opinion of the SM/EC.</p> <div data-bbox="810 1053 1108 1212" data-label="Text"> <p align="center"><b>NOTE</b> Explosion is defined as a rapid chemical reaction resulting in noise, heat and the rapid expansion of gas.</p> </div>	<u>Fire compromising the function of safety systems (e.g., both trains rendered inoperable).</u>	<div data-bbox="1617 849 1896 941" data-label="Text"> <p align="center"><b>NOTE</b> Refer to "Potential Core Melt" Event/Class 6.A.</p> </div>
<u>EXPLOSION</u>	<u>Occurrence of an explosion within the Owner Controlled Area.</u>	<u>Damage to structures/components within the Protected Area by explosion which affects plant operation.</u>	<u>Severe damage to safe shutdown equipment from explosion, (e.g., both trains rendered inoperable).</u>	

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**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
4.A. <u>FUEL ELEMENT FAILURE</u>	<p><u>Fuel element damage</u></p> <ol style="list-style-type: none"> <li>Process monitors or area radiation surveys indicate increased letdown activity. <u>AND</u></li> <li>Confirmed RCS sample indicating: <ol style="list-style-type: none"> <li>Coolant activity greater than the Tech Spec limit for iodine spike (Tech Spec Figure 3.4-1.). <u>OR</u></li> <li>Coolant activity greater than 100/E <math>\mu\text{Ci}/\text{gram}</math> specific activity.</li> </ol> </li> </ol> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b></p> <p>If analysis is not available within 1 hour, and it is expected that activity is greater than Tech Spec limit, classify as "<u>UNUSUAL EVENT.</u>"</p> </div>	<p><u>Fuel element failure</u></p> <ol style="list-style-type: none"> <li>Process monitors or area radiation surveys indicate increased letdown activity and confirmed RCS Samples indicating DEQ I-131 activity greater than or equal to 275 <math>\mu\text{Ci}/\text{mL}</math>.</li> </ol> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>NOTE</b></p> <p>If analysis is not available within 1 hour, and it is expected that RCS activity for DEQ I-131 is greater than 275 <math>\mu\text{Ci}/\text{mL}</math>, classify as an "<u>ALERT.</u>"</p> </div>	<p><u>Fuel element failure with inadequate core cooling</u></p> <ol style="list-style-type: none"> <li>RCS DEQ I-131 activity greater than or equal to 275 <math>\mu\text{Ci}/\text{mL}</math>. <u>AND</u></li> <li>Highest CET per core quadrant indicates greater than 10°F superheat or 700°F.</li> </ol>	<p><u>A release has occurred or is in progress resulting in:</u></p> <ol style="list-style-type: none"> <li>Containment High Range Radiation monitor greater than <math>1.46 \times 10^5 \text{ R/hr}</math> (If CHRRM inoperable, Post-LOCA monitors greater than 1000 mR/hr). <u>OR</u></li> <li>Performance of EPIP-09 (Off-site Dose Calculations) or measured dose rates from off-site surveys indicate site boundary (1 mile) exposure levels have been exceeded as indicated by either A, B, C, or D below: <ol style="list-style-type: none"> <li>1000 mrem/hr (total dose rate)</li> <li>1000 mrem (total dose - TEDE)</li> <li>5000 mrem/hr (thyroid dose rate)</li> <li>5000 mrem (thyroid dose - CDE)</li> </ol> </li> </ol>
4.B. <u>FUEL HANDLING ACCIDENT</u>		<p><u>Fuel handling accident which results in the release of radioactivity to Containment or Fuel Handling Building:</u></p> <ol style="list-style-type: none"> <li>SM/EC determines that an irradiated fuel assembly may have been damaged. <u>AND</u></li> <li>Associated area or process radiation monitors are in alarm.</li> </ol>	<p><u>Major damage to irradiated fuel in Containment or Fuel Handling Building</u></p> <ol style="list-style-type: none"> <li>Affected area radiation monitor greater than 1000 mrem/hr. <u>AND</u></li> <li>Damage to more than one irradiated fuel assembly. <u>OR</u></li> <li>Major damage resulting from uncovering of one or more irradiated fuel assemblies in the spent fuel pool.</li> </ol>	

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**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
5.A. <u>EARTHQUAKE</u>	<p><u>A confirmed earthquake has occurred</u></p> <p>1. A confirmed earthquake has been experienced within the Owner Controlled Area. <u>OR</u></p> <p>2. A earthquake is detected by plant seismic monitor instruments or other means.</p>	<p><u>A confirmed earthquake has occurred.</u></p> <p>1. A confirmed earthquake has occurred which registered GREATER THAN 0.05g within the Owner Controlled Area. <u>OR</u></p> <p>2. A confirmed earthquake has occurred that could cause or has caused trip of the turbine generator or reactor.</p>	<p><u>A confirmed earthquake has occurred</u></p> <p>1. A confirmed earthquake has occurred which registered GREATER THAN 0.1g within the Owner Controlled Area and the plant not in cold shutdown. <u>OR</u></p> <p>2. A confirmed earthquake has occurred that has caused loss of any safety system function (e.g., both trains inoperable).</p>	<div> <p align="center"><b>NOTE</b> Refer to "Potential Core Melt" Event/Class 6.A.</p> </div>
5.B. <u>HURRICANE</u>	<p><u>Hurricane Warning</u></p> <p>1. Confirmed hurricane warning is in effect.</p>	<p><u>Hurricane warning with winds near design basis</u></p> <p>1. Confirmed hurricane warning is in effect and winds are expected to exceed 175 mph within the Owner Controlled Area.</p> <div> <p align="center"><b>NOTE</b> At FPL's request, NOAA will provide an accurate projection of wind speeds on-site 24 hours prior to the onset of hurricane force winds. If that projection is not available within 12 hours of entering into the warning, classify the event using current track and wind speeds to project on-site conditions. For example, projected on-site wind speed would be less than maximum hurricane wind speed if the track is away from PSL.</p> </div>	<p><u>Hurricane warning with winds GREATER THAN design basis</u></p> <p>1. Plant not at cold shutdown. <u>AND</u></p> <p>2. Confirmed hurricane warning is in effect and winds are expected to exceed 194 mph within the Owner Controlled Area.</p> <div> <p align="center"><b>NOTE</b> At FPL's request, NOAA will provide an accurate projection of wind speeds on-site 24 hours prior to the onset of hurricane force winds. If that projection is not available within 12 hours of entering into the warning, classify the event using current track and wind speeds to project on-site conditions. For example, projected on-site wind speed would be less than maximum hurricane wind speed if the track is away from PSL.</p> </div>	<div> <p align="center"><b>NOTE</b> Refer to "Potential Core Melt" Event/Class 6.A.</p> </div>

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
5.C. <u>TORNADO</u>	<u>Notification of a tornado sighted in the Owner Controlled Area.</u>	<u>Any tornado striking the Power Block.</u>		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>NOTE</b> Refer to "Potential Core Melt" Event/Class 6.A.</p> </div>
5.D. <u>ABNORMAL WATER LEVEL</u>	<u>Abnormal water level conditions are expected or occurring</u>  1. Low intake canal level of -10.5 ft. MLW for 1 hour or more. <u>OR</u> 2. Visual sightings by station personnel that water levels are approaching storm drain system capacity.	<u>Flood, low water, hurricane surge, or other abnormal water level conditions</u>  1. The storm drain's capacity is exceeded during hurricane surge or known flood conditions. <u>OR</u> 2. Low intake canal level of -10.5 ft MLW for 1 hour or more with emergency barrier valves open.	<u>Flood, low water, hurricane surge, or other abnormal water level conditions causing failure of vital equipment</u>  1. Flood/surge water level reaching elevation +19.5 ft. (turbine building/RAB ground floor). <u>OR</u> 2. Low intake canal level has caused the loss of all ICW flow.	

**TABLE 3-1**  
**EMERGENCY CLASSIFICATION TABLE**

**NOTE**

Activation of the Emergency Response Facilities does not require declaration of an emergency or entry into a specific emergency classification.

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
6.A. <u>INCREASED AWARENESS OR POTENTIAL CORE MELT</u> (Page 1 of 2)	<u>Emergency Coordinator's judgement that plant conditions exist which warrant increased awareness on the part of the operating staff and/or local authorities.</u>  1. The plant is shutdown under abnormal conditions (e.g., exceeding cooldown rates or primary system pipe cracks are found during operation). <u>OR</u> 2. Any plant shutdown required by Technical Specifications in which the required shutdown is not reached within action limits.	<u>Emergency Coordinator's judgement that plant conditions exist which have a potential to degrade the level of safety at the plant.</u>	<u>Emergency Coordinator's judgement that:</u>  1. Plant conditions are significantly degrading in an uncontrollable manner.	<u>Emergency Coordinator's judgement that plant conditions exist that make release or large amounts of radioactivity in a short period appear possible or likely.</u> (Any core melt situation.)  1. LOCA with failure of ECCS leading to severe core degradation or melt. <u>OR</u> 2. LOCA with initially successful ECCS and subsequent failure of containment heat removal systems for greater than 2 hours. <u>OR</u> 3. Total loss of feedwater followed by failure of once-through-cooling (ECCS) to adequately cool the core. <u>OR</u> 4. Failure of off-site and on-site power along with total loss of feedwater makeup capability for greater than 2 hours. <u>OR</u> 5. ATWS occurs which results in core damage or causes failure of core cooling and make-up systems. <u>OR</u> 6. Any major internal or external event (e.g., fire, earthquake or tornado substantially beyond design basis) which in the EC's opinion has or could cause massive damage to plant systems resulting in any of the above.

(continued on next page)

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
6.A. <u>INCREASED AWARENESS OR POTENTIAL CORE MELT</u>  (Page 2 of 2)				<p align="center"><b>NOTE</b></p> <p>1. Most likely containment failure mode is melt-through with release of gases only. Quicker releases are expected for failure of containment isolation system.</p> <p>2. General Emergency must be declared for the above listed events. The likelihood of corrective action (repair of AFW pump, etc.) should not be considered.</p>
7.A. <u>LOSS OF POWER</u>	<u>Loss of off-site power or loss of all on-site AC power capability</u>  1. Loss of off-site AC power. <u>OR</u> 2. Loss of capability to power at least one vital 4.16 kv bus from <u>any</u> available emergency diesel generator.	<u>Station Blackout (Total Loss of AC)</u>  1. Loss of off-site AC power. <u>AND</u> 2. Failure of both emergency diesel generators to start or load. <hr/> 1. Drop in A and B DC buss voltages to less than 70 VDC.	<u>Station Blackout (Total Loss of AC) for GREATER THAN 15 minutes</u>  1. Loss of off-site AC power.  2. Sustained failure of both emergency diesel generators to start or load. <u>AND</u> 3. Failure to restore AC power to at least one vital 4.16 kv bus within 15 minutes. <hr/> <u>Loss of all vital on-site DC for greater than 15 minutes</u>  1. Sustained drop in A and B DC bus voltages to 70 VDC for greater than 15 minutes.	<p align="center"><b>NOTE</b></p> <p>Refer to "Potential Core Melt" Event/Class 6.A.</p>

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
8.A. <u>LOSS OF PLANT CONTROL FUNCTIONS</u>		<u>Loss of Plant Control Functions</u>  1. Complete loss of any function needed for plant cold shutdown. <u>OR</u> 2. Failure of the Reactor Protection System to bring the reactor subcritical when needed. <u>OR</u> 3. Control room is evacuated (for other than drill purposes) with control established locally at the Hot Shutdown Control Panel.	<u>Critical Loss of Plant Control Functions</u>  1. Loss of any function or system which, in the opinion of the Emergency Coordinator, precludes placing the plant in Hot Shutdown. <u>OR</u> 2. Failure of the RPS to trip the reactor when needed, and operator actions fail to bring the reactor subcritical. <u>OR</u> 3. Control Room is evacuated (for other than drill purposes) and control cannot be established locally at the Hot Shutdown Control Panel within 15 minutes.	<div style="border: 1px solid black; padding: 5px;"> <b>NOTE</b>            Refer to "Potential Core Melt" Event/Class 6.A.         </div>
		<hr/> <u>Loss of Shutdown Cooling</u>  1. Complete loss of functions needed to maintain cold shutdown.  A. Failure of shutdown cooling systems, resulting in loss of cold shutdown conditions. <u>AND</u> B. RCS subcooling cannot be maintained greater than 0°F.		

**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
8.B. <u>LOSS OF ALARMS/ COMMUNICATION/ MONITORING</u>	<p><u>Significant loss of effluent monitoring capability, communications, indication and alarm panels, etc., which impairs ability to perform accident or emergency assessment</u></p> <ol style="list-style-type: none"> <li>1. Loss of effluent or radiological monitoring capability requiring plant shutdown. <u>OR</u></li> <li>2. Loss of all primary and backup communication capability with off-site locations, <u>OR</u></li> <li>3. Unplanned loss of most (greater than 75%) or all safety system annunciators for greater than 15 minutes.</li> </ol>	<p><u>Loss of alarms:</u></p> <ol style="list-style-type: none"> <li>1. Unplanned loss of most (greater than 75%) or all safety system annunciators. <u>AND</u></li> <li>2. Plant transient in progress.</li> </ol>	<p><u>Loss of alarms/Monitoring:</u></p> <ol style="list-style-type: none"> <li>1. Inability to monitor* a significant transient in progress.</li> </ol> <p>* Monitoring means loss of ERDADS, QSPDS and/or the inability to determine any one of the following: reactivity control, core cooling, RCS status or containment integrity.</p>	
9.A. <u>AIRCRAFT / MISSILE</u>	<p><u>Unusual aircraft activity</u></p> <ol style="list-style-type: none"> <li>1. Aircraft crash in the Owner Controlled Area or unusual aircraft activity over facility that in the opinion of the SM/EC, could threaten the safety of the plant or personnel.</li> </ol>	<p><u>Aircraft/missile impact</u></p> <ol style="list-style-type: none"> <li>1. Aircraft crash into the Power Block. <u>OR</u></li> <li>2. Visual or audible indication of missile impact on the Power Block.</li> </ol>	<p><u>Damage to vital systems from aircraft/missiles</u></p> <ol style="list-style-type: none"> <li>1. Aircraft crash into the Power Block damaging vital plant systems. <u>OR</u></li> <li>2. Damage resulting in loss of safe shutdown equipment from any missile.</li> </ol>	

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**TABLE 3-1  
EMERGENCY CLASSIFICATION TABLE**

EVENT/CLASS	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
9.B. <u>TURBINE FAILURE</u>	<u>Turbine rotating component failure causing rapid plant shutdown.</u>	<u>Visual indication that the turbine casing has been penetrated by blading.</u>		
9.C. <u>TOXIC OR FLAMMABLE GAS</u>	<u>Unplanned/uncontrolled toxic or flammable gas release in the Owner Controlled Area that could affect plant/personnel safety.</u>	<u>Entry of toxic or flammable gas into areas potentially affecting plant operation.</u>	<u>Toxic or flammable gas has diffused into vital areas compromising the function of safety related equipment (e.g., both trains rendered inoperable).</u>	
10. <u>SECURITY THREAT</u>	<p><u>A SECURITY ALERT has been called by the Security Force in response to one or more of the items listed below:</u></p> <ol style="list-style-type: none"> <li>1. Bomb Threat</li> <li>2. Attack Threat               <ul style="list-style-type: none"> <li>- Land/Vehicle</li> <li>- Waterborne</li> <li>- Airborne</li> <li>- Insider</li> </ul> </li> <li>3. Security Threat</li> <li>4. Protected Area intrusion attempt or breach</li> <li>5. Sabotage attempt</li> <li>6. Internal disturbance</li> <li>7. Civil disturbance</li> <li>8. Vital Area intrusion</li> <li>9. Security Force strike</li> <li>10. Credible site-specific Security Threat notification</li> <li>11. Extortion/Coercion/Hostage Threat against plant</li> <li>12. Sniper attack</li> </ol>	<u>A SECURITY EMERGENCY has been called by the Security Force as defined in the Safeguards Contingency Plan.</u>	<u>A SECURITY EMERGENCY involving imminent occupancy of the control room or other area(s) vital to the operation of the reactor as defined in the Safeguards Contingency Plan.</u>	<u>A successful takeover of the plant including the Control Room or any other area(s) vital to the operation of the reactor as defined in the Safeguards Contingency Plan.</u>

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**TABLE 3-2A**  
**ST. LUCIE UNIT 1**  
**PROCESS AND EFFLUENT RADIATION MONITORS USED FOR ACCIDENT ASSESSMENT**

<u>MONITORS</u>	<u>NUMBER (PER UNIT)</u>	<u>TYPE (1)</u>	<u>LOCATION</u>	<u>CONTROL FUNCTION</u>	<u>RANGE OF MEASUREMENT</u>			<u>TYPICAL HIGH ALARM SETPOINT</u>
a. Steam Generator Blowdown	2	SSL	RAB	Close S/G blowdown and sample valves FCV-23-3, 5, 7, 9	1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM			1 x 10 <sup>4</sup> CPM
b. Condenser Air Ejector	1	SSG	Turbine Bldg.	NONE	1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM (2)			7.5 x 10 <sup>1</sup> CPM
c. Fuel Handling Building Stack	1	PIG with medium & high range gas channels	FHB Roof	NONE	1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	P		1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	I	(3)	1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>-7</sup> to 1 x 10 <sup>-1</sup> µCi/cc	G	(low)	1.51 x 10 <sup>-3</sup> µCi/cc
					2.5 x 10 <sup>-2</sup> to 4 x 10 <sup>2</sup> µCi/cc	G	(medium)	3.16 x 10 <sup>-1</sup> µCi/cc
					1 x 10 <sup>-1</sup> to 1 x 10 <sup>5</sup> µCi/cc	G	(high)	3.2 x 10 <sup>1</sup> µCi/cc
d. Plant Stack	1	PIG with medium & high range gas channels	RAB Roof	NONE	1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	P	(3)	1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	I	(3)	1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>-7</sup> to 1 x 10 <sup>-1</sup> µCi/cc	G	(low)	1.42 x 10 <sup>-3</sup> µCi/cc
					2.5 x 10 <sup>-2</sup> to 4 x 10 <sup>2</sup> µCi/cc	G	(medium)	5 x 10 <sup>-1</sup> µCi/cc
					1 x 10 <sup>-1</sup> to 1 x 10 <sup>5</sup> µCi/cc	G	(high)	3.24 x 10 <sup>1</sup> µCi/cc
e. ECCS Area Ventilation Exhaust	1/train	PIG with medium & high range gas channels	RAB Elev. 43'	NONE	1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	P	(3)	1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>1</sup> to 1 x 10 <sup>6</sup> CPM	I	(3)	1 x 10 <sup>4</sup> CPM
					1 x 10 <sup>-7</sup> to 1 x 10 <sup>-1</sup> µCi/cc	G	(low)	5 x 10 <sup>-4</sup> µCi/cc
					2.5 x 10 <sup>-2</sup> to 4 x 10 <sup>2</sup> µCi/cc	G	(medium)	2.5 x 10 <sup>-1</sup> µCi/cc
					1 x 10 <sup>-1</sup> to 1 x 10 <sup>5</sup> µCi/cc	G	(high)	2.5 x 10 <sup>1</sup> µCi/cc
f. Steam Dumps A&B	1/train	Shielded G-M tubes	Main Steam Lines Upstream of MSIVs	NONE	1 x 10 <sup>-1</sup> to 1 x 10 <sup>4</sup> mR/hr			1 mR/hr

(1) SSG - single stage gaseous with beta scintillator detector. PIG-particulate/iodine/noble gas with beta scintillator detectors and sodium iodide for iodine channel. Medium and high range noble gas channels utilize energy compensated G-M tubes.

SSL - single stage liquid with sodium iodide detector.

(2) The condenser air ejector exhaust is normally diverted to the main Plant Stack. This point is monitored by the Plant Stack monitoring system.

(3) These are effluent level monitors, not used for accident assessment.

**TABLE 3-2B**  
**ST. LUCIE UNIT 2**  
**PROCESS AND EFFLUENT RADIATION MONITORS USED FOR ACCIDENT ASSESSMENT**

<u>MONITORS</u>	<u>NUMBER (PER UNIT)</u>	<u>TYPE (1)</u>	<u>LOCATION</u>	<u>CONTROL FUNCTION</u>	<u>RANGE OF MEASUREMENT</u>			<u>TYPICAL HIGH ALARM SETPOINT</u>
a. Steam Generator Blowdown	2	SSL	RAB	Close S/G blowdown valves and sample FCV-23-3, 5, 7, 9	$1 \times 10^{-7}$ to $1 \times 10^{-2}$ $\mu\text{Ci/cc}$			$2 \times 10^{-4}$ $\mu\text{Ci/cc}$
b. Condenser Air Ejector	1	SSG	Turbine Bldg.	NONE	$1 \times 10^{-7}$ to $1 \times 10^{-1}$ $\mu\text{Ci/cc}$ (3)			$2 \times 10^{-6}$ $\mu\text{Ci/cc}$
c. Fuel Handling Building Stack	1	PIG	FHB Roof	(3)	$1 \times 10^1$ to $1 \times 10^6$ CPM $1 \times 10^1$ to $1 \times 10^6$ CPM $1 \times 10^{-7}$ to $1 \times 10^{-1}$ $\mu\text{Ci/cc}$	P I (3) G (2)		$1 \times 10^4$ CPM $1 \times 10^4$ CPM $1 \times 10^{-3}$ $\mu\text{Ci/cc}$
d. Plant Stack	2	PIG	RAB Roof	(3)	$1 \times 10^1$ to $1 \times 10^6$ CPM $1 \times 10^1$ to $1 \times 10^6$ CPM $1 \times 10^{-7}$ to $1 \times 10^{-1}$ CPM	P (3) I (3) G		$1 \times 10^4$ CPM $1 \times 10^4$ CPM $1 \times 10^{-3}$ $\mu\text{Ci/cc}$
Plant Stack Accident Range	1	3-stage gas with multiple part/iodine collectors	RAB Roof	Auto switchback to normal range monitor	$1 \times 10^{-7}$ to $1 \times 10^{-1}$ $\mu\text{Ci/cc}$ $1.2 \times 10^{-3}$ to $1.2 \times 10^3$ $\mu\text{Ci/cc}$ $1 \times 10^{-1}$ to $1 \times 10^5$ $\mu\text{Ci/cc}$	Low Medium High		$1 \times 10^{-3}$ $\mu\text{Ci/cc}$
e. ECCS Area Ventilation / Accident Range	1/train	3-stage gas with multiple part/iodine collectors	RAB Elev. 43'	Auto switchover to accident range monitor	$1 \times 10^{-7}$ to $1 \times 10^{-1}$ $\mu\text{Ci/cc}$ $1.2 \times 10^{-3}$ to $1.2 \times 10^3$ $\mu\text{Ci/cc}$ $1 \times 10^{-1}$ to $1 \times 10^5$ $\mu\text{Ci/cc}$	Low Medium High		$5 \times 10^{-4}$ $\mu\text{Ci/cc}$
f. Steam Dumps A&B	1/train	Shielded G-M tubes with bkgd subtraction feature	Main Steam Lines Upstream of MSIVs	NONE	$1 \times 10^{-2}$ to $1 \times 10^4$ mR/hr			1.5 mR/hr

(1) SSG - single stage gaseous with beta scintillator detector. PIG-particulate/iodine/noble gas with beta scintillator detectors and sodium iodide for iodine channel. 3-stage accident monitors use beta scintillator for low range, cadmium - telluride for medium/high ranges.

SSL - single stage liquid with sodium iodide detector.

(2) The condenser air ejector exhaust monitor is normally diverted to the Plant Stack. The FHB stack exhaust is diverted to the main Plant Stack under high fuel pool area radiation conditions and then becomes monitored by the Plant Stack monitoring system.

(3) These are effluent level monitors, not used for accident assessment.

**TABLE 3-3  
ST. LUCIE 1 AND 2 AREA RADIATION MONITORS**

1. Containment Isolation Monitors

Unit 1:

Range:	1.0 to $10^5$ mR/hr
Typical Alarm Setpoint	8000 mR/hr

Unit 2:

Range:	1.0 to $10^7$ mR/hr
Typical Alarm Setpoint	8000 mR/hr

2. In-Containment High Range Monitors

Unit 1:

Range:	1.0 to $10^8$ R/hr	/R44
Typical High Alarm Setpoints:	6.4 R/hr (calibrated setpoint)	
	$7.3 \times 10^3$ R/hr (EAL accident setpoint)	
Typical High/High Alarm Setpoints:	8.0 R/hr (calibrated setpoint)	
	$1.47 \times 10^5$ R/hr (EAL accident setpoint)	

Unit 2:

Range:	1.0 to $10^8$ R/hr	/R44
Typical High Alarm Setpoints:	6.4 R/hr (calibrated setpoint)	
	$7.25 \times 10^3$ R/hr (EAL accident setpoint)	
Typical High/High Alarm Setpoints:	8.0 R/hr (calibrated setpoint)	
	$1.45 \times 10^5$ R/hr (EAL accident setpoint)	

3. Spent Fuel Pool Monitor

Unit 1:

Range:	0.1 to $10^4$ mR/hr
Typical Alarm Setpoints:	5 mR/hr (High)
	12 mR/hr (High/High)

Unit 2:

Range:	0.1 to $10^4$ R/hr
Typical Alarm Setpoints	5 mR/hr (High)
	15 mR/hr (High/High)

4. Post LOCA Monitors

Unit 1:

Range:	1.0 to $10^5$ mR/hr	/R44
Typical Alarm Setpoints:	75 mR/hr (High)	
	100 mR/hr (High/High)	

Unit 2:

Range:	10 to $10^7$ mR/hr
Typical Alarm Setpoints:	75 mR/hr (High)
	100 mR/hr (High/High)

**TABLE 3-4**  
**NON-RADIOLOGICAL INSTRUMENTATION USED FOR ACCIDENT ASSESSMENT**

<u>INSTRUMENTS</u>	<u>RANGE UNIT 1</u>	<u>RANGE UNIT 2</u>
RCS pressure	0-1600/ 1500-2500 psia 0-3000 psia	0-750/ 1500-2500 psia 0-3000 psia
RCS temperature		
hot leg (control channel)	515-615 F	515-615 F
hot leg (safety channel)	515-665 F	515-665 F
cold leg (control channel)	515-615 F	515-615 F
cold leg (safety channel)	465-615 F	465-615 F
cold leg (wide range)	0-600 F	0-600 F
Incore thermocouples	32-2300 F	32-2300 F
Subcooled Margin Monitors (QSPDS)	Calculated	Calculated
Nuclear Instrumentation		
Power Range (Linear Scale)	0-125%	0-125%
Wide Range Power (Log Scale)	$2 \times 10^{-8}$ -200%	$2 \times 10^{-8}$ -200%
Extended Range	$1-10^5$ CPS	N/A
Start-Up Channel	N/A	$1-10^5$ CPS
Pressurizer pressure (same as RCS)	0-1600/ 1500-2500 psia 0-3000 psia	0-750/ 1500-2500 psia 0-3000 psia
Pressurizer level	0-100%	0-100%
Steam Generator pressure (Main steam side)	0-1200 psig	0-1200 psig
Steam Generator level	0-100%	0-100%
Main steam pressure (safety channel)	0-1200 psia	0-1200 psia
ECCS header isolation valve lights	red - open green - closed	red - open green - closed
ECCS pumps	0-75 amps	0-75 amps
Containment pressure	0-50 psig (ESFAS) 0-60 psig -5-175 psig	0-15 psig (ESFAS) 0-60 psig -5-175 psig
Earthquake monitor	0-20%g	N/A

N/A = not applicable to unit

#### 4. NOTIFICATION AND COMMUNICATION

This section describes the procedures and methods established for initial notification and follow-up communications with Florida Power & Light Company, and from Florida Power & Light Company to the appropriate state, county, and federal response organizations. Section 4.6, Communications Equipment, describes the referenced systems in more detail. **Figure 1-2** shows the initial notification flow. **Table 4-1** presents the organizational positions and alternates for the primary response organizations responsible for ensuring the manning of communications links.

##### 4.1 FPL Emergency Response Organization

The FPL Emergency Coordinator, acting in accordance with plant procedures, has the responsibility to make the necessary notifications and communications, and for determining the content of the notification. However, actual contacts may be made by designated communications assistants. The use of the phrase "Emergency Coordinator" below is also defined as "Emergency Coordinator or designated communicator," except for those items described in Section 2.2.2.2 which cannot be delegated.

##### 1. Initial Notification

Florida Power & Light Company emergency procedures call for the following actions for initial notification within the FPL organization.

1. Personnel detecting a potential significant off-normal event or condition should report it to the Shift Manager by the fastest means available. This may mean face-to-face communication, the plant public address system, or the commercial (Bell) telephone system. These systems provide adequate means of redundancy for this initial notification.

The following information should be related to the extent possible:

- Type of emergency (fire, pipe rupture, etc.).
- Location of emergency.
- Presence of injured personnel.
- Extent of damage to plant components.

The Shift Manager directs the investigative actions to address the off-normal event. The Shift Manager classifies the event and if it is determined to be an Unusual Event, Alert, Site Area Emergency, or General Emergency, implements this Emergency Plan and becomes the Emergency Coordinator.

/R44

/R44

4. NOTIFICATION AND COMMUNICATION (continued)

4.1 1. 1. (continued)

As necessary, the Emergency Coordinator notifies plant personnel of the emergency situation and any required protective actions by the Plant Public Address system. Activation of FPL personnel proceeds to the degree necessary, as determined by the EC, in response to the severity of the emergency.

If necessary, the Emergency Coordinator directs the evacuation of all visitors and non-essential Florida Power & Light Company employees.

2. The Emergency Coordinator notifies the Duty Call Supervisor (DCS) by the most readily available communications system and provides basic information as described below and the status of his/her notification of off-site authorities. The DCS notifies the Recovery Manager (RM) and appropriate response personnel by telephone, cellular phone, or beeper.

The Emergency Coordinator provides the following information to the DCS to the extent possible:

- Type of accident or incident
  - Affected Unit
  - Assessment of the emergency condition (including the class of emergency).
  - Information on personnel injuries, and an estimate of personnel radiation exposures.
  - Off-site support already called in and/or required.
  - An estimate of the magnitude of a radioactive material release and the area possibly affected, if applicable.
  - Actions already taken or recommended with respect to the evacuation of various on-site areas, if applicable.
  - Meteorological information.
  - Assessment of potential radiation exposure to persons off-site and any protective actions for off-site areas recommended, if applicable.
3. Once the Emergency Operations Facility (EOF) is declared operational the Recovery Manager (RM) assumes responsibility for notification of off-site governmental agencies.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.1 2. Communications

Initially, communications between the Emergency Coordinator (in the Control Room) and FPL's Expanded Emergency Organization are by redundant telephone systems, with radio as the backup. When the Emergency Operations Facility is mobilized, communications within the FPL Emergency Response Organization are accomplished primarily using commercial phones.

Follow-up messages regarding the prognosis for worsening or terminating of the event as well as requests for on-site support by off-site organizations will be made periodically or as needed by the EC to the RM. Recommendations for off-site protective measures to Division of Emergency Management (DEM) may be included as part of follow-up messages. These measures are discussed in **Figure 5-1**.

##### 4.2 State and County Agencies

The State and County agencies are notified of an emergency situation (within 15 minutes) via redundant communication lines. State of Florida notification and communications procedures are presented in Annex A (Chapter 6) of the State Plan.

##### 1. Division of Emergency Management

###### **Initial Notification**

FPL's Emergency Coordinator will make initial notification within 15 minutes of declaring an emergency to the Duty Officer at the State Warning Point (SWP) in Tallahassee. The State's Hot Ring Down (commercial telephone and ESATCOM (Satellite Communications System) serve as backups) will be used for notification of any emergency: Unusual Event, Alert, Site Area Emergency or General Emergency. Backup telephone numbers for 24-hour per day notification are provided by procedure.

**Figure 4-1A** displays an example format of the information to be communicated to SWP during initial and follow-up notifications. The listed information is provided to the extent possible at the time of initial notification. Periodically, additional update information is included in follow-up messages. Follow-up messages may come from the Technical Support Center (TSC), if operational, or the Emergency Operations Facility (EOF), if operational.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.2 1. Division of Emergency Management (continued)

The initial notification may be brief with certain information not available. Follow-up messages from the Emergency Coordinator or Recovery Manager to the Division of Emergency Management (DEM) will include the required information as it becomes available.

The Division of Emergency Management has established a procedure to authenticate emergency notification from the St. Lucie Plant. The Hot Ring Down and ESATCOM systems are restricted circuits under control of the DEM and local government.

##### **Communications**

The Emergency Coordinator will maintain periodic contact with the State Warning Point, located at the State Emergency Operations Center (EOC) in Tallahassee, via the Hot Ring Down network.

FPL responsibility for communication with off-site agencies is transferred from the Emergency Coordinator to the Recovery Manager when the Recovery Manager declares the EOF operational.



**FIGURE 4-1**  
**FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM<sup>1</sup>**  
 (Page 1 of 1)

On-line Verification: ☐ SWP/DEM ☐ St. Lucie County ☐ Martin County

1. A. ☐ THIS IS A DRILL B. ☐ THIS IS AN EMERGENCY

2. A. Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ B. Contact Time: \_\_\_\_\_ C. Reported by: (Name) \_\_\_\_\_  
 D. Message Number: \_\_\_\_\_ E. Reported from: ☐ Control Room ☐ TSC ☐ EOF

3. Site: A. ☐ Crystal River Unit 3 B. ☐ St. Lucie Unit 1 C. ☐ St. Lucie Unit 2  
 D. ☐ Turkey Point Unit 3 E. ☐ Turkey Point Unit 4

4. Emergency Classification: A. ☐ Notification of Unusual Event C. ☐ Site Area Emergency  
 B. ☐ Alert D. ☐ General Emergency

5. A. ☐ Emergency Declaration: B. ☐ Emergency Termination: Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_

6. Reason for Emergency Declaration:\* A. ☐ EAL Number OR B. ☐ Description: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

7. Additional Information or Update: A. ☐ None OR B. ☐ \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Weather Data: A. Wind direction from \_\_\_\_ degrees B. Downwind Sectors Affected: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

9. Release Status: A. ☐ None (Go to Item 11) B. ☐ Is occurring C. ☐ Has occurred, but stopped

10. Release Significance Category (at the Site Boundary):  
 A. ☐ Information not available at this time.  
 B. ☐ Release within normal operating limits ( $\leq 3.5$  E-1 Ci/sec noble gas,  $\leq 4.6$  E-5 Ci/sec iodine)  
 C. ☐ Non-Significant Fraction of PAG Range (release is  $>$  normal limits and  $< 500$  mrem TEDE and 1000 mrem CDE)  
 D. ☐ PAG Range ( $\geq 500$  mrem TEDE or  $\geq 1000$  mrem CDE)

11. Utility Recommended Protective Actions:

A. ☐ No recommended actions at this time.

B. ☐ The utility recommends the following protective actions:

<input type="checkbox"/> Miles	<input type="checkbox"/> No Action Sectors	<input type="checkbox"/> Evacuate Sectors	<input type="checkbox"/> Shelter Sectors
0 - 2	_____	_____	_____
2 - 5	_____	_____	_____
5 - 10	_____	_____	_____

OR

Shelter Zones / Areas: \_\_\_\_\_

Evacuate Zones / Areas: \_\_\_\_\_

C. Consider Issuance of KI: ☐ Yes ☐ No

*If form is completed in the Control Room, go to Item 15. If completed in the TSC or EOF, continue with Item 12.*

12. Plant Conditions: A. Reactor Shutdown? ☐ Yes ☐ No B. Core Adequately Cooled? ☐ Yes ☐ No  
 C. Containment Intact? ☐ Yes ☐ No D. Core Condition: ☐ Stable ☐ Degrading

13. Weather Data: A. Wind Speed \_\_\_\_\_ mph B. Stability Class \_\_\_\_\_

14. Additional Release Information: ☐ N/A OR

A. ☐ Noble Gases \_\_\_\_\_ Curies per second B. ☐ Iodines \_\_\_\_\_ Curies per second

C. Airborne: Date Started \_\_\_\_/\_\_\_\_/\_\_\_\_ Time Started \_\_\_\_\_ Date Stopped \_\_\_\_/\_\_\_\_/\_\_\_\_ Time Stopped \_\_\_\_\_  
 D. Liquid: Date Started \_\_\_\_/\_\_\_\_/\_\_\_\_ Time Started \_\_\_\_\_ Date Stopped \_\_\_\_/\_\_\_\_/\_\_\_\_ Time Stopped \_\_\_\_\_

Distance	Projected Thyroid Dose (CDE) for 1 Hour	Projected Total Dose (TEDE) for 1 Hour
1 Mile (Site Boundary)	E. _____ mrem	F. _____ mrem
2 Miles	G. _____ mrem	H. _____ mrem
5 Miles	I. _____ mrem	J. _____ mrem
10 Miles	K. _____ mrem	L. _____ mrem

EC or RM Approval Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_

15. Message Received By: Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_

\* If emergency class escalation is known to be necessary and a new notification form will be transmitted within 15 minutes, then you may go to line 15.

<sup>1</sup> Format may vary in plant procedures.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.2 2. Department of Health

###### **Initial Notification**

The Division of Emergency Management (DEM) State Warning Point Duty Officer is responsible for notifying the Department of Health. Notification is made to the Bureau of Radiation Control. A Health Physicist contacts the St. Lucie County EOC to ascertain what, if any, protective actions have been initiated. If required, the Bureau of Radiation Control activates the Mobile Emergency Radiological Laboratory (MERL) and/or the Radiological Monitoring Teams.

###### **Communications**

The Public Health Physicist maintains contact with the Division of Emergency Management (DEM) via mobile radio as he/she travels to the FPL Emergency Operations Facility. Contact is maintained with the Mobile Emergency Radiological Laboratory (MERL) by the Division of Emergency Management (DEM) via Local Government Radio or cellular phone while the MERL is in transit. On arrival, commercial phones are also available.

The State Plan describes provisions for communication between EOCs and off-site radiological monitoring teams in Annex A (Chapter 6 and Appendix III).

##### 4.3 St. Lucie County and Martin County Department of Public Safety Directors

###### **Initial Notification**

The risk county EOCs are initially notified simultaneously via the same communications link used (Hot Ring Down or its alternates) to notify the Division of Emergency Management State Warning Point for all four classes of emergencies. Hot Ring Down and its alternates are monitored on a 24-hour basis by the St. Lucie and Martin County Departments of Public Safety.

The Department of Public Safety Directors can then be reached by telephone or by dispatching a patrol car. Also, the Duty Officer at the Division of Emergency Management's State Warning Point is responsible for confirming the receipt of emergency notification by the County Emergency Management Directors. When the emergency notification is by commercial telephone, he/she is responsible for verifying the message from the Plant by a callback procedure and informing the County Directors that the message has been verified. Alternate commercial telephone numbers for 24-hour per day notification are provided by procedure.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.3 St. Lucie County and Martin County Department of Public Safety Directors (continued)

###### **Initial Notification (continued)**

Follow-up messages concerning the emergency (Alert Class and higher) may come from the TSC staff or the EOF. Information that should be contained in these messages is shown in **Figures 4-1**.

###### **Communications**

The County Department of Public Safety Directors proceed to the St. Lucie and Martin County Emergency Operations Centers, respectively and use the communication channels available there. These include Hot Ring Down, ESATCOM (Satellite Communications System), Local Government Radio, teletype, facsimile, police and fire radio networks, telephone, and RACES (Radio Amateur Civil Emergency Services).

##### 4.4 Federal Agencies

###### 1. U.S. Nuclear Regulatory Commission

###### **Initial Notification**

The NRC Operations Center in Maryland is notified of certain events by Emergency Notification System (ENS) from the Control Room. The notifications include all radiological emergencies and are made in accordance with Federal Regulations and plant procedures. The Emergency Coordinator or his designee initiates this contact within one hour of the classification of an emergency. Alternate commercial phone numbers are provided by procedure.

###### **Communications**

Communications with the NRC may be handled by telephone from the Control Room, the TSC (if operational), or the Emergency Operations Facility (if operational).

###### 2. U.S. Coast Guard

Assistance from the Coast Guard for on-site rescue, aid or evacuation of persons in danger, and the protection of property threatened by any type of disaster can be requested by telephone from the Emergency Coordinator or his/her designee or the Recovery Manager or his/her designee to the Coast Guard Duty Officer.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.5 Notification of the Public by the State/County

The State Plan (See Appendix A for Distribution of State Plan) defines the state and county procedures for notifying the public in the event of an emergency. Annex A (Appendix III, Section VI) of the State Plan describes further provisions.

##### 4.6 Communications Equipment

The various communications systems previously discussed are described in more detail below and in **Figure 4-2**.

This communications network incorporates all telephones, the plant public address system, fixed and mobile radio systems, and radio "beepers" employed for routine plant operation and other normal company business. Key personnel on-site are readily accessible, since at any time most or all of these systems are available to contact them. In addition, the communication systems of State and County agencies and other organizations with which the company has emergency assistance agreements will be used to implement emergency activities.

##### **Public Address System (PA)**

The PA system, with speakers strategically located throughout the Protected Area, provides for the transmission of warning and instructions in the event of an emergency. The system is in frequent use during normal plant operations, and consists of numerous separate amplifiers which operate from the plant 120 volt AC vital instrument power system. Handsets are provided in the Plant Control Rooms, the North and South Services Buildings, and numerous other locations within the Protected Area. The system includes one paging channel and five party line channels.

##### **Bell System Telephones (Commercial Telephones)**

There are numerous Bell Telephone System lines connected to the plant for normal dial telephone service. This system represents the primary system for routine communication with areas outside the plant.

##### **Portable Radio Transceivers**

Various portable radio transceivers (walkie-talkies) are available to supplement the fixed communications equipment in the plant. These radios are lightweight battery operated units which may be easily carried by personnel to any location on the plant site. Some of these portable radios are capable of communicating with an FM radio transceiver over a range of several miles.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.6 Communications Equipment (continued)

###### **FPL Intelligent Tandem Network (ITN) System**

Telephones in most FPL locations may access the Intelligent Tandem Network (ITN) telephone system. Through the ITN and its associated "Uniform Dialing Plan," other company office locations may be directly dialed, WATS lines may be accessed, and local telephone calls may be placed. This system uses a combination of Bell telephones and FPL telephones, depending upon office location.

###### **Radio Paging System**

Telephones in the ITN system may be interconnected to the Radio Paging System. This system is capable of reaching beepers located within FPL's service area from Sebastian Inlet to Miami-Dade County/Monroe County line. Beepers are regularly assigned to key personnel in the Emergency Response Organization as shown in the Emergency Response Directory (ERD).

###### **Company Radio System**

The company radio system consists of a variety of fixed base radio equipment. The System Operations Power Coordinator's office, trouble dispatcher offices, service centers, power plants, and mobile service vehicles are equipped with one or more of these radio systems. In the event of interruption of electric service to the base radio stations, emergency power can be supplied to this equipment.

The Control Room, TSC, and EOF have access to one or more of these radio systems. These radio systems will provide back-up communications between the Plant, the EOF, and the System Operations Office. The System Operations Office has direct telephone lines and either direct, patch, or indirect radio contact with all the plants, radio-equipped vehicles and service centers in the Florida Power and Light Company system.

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#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.6 Communications Equipment (continued)

###### **Hot Ring Down Telephone System (HRD)**

The Hot Ring Down Telephone System is installed in the Control Rooms, TSC, EOF, State EOC, and risk county EOCs. This system uses dedicated commercial telephone lines and is activated through pre-designated three digit access "telephone numbers."

The initial notification of an emergency and other required notifications are made via this system to the State Division of Emergency Management (State Warning Point - Tallahassee) and the County Departments of Public Safety. The Hot Ring Down System is the primary system for communication among these facilities. Commercial telephone and ESATCOM (Satellite Communications System) serve as backups.

###### **ESATCOM**

ESATCOM is an Emergency Satellite Communications System which is available in the Control Rooms, the Technical Support Center, and the Emergency Operations Facility. The ESATCOM is an alternate communications pathway for the Hot Ring Down telephone.

###### **Local Government Radio (LGR) System**

The LGR System operates on frequencies allocated in the State Division of Emergency Management (DEM) and is typically used to maintain communications with the State Department of Health (DOH), Mobile Emergency Radiological Laboratory (MERL) and the DOH field monitoring teams.

#### 4. NOTIFICATION AND COMMUNICATION (continued)

##### 4.6 Communications Equipment (continued)

###### **NRC Emergency Telecommunications System (ETS)**

Portions of this system are used to contact the NRC, such as the ENS and HPN. These phone links are described below:

- **Emergency Notification System (ENS)** - The ENS is used for initial notification by the licensee, as well as ongoing information on plant systems, status, and parameters. The ENS is installed in each Control Room, TSC and EOF.
- **Health Physics Network (HPN)** - The HPN is used for communication with the licensee on radiological conditions (in-plant and off-site) and meteorological conditions, as well as their assessment of trends and needs for protective measures on-site and off-site. The HPN is located in the TSC and EOF.

Additionally, this system contains conferencing bridges and access to a Local Area Network (LAN) for use by the NRC Site Team.

##### 4.7 Testing

As discussed in Section 7.1, Exercises and Drills, communications equipment and procedures will be tested periodically as part of the FPL program of exercises, drills, and tests for maintaining emergency preparedness.

# **TABLE 4-1** **COMMUNICATIONS RESPONSIBILITIES**

The following positions are responsible to ensure the manning of communication links for the listed organizations/facilities:

## 1. FPL On-shift Emergency Response Organization/Control Room

Primary: Emergency Coordinator

1. Shift Manager (SM)
2. Alternate as defined by plan and procedure

Alternate: Designated Communicator (from available plant operating and technical staff).

## 2. FPL Expanded Emergency Response Organization/Technical Support Center and Emergency Operations Facility

Primary: Emergency Coordinator/Recovery Manager

1. Plant General Manager (TSC)/Vice President, St. Lucie Plant (EOF)
2. Alternate as defined by plan and procedure

Alternate: Designated Communicator (from available management or technical staff).

## 3. Florida Division of Emergency Management/State Emergency Operations Center, Tallahassee

Primary: Chief of Operations, DEM

Alternate: As defined in the State Plan

## 4. St. Lucie County/Emergency Operations Center, Ft. Pierce

Primary: St. Lucie County Department of Public Safety Director

Alternate: As defined in the State Plan

## 5. Martin County/Emergency Operations Center, Stuart

Primary: Martin County Department of Public Safety Director

Alternate: As defined in the State Plan

## 6. Florida Department of Health Bureau of Radiation Control (BRC)/Field Monitoring Teams

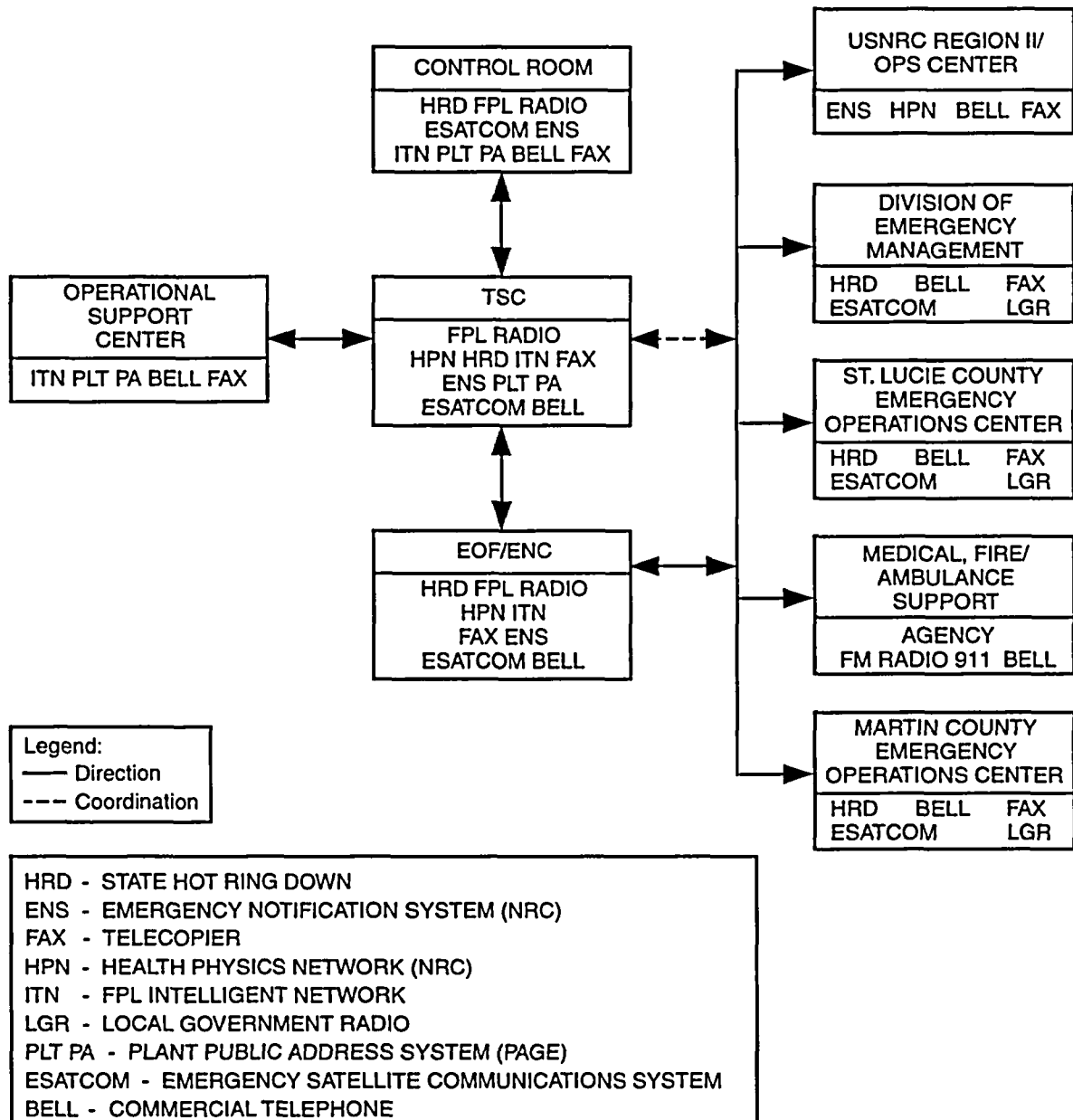
Primary: Supervisor, BRC

Alternate: As defined in the State Plan

/R44



**FIGURE 4-2  
COMMUNICATIONS INTERFACES**



(D/PS/EPLAN-F4.2-R36)

## 5. RESPONSE TO ACCIDENT CONDITIONS

**Table 3-1** identifies a spectrum of off-normal events and classifies those events into four categories. The classification is based on Emergency Action Levels which are related to instrument readings, or observations, or a combination of these identified in the table. This section discusses the assessment of and response to these events.

### 5.1 Accident Assessment

Once an off-normal event has been detected and classified in accordance with the Emergency Action Levels, a process of continuing assessment will be initiated. System instrumentation and procedures which would be used as appropriate in the assessment process are described below. Specifications of instrumentation utilized for accident assessment are contained in procedures. Post accident sampling capabilities are also described in procedures.

#### 1. Plant Release Pathways

Units 1 and 2 at the St. Lucie Plant are equipped with independent systems for measuring radioactivity at potential release points and within the containment buildings (See **Table 3-2 and 3-3**).

The plant vent monitoring system samples the exhaust stream which is the pathway for releases from the containment purge, reactor auxiliary building, condenser air ejector exhaust and the waste gas decay tanks. The waste gas system has a separate monitor which controls releases to the plant vent.

Additional release pathways are also monitored. These include the fuel building vent (exhaust for fuel pool, new fuel room and fuel pool pump room). During accident conditions, the Unit 2 fuel building exhaust is diverted and monitored through the Unit 2 plant vent. The two Emergency Core Cooling System (ECCS) pump bays at each of the units have monitored exhaust systems. The two main steam lines at each of the units are monitored for possible releases via the safety relief valves and/or atmospheric steam dump.

All monitored pathways, excluding the main steam lines, are equipped with high efficiency particulate filters or charcoal/iodine filters or both. The monitoring point is after the filters and before the release opening to the atmosphere.

For particulates and iodine, release points other than the main steam lines will be monitored using grab sampling and analysis in accordance with plant procedures.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.1 1. Plant Release Pathways (continued)

In addition to these monitors, each unit is provided with an area radiation monitoring system (see **Table 3-3**). This monitoring system employs detectors distributed throughout the unit and detector indicators are provided locally and in the respective Control Rooms. The area monitoring system provides early indication of a release of radioactivity within the unit.

Under accident conditions, the containment atmosphere is monitored for radioisotopic content by grab sampling. In addition, the containment is provided with radiation monitors. These monitors would provide an early indication of radioactivity in the containment, particularly as a result of a loss of reactor coolant to the containment building.

Chemical and radioisotopic analyses of the reactor coolant are provided by grab sampling.

Also, each plant has a system of fire detectors with appropriate alarms in the Control Room to provide warning of a fire emergency.

### 2. On-site Sampling Resources

The capability is available at the St. Lucie Plant to obtain grab samples of the reactor containment atmosphere and the reactor coolant.

To obtain grab samples of the containment atmosphere following an accident, a special removable gas sampling vessel is provided in the Containment Hydrogen Analyzer System on both units. The removable vessel would be transported to the plant laboratory. At the laboratory, a portion of the gas would be drawn from the vessel, and the radioisotopic content determined by a multichannel analyzer. Plant procedures provide detailed instructions for sample acquisition, transportation, and analysis.

Reactor coolant grab samples can also be taken following an accident. Details on sample acquisition, transportation, and analysis are described in plant procedures.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.1 2. On-site Sampling Resources (continued)

Air samples will be collected using portable air samplers in accordance with a plant procedure. Portable air samplers are located such that time required to obtain results is minimized for critically manned areas (e.g., Control Room, Technical Support Center). Silver zeolite sample cartridges are stored on-site. To preclude interferences by noble gas adsorption, only silver zeolite cartridges will initially be used to sample critically manned areas (e.g., Control Room, Technical Support Center, other areas which require personnel to be present). Collected samples will be transported promptly to the lab. If necessary, an alternate Counting Room will be established using portable equipment in a low background area. Analysis by gamma spectroscopy, in accordance with approved procedures, is preferred, but portable instrumentation yielding usable results is available.

### 3. Meteorological Systems

Meteorological data are required to make estimates of off-site radiation exposure in the event of a release of gaseous radioactivity. Measurement of three meteorological parameters, wind speed, wind direction, and a measure of atmospheric stability, are required to make estimates of atmospheric dispersion, an essential part of an off-site radiation exposure calculation.

Meteorological data are collected at the St. Lucie Plant site. The readouts from the site meteorological tower are digital with strip chart recorders to provide 15 minute averages and the data are directly available at the Unit 1 Control Room. The National Weather Service Station serves as the backup. **Table 5-1** summarizes the available data.

As indicated in **Table 5-1**, values of the key meteorological parameters are provided for by the St. Lucie Plant meteorological tower. These readouts are provided continuously and the data are directly available at the Control Room, Technical Support Center (TSC), and the Emergency Operations Facility (EOF) via the Emergency Response Data Acquisition and Display System (ERDADS).

Meteorological data are provided to the State via initial and follow-up communications. Data is also provided in response to direct inquiries from DEM and the Bureau of Radiation Control. The EOF and NRC can receive timely meteorological information through the TSC, upon request, or through ERDADS.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.1 4. Source Term and Release Determination

As discussed in Section 5.1.3 certain meteorological parameters are required for the calculation of off-site radiation exposure from airborne releases. Additional essential pieces of information are the rate of release and isotopic composition of the released radioactivity. If radioactivity was released from a monitored vent, then a direct measure of the release rate would be available. Monitored release points are discussed in Section 5.1.1.

Based upon certain assumptions, a specific source term can be determined using the FPL Class A Emergency Off-site Dose Calculation Program or EPIP-09, "Off-site Dose Calculations" for all monitored release points and grab samples.

In the event of a loss of coolant accident, the containment radiation monitors would provide the first indication of the magnitude or existence of radioactivity in the containment atmosphere. Additional information about the isotopic composition of the airborne radioactivity would be derived from isotopic analysis of a containment atmosphere sample.

Containment High Range Radiation Monitors (CHRRM) provide an indication of levels of radioactive material in the containment atmosphere. These monitors can be used to determine a certain concentration of radionuclides based upon the isotopic mixes assumed for the accidents described in the Updated Final Safety Analysis Report (UFSAR). Procedures addressing these parameters and calculations are provided in the FPL Class A Emergency Off-site Dose Calculation Program or EPIP-09, "Off-site Dose Calculations."

Procedures have been developed to assist the plant staff in estimating release rates and isotopic content for releases from the various plant vents.

A containment release rate for use in the off-site dose estimation procedure mentioned above is conservatively estimated as the design basis leak rate at the design pressure.

**TABLE 5-1**  
**SOURCES OF METEOROLOGICAL DATA**

<b>Meteorological Parameter</b>	<b>Primary Source of Information</b>	<b>Type of Display</b>	<b>Alternate Source of Information</b>
Wind Speed	St. Lucie Meteorological Tower (10 meter sensors serve as primary, 60 meter sensors serve as first backup)	ERDADS display or Digital and Chart recorder (15 minute averages) - Unit 1 only	National Weather Service Station  Melbourne
Wind Direction	St. Lucie Meteorological Tower (10 meter sensors serve as primary, 60 meter sensors serve as first backup)	ERDADS display or Digital and Chart recorder (15 minute averages) - Unit 1 only	National Weather Service Station  Melbourne
Stability Class ( $\Delta T$ )	St. Lucie Meteorological Tower (60 meter temperature sensor - 10 meter temperature sensor)	ERDADS display or Digital and Chart recorder (15 minute averages) - Unit 1 only	National Weather Service Station  Melbourne
Other basic meteorological parameters	National Weather Service Station  Melbourne	None (via telephone)	

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.1 5. Exposure and Dose Rate Determination

One of the uses of radiation monitors and meteorological instrumentation is the calculation of off-site radiation exposures. An estimate of doses is needed in the event of a radiological emergency so that responsible agencies can use this information to plan protective action.

EPIP-09, "Off-site Dose Calculations" provides the details of how initial dose estimates are determined. In particular, current meteorological data, grab sample results, Field Monitoring Team data, process monitor data, Containment High Range Radiation Monitors (CHRRM) and Post-LOCA Radiation Monitor readings are used in conjunction with tables to estimate doses under actual meteorological conditions. Dose calculations will be updated periodically during the course of the accident and the results will be provided to State and County authorities for their use in evaluating the need for protective action. **Figure 5-1** compares off-site dose estimates with the Environmental Protection Agency (EPA) Protective Action Guides (PAGs). Initial dose estimates would be prepared by the Chemistry Department representative who reports to the Technical Support Center. Refined dose estimates would be performed by dose assessment personnel in the Emergency Operations Facility, when operational. Dose estimates may be performed using EPIP-09 or the Class A computer model which utilizes dose factors from EPIP-09. Default values, estimating a worst case situation can be utilized if assessment instrumentation is not available (off-scale or inoperable) and field sample analysis has not yet been completed. FPL off-site dose calculations and field monitoring analysis will be compared with Florida Department of Health and other off-site agencies (NRC, DOE) calculations and analysis when those agencies co-locate in the EOF.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.1 6. Off-site Monitoring

#### **Dosimetry**

The Florida Department of Health maintains a system of about 35 TLD stations in the vicinity of St. Lucie Plant. Stations are provided in each land based 22.5° sector, at approximately 1-mile, 5-mile and 10-mile radii.

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#### **Laboratories and Sampling**

Laboratory facilities are provided as discussed in Section 2.3.2. The plant's on-site radiological laboratories serve as primary facilities with backup provided by portable equipment. Analysis of off-site environmental samples collected by the State will be performed at the State's Mobile Emergency Radiological Laboratory. This mobile lab can be in position near the site within three hours of notification. Bureau of Radiation Control representatives dispatched to the EOF will serve as a central point for the receipt of all State off-site field monitoring data.

#### **Field Monitoring - State**

Annex A (Chapter 9) of the State Plan discusses the State role in accident assessment. It describes agencies and their missions, specialized personnel, special equipment, and other matters related to field monitoring within the Plume Exposure Pathway Emergency Planning Zone (EPZ). Annex A (Chapter 8, Section V and Figures 8-2 to 8-4) discuss in further detail the capability and resources for field monitoring.

Transportation of field teams is discussed in Annex A (Chapter 8, Section III) of the State Plan. Field team communications are described in Annex A (Chapter 6) of the State Plan. Monitoring equipment is described in Annex A, (Chapter 8, Section V and Figures 8-2 to 8-4). Composition of field teams is discussed in Annex A (Chapter 9) of the State Plan.

/R44

Although county plans discuss accident assessment, Section X of Appendix III, 'St. Lucie Commercial Nuclear Power Plant (Site Plan)', indicates that the off-site accident assessment responsibility rests with the Bureau of Radiation Control.

DOH Bureau of Radiation Control provides for the measurement of iodine in air and the use of such measurements in assessment activities.



5. RESPONSE TO ACCIDENT CONDITIONS (continued)

5.1 6. Off-site Monitoring (continued)

**Field Monitoring - Plant**

Plant procedure HP-200, "Health Physics Emergency Organization," provides methods for activation of emergency field monitoring teams and dispatching these teams throughout the plume EPZ.

Procedure HP-202, "Environmental Monitoring During Emergencies," includes techniques for measurements of airborne concentrations of radioiodine and direct radiation dose rates, transportation of teams, expected deployment times, and communications. Instrumentation, at the plant, is available with the capability to detect radioiodine in concentrations of at least  $10^{-7}$  microcuries/cc, in the field. Assessment of data is discussed in EPIP-10, "Off-site Radiological Monitoring."

**Coordination of Sampling Data**

To assure that information concerning FPL off-site radiological assessment is exchanged, arrangements have been made for representatives from the Bureau of Radiation Control to be stationed at the EOF. Direction and control of field operations for the Department of Health will be provided by the Bureau of Radiation Control Health Physics Supervisor. He/she will conduct/supervise accident assessment and/or response of the field teams from a post at the EOF, where office space and communications equipment are available. Prior to the arrival of Bureau of Radiation Control personnel, coordination of this information will be through follow-up communications with DEM and the Plume Exposure Pathway EPZ counties.

Department of Energy (DOE) off-site monitoring assistance, if required, will be requested by the DEM in consultation with the Bureau of Radiation Control. Lead responsibility for coordination with the DOE is assigned to the Bureau of Radiation Control.

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## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 Protective Response

This section describes the protective actions on-site and data provided to assist the State and County in determining appropriate off-site protective actions.

#### 1. Protective Actions

##### **On-site**

On-site protective actions for a radiological emergency consist of evacuation of the affected area (localized evacuation or site evacuation), monitoring of all personnel who were in the affected area, decontamination as required, and re-entry to determine the magnitude and extent of the problem when it is determined to be safe to do so.

Individuals remaining or arriving on-site during an emergency will be provided protective equipment as prescribed by the TSC HP Supervisor and plant procedures. Florida Power & Light Company will make Potassium Iodide (KI) available for use as a thyroid blocking agent. Use of KI will be in accordance with plant procedures.

/R44

Control Room personnel are in an isolated environment and need protective equipment if they leave the Control Room. An emergency kit with necessary equipment is present inside both Control Rooms and is to be used for this purpose (**Table 2.3**). In addition, if there is fire or smoke in the Control Room or if the Control Room air becomes contaminated, Control Room personnel might have to don respiratory protective equipment in order to remain in the Control Room to handle the emergency.

##### **Decontamination**

Personnel decontamination facilities are available in four locations. Their use will be governed by the nature of the incident.

1. Hot Locker Rooms - Showers and sinks available for the decontamination of personnel with no (or minor) injuries. One is located in the Auxiliary Building for each unit.
2. Lawnwood Regional Medical Center in Ft. Pierce, FL and Martin Memorial Medical Center in Stuart, FL are available for medical treatment and decontamination of contaminated injured individuals. Lawnwood Regional Medical Center is located approximately 8 miles Northwest of St. Lucie Plant. Martin Memorial Medical Center is located approximately 10 1/4 miles South of St. Lucie Plant.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 1. Protective Actions (continued)

#### Decontamination (continued)

3. Decontamination Facility - The Site Assembly Station personnel decontamination capabilities consist of utilizing various types of decontamination agents, such as waterless cleaners and decontamination foams. A quantity of cloth material is available for use with these decontamination agents. Contamination monitoring is performed through the use of count rate instruments with beta sensitive probes. Extra clothing for personnel whose personal clothing has been contaminated is available in the form of disposable garments. Decontamination of vehicles will be handled following the accident. Methods for decontamination and monitoring are described in plant procedures.

#### Off-site

Off-site areas are the responsibility of the respective County Public Safety Departments, the Department of Health, and the Division of Emergency Management of the State of Florida. Control of radioactive contamination and public safety in off-site areas are responsibilities of these governmental agencies, and their criteria for implementing protective actions may be found in the State Plan (Annex A, Chapter 10). Decontamination of off-site areas will be performed under the direction of the Bureau of Radiation Control.

Section XII.E. of Appendix III of the State Plan discusses evacuation routes, times, and facilities in relation to St. Lucie and Martin Counties.

Recommendations for protective actions will be made by the Emergency Coordinator (Recovery Manager after EOF is operational) in accordance with **Figure 5-1**. The development of this table was based upon consideration of severity of an accident (emergency class), estimated off-site doses (if available), and the EPA Protective Action Guides.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 2. On-site Warning and Response

During an emergency, the relocation of plant personnel in the Protected Area may be required in order to prevent or minimize exposure to radioactive materials. Evacuation is the primary protective action anticipated for on-site personnel. An emergency evacuation is the orderly, rapid, and safe withdrawal of all personnel from an area affected by an emergency condition. The plant public address system will be used to announce evacuation orders. Announcement of an emergency situation to all plant personnel within the Protected Area can be accomplished in less than 15 minutes. Depending on the nature of the emergency and the extent of the area affected, evacuations have been classified as either a Local Evacuation or an Owner Controlled Area Evacuation.

#### 1. Local Evacuation

##### Definition

A local evacuation is the evacuation of personnel from a room, area, or building located within the Protected Area.

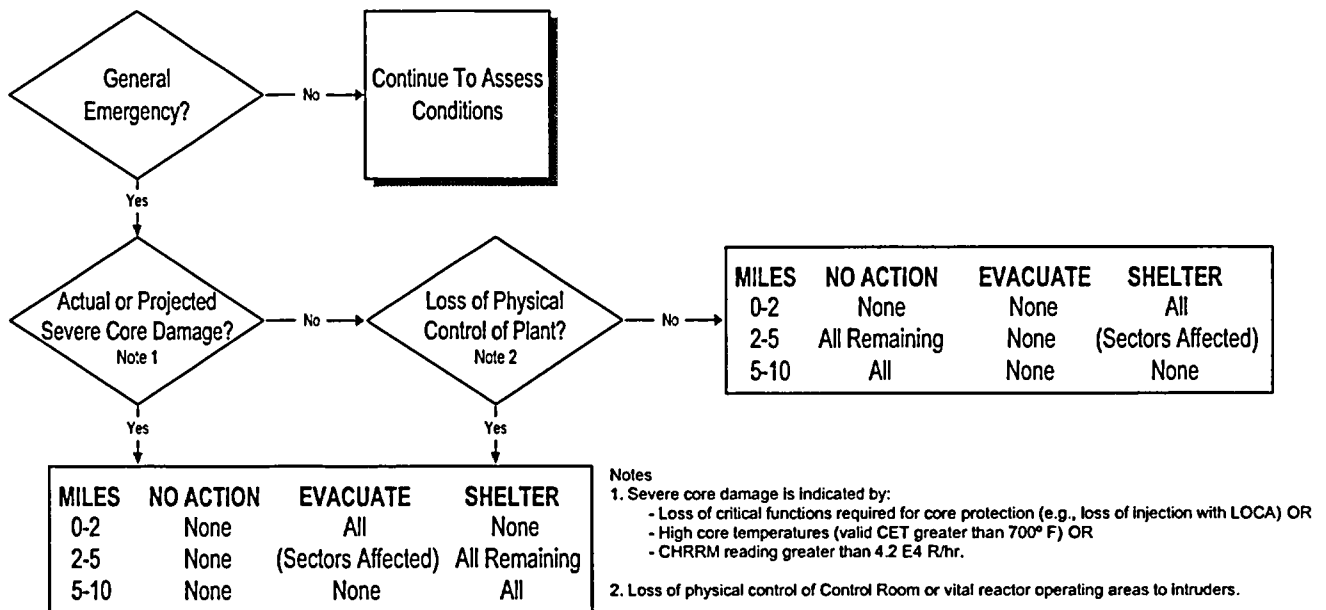
##### Criteria

The evacuation of an affected local area will be initiated per routine HP procedures when any of the following conditions occur:

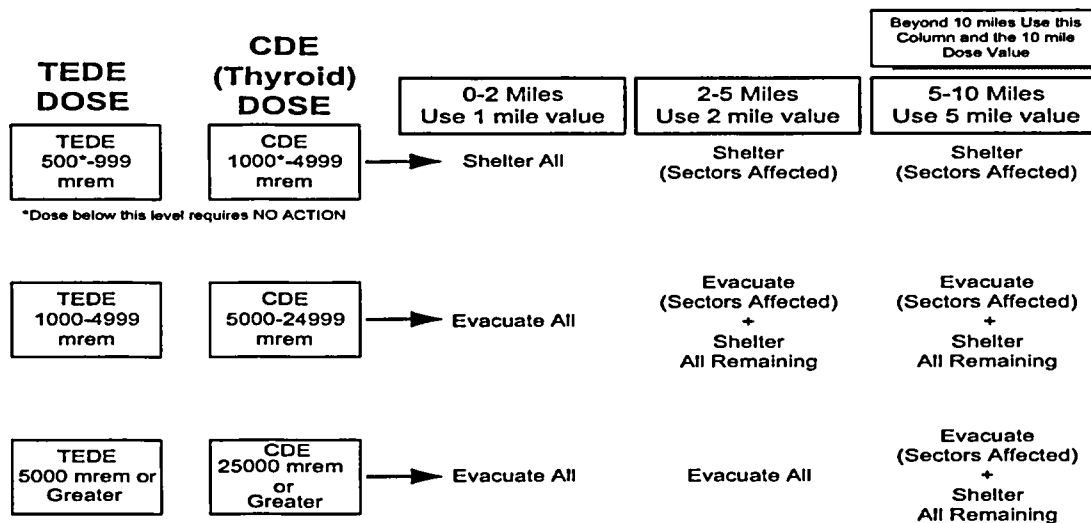
1. Area Radiation Monitor Alarm
2. Containment Evacuation Alarm
3. Unevaluated direct radiation dose rate increase in excess of 100 mrem/hour above normal levels.
4. Unexpected airborne radioactivity concentration in excess of  $1 \times 10^{-9}$  micro Ci/cc. /R44
5. Removable radioactive surface contamination in an unposted area in excess of 1000 dpm/100 cm<sup>2</sup> beta-gamma over an area 100 ft<sup>2</sup>. /R44
6. Removable radioactive surface contamination in an unposted area in excess of 50 dpm/100 cm<sup>2</sup> alpha over an area 100 ft<sup>2</sup>. /R44

# FIGURE 5-1 PROTECTIVE ACTION RECOMMENDATIONS<sup>1</sup>

## PARs Based on Plant Conditions



## PARs Based on Off-Site Dose



(DPS/EPLAN-F5.1-R36)

<sup>1</sup> Format may vary in plant procedures.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 2. 1. Local Evacuation (continued)

#### Personnel Actions

When the containment evacuation alarm is activated or when the Emergency Coordinator makes notification over the public address system that a local evacuation has been declared, non-essential FPL and contract personnel, and visitors in the area will go to the designated assembly area and remain there for personnel accountability and monitoring. Plant visitors are escorted at all times by a trained person who is accountable for them. They will also be informed by their escort during any emergency of what they are expected to do during the emergency.

When a local evacuation is declared, the Security Force will assist in personnel accounting and be prepared to brief the SM/Emergency Coordinator.

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#### Precautions

Every effort will be made to minimize personnel exposure to radiation. Personnel who have been in the area of an evacuation should remain in a group and should not mix with other personnel in the assembly area until they have been monitored for possible contamination, unless they are injured. Injured personnel will be treated by the First Aid Team. Provisions exist for off-site treatment of personnel, if required (see Section 2.5).

#### Evacuation Implementation

The SM/Emergency Coordinator will announce the local evacuation over the public address system, identifying the area affected, the assembly point and other instructions as required. All personnel in the evacuated area will stop work, turn off potentially hazardous equipment and leave the area. All personnel in the evacuated area should report to the designated assembly area for monitoring and accountability. The SM/Emergency Coordinator will activate the Emergency Response Organization as required. The SM/Emergency Coordinator, and department supervisors and foremen having personnel working in the evacuated area, will assist in verifying that all personnel are accounted for. The SM/Emergency Coordinator will initiate a search for personnel who have not been accounted for.

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## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 2. 2. Owner Controlled Area Evacuation

#### Definition

An Owner Controlled Area Evacuation is the orderly withdrawal of all non-essential personnel from the Owner Controlled Area (OCA), including the Protected Area (PA).

#### Criteria

An Owner Controlled Area Evacuation can be initiated at the discretion of the EC and is signaled by the sounding of the evacuation alarm followed by instructions given over the public address system. Evacuation of the OCA will normally occur at a Site Area Emergency or General Emergency unless such action is deemed unwarranted by the EC (i.e., personnel would be placed at greater risk).

#### Responsibilities

The EC advises the TSC Security Supervisor of evacuation of the OCA either directly or via the evacuation alarm and/or the public address system. Information needed by the Security Force to properly fulfill their responsibilities during the evacuation is provided to the TSC Security Supervisor by the EC. Significant responsibilities during the evacuation include directing the evacuation movements and personnel accountability.

The EC will direct that a search be initiated for any personnel not accounted for.

#### Evacuation Preparedness

The population within the OCA is approximately 1000, including workers who may be present on-site at shift change.

All visitors will have adequate transportation available to evacuate all members of their respective groups. The Security Force will assist in arranging for required transportation.

5. RESPONSE TO ACCIDENT CONDITIONS (continued)

5.2 2. 2. Owner Controlled Area Evacuation (continued)

**Evacuation Preparedness** (continued)

Escorts accompanying visitors will assure that transportation is available at all times while the visitors are on-site. Escorts will maintain controls of groups of individuals to which they are assigned to enable all members of the groups to be located, notified, and evacuated in the event that evacuation of the OCA is called for.

Procedures used by the Security Force define which evacuation route(s) will be used by the various groups in the OCA.

**Evacuation Implementation**

The EC will sound the evacuation alarm and announce instructions for evacuation of the OCA over the public address system. Upon hearing the alarm and/or evacuation order, all non-essential personnel will evacuate. ERO personnel will report to the TSC, OSC, or EOF for assignment.

The EC will notify the TSC Security Supervisor that an Owner Controlled Area Evacuation is ordered and will advise him/her of all pertinent information affecting the evacuation, including priorities and/or special conditions which exist to enable the evacuation to be conducted in a safe manner. Security will assign specific areas of the OCA, outside the PA, for which they are responsible for personnel notification.

The TSC Security Supervisor will immediately initiate the evacuation procedures for the OCA, outside the PA including: (these actions may occur at the Alert level)

1. Notification of all security patrols and tour guides of the evacuation.
2. Notification of all non-company groups working in or using portions of the OCA.
3. Initiate sweeps of recreation areas and assist in personnel accountability.



## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 2. 2. Owner Controlled Area Evacuation (continued)

#### Evacuation Implementation (continued)

Upon declaration of an Owner Controlled Area Evacuation, the Security Force will conduct personnel accountability in accordance with emergency procedures. An initial list of individuals in the PA is established in 30 minutes and continuously updated until all individuals are accounted for. The number of security officers on duty at any time is adequate to handle the evacuation of personnel in the OCA should such an action be called for by the EC.

#### Personnel Actions

When an evacuation is ordered, all non-essential personnel shall exit the PA via their normal gate unless otherwise directed by the EC. Non-essential personnel shall travel from the plant site following the designated evacuation route. **Figure 5.2** shows the evacuation route(s) for personnel. It is expected that the primary evacuation route will not be affected by adverse weather or traffic conditions. If a release is in progress and the potential exists for contamination of evacuees, they will be directed to an off-site assembly area. The primary assembly area for evacuated personnel is the Jaycee Public Park on Highway A1A, located approximately 7 ½ miles north of the plant on the road to Ft. Pierce. The alternate assembly area, south of the plant, is Jensen Public Beach Parking Area. All personnel will be requested to remain at the assembly area until instructed otherwise.

### 3. Off-site Area Protective Measures

An off-site area evacuation is the orderly withdrawal of all persons from the portion of the public areas surrounding the plant which have been affected by the emergency. The criteria for the initiation of the evacuation are determined by the Department of Health as specified in the State Plan. Appendix III of the State Plan describes evacuation measures and provides maps indicating designated evacuation routes.

A summary of evacuation time estimates appears in **Table 5-2** (Figure III-22 in the State Plan). **Figure 5-3** (Figure III-21 in the State Plan) is a map of the evacuation routes for the general public. Maps and text describing evacuation routes, monitoring points, and reception centers are provided in the State Plan.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.2 3. Off-site Area Protective Measures (continued)

The EC (RM when the EOF is operational) will recommend offsite protective actions based on the criteria shown in **Figure 5-1, Protective Action Recommendations**.

The St. Lucie and Martin County Public Safety Directors and the State Division of Emergency Management will be responsible for the direction and implementation of the necessary protective actions as specified in the State Plan, including notification and coordination with other State and local assistance agencies.

It will be the responsibility of the St. Lucie and Martin County Public Safety Departments to notify the general public if an evacuation is warranted. This will be accomplished as discussed in Sections 5.2.4 and 5.2.8.

The State Plan describes the basis for the choice of recommended actions for the Plume Exposure Pathway EPZ during emergency conditions. Protective action decisions are made on the basis of information which becomes available as a result of accident assessment. The Bureau of Radiation Control Standard Operating Procedures also discuss the process by which state officials collect information and make recommendations. The Bureau of Radiation Control Standard Operating Procedures also discuss assessment actions which would form a basis for recommendations. The State and County Plans point out that EPA Protective Action Guides will be an important basis for Protective Action Recommendations (PARs).

### 4. Public Warning and Information

Annex A (Chapter 5, Section III), to the State Plan, provides information on warning of the public, in general, and Appendix III Section VI discuss warning procedures in St. Lucie and Martin Counties, in particular.

Prompt notification systems are discussed therein. FPL has purchased and installed an alert (siren) and notification system as described in Section 5.2.8.

Notification to the population and arrangements with public communications media are described in the State Plan. Annex A (Chapter 7) to the State Plan provides the guidance for keeping the public informed about the potential hazards, emergency response, and protective measures that can be taken to minimize or avoid public health effects. Annex A (Chapter 7) also provides procedures for the timely and accurate collection, coordination, and dissemination to the public of such information.

5. RESPONSE TO ACCIDENT CONDITIONS (continued)

5.2 4. Public Warning and Information (continued)

Annex A (Chapter 7, Figures 7-1 to 7-8) of the State Plan also provides for sample releases to be used for media. These are consistent with FPL's classification scheme. These are examples of specific prior arrangements that have been made to use public communication media for issuing emergency instructions to the public. Section VIII of Appendix III discusses annual orientation of the media. Section VI of Appendix III indicates TV and radio stations which would be used to alert the public.

5. Population Exposure Estimates

Population exposure estimates are discussed in Annex A (Chapter 13, Section IV) of the State plan. Bureau of Radiation Control Standard Operating Procedures discuss the projected dose calculation process and assessment and monitoring in the Ingestion Exposure Pathway EPZ. Standard Operating Procedures are used to determine dose rates.

6. Special Needs Population

Section XII of Appendix III of the State Plan contains a discussion of evacuation of special need populations.

7. Population Distribution

The State Plan contains maps showing population distribution, and it describes the means for notifying transient and resident population. Population maps and tables are included in Appendix III of the State Plan (St. Lucie Site Plan).

8. Alert and Notification System

FPL has purchased an alert and notification system for use by the St. Lucie and Martin County Public Safety Directors in alerting the population of the need to possibly take protective actions. The system consists of more than 85 electronic sirens located throughout the Plume Exposure Pathway EPZ. These electronic sirens have public address capability for voice messages. Upon sounding the sirens, the affected public, keyed through the public information program, should turn on their radios to the local Emergency Alert System (EAS) radio station and await emergency information and instructions.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.3 Radiological Exposure Control

#### 1. On-site Radiation Protection Program

An objective of emergency response is to minimize radiation exposure to individuals both on-site and off-site. Situations may arise, however, when observance of this goal is inconsistent with personnel or plant safety. In anticipation of such needs, guidelines have been established for emergency conditions. The guidelines on which the emergency radiation protection program is based are stated below.

Exposure to emergency response personnel should be maintained As Low As Reasonably Achievable (ALARA). Actions taken during an emergency should take into consideration the amount of exposure required to accomplish the task versus the potential benefit to the public health and safety.

Conditions may warrant re-entry into high radiation areas leading to exposure in excess of the regulatory limit. Except for rescue of personnel (life-saving only), authorization must be given in advance by the Emergency Coordinator (EC) in consultation with the TSC HP Supervisor. If time permits the EC should obtain concurrence from the Recovery Manager (if the EOF is operational). In any case where regulatory limits have been exceeded the EC shall notify the RM of the event.

For those remote circumstances involving an event in progress, and obtaining EC approval will result in leaving the accident scene or decrease the victim(s) chance of survival, lifesaving actions may be performed without obtaining EC approval. The EC shall be notified immediately following the rescue operation.

Re-entry personnel that have been selected/chosen to exceed regulatory exposure limits should be volunteers, broadly familiar with the risks involved (radiosensitivity of fetuses, effects of acute exposures, etc.), and whose normal duties have trained them for such missions.

EPA 400, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," EPA 400-R-92-001 states that "To assure adequate protection of minors and the unborn during emergencies, the performance of emergency services should be limited to non-pregnant adults." FPL endorses this guidance; however, FPL recognizes that it is the right of the worker to make the decision to perform as an on-site emergency worker, understanding the potential risks involved.

5. RESPONSE TO ACCIDENT CONDITIONS (continued)

5.3 1. On-site Radiation Protection Program (continued)

For the following missions, (1) the exposure limit is:	TOTAL DOSE <sup>(2)</sup> (TEDE)	THYROID <sup>(3)</sup> (CDE)
Performance of actions that would not directly mitigate the event, minimize escalation, or minimize effluent releases.	5 REM	50 REM
Performance of actions that mitigate the escalation of the event, rescue persons from a <u>non-life</u> threatening situation, minimize exposures or minimize effluent releases.	10 REM	100 REM
Performance of actions that decrease the severity of the event or terminate the processes causing the event in an attempt to control effluent releases to avoid extensive exposure of large populations. Also, rescue of persons from a <u>life-threatening</u> situation.	25 REM	250 REM
Rescue of persons from a <u>life-threatening</u> situation. (Volunteers should be above the age of 45.) <sup>(4)</sup>	(5)	(5)

5. RESPONSE TO ACCIDENT CONDITIONS (continued)

5.3 1. On-site Radiation Protection Program (continued)

**NOTE 1**

Both Total Dose (TEDE) and Thyroid Dose (CDE) should be used for purposes of controlling exposure.

**NOTE 2**

Protective clothing, including respirators should be used where appropriate.

- (1) Exposure limits to the lens of the eye are 3 times the Total Dose (TEDE) values listed.
- (2) Total Dose (TEDE) is the total dose from both external and internal (weighted) sources - Total Effective Dose Equivalent.
- (3) Thyroid Dose (CDE) commitment from internal sources - Committed Dose Equivalent. The same dose limits also apply to other organs (CDE), skin (Shallow Dose Equivalent) and extremities (Extremity Dose Equivalent).
- (4) Volunteers with full awareness of risks involved including numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects.
- (5) No upper limit for Total Dose (TEDE) and/or Thyroid Dose (CDE) has been established because it is not possible to pre-judge the risks that one person should be allowed to take to save the life of another. Also, no specific limit is given for thyroid dose since in the extreme case, complete thyroid loss might be acceptable sacrifice for a life saved. This should not be necessary if respirators and/or thyroid protection for rescue personnel are available as the result of adequate planning.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.3 2. Dose Records

FPL Nuclear Division procedures provide for conducting the personnel dosimetry program. The company has the capability of determining personnel radiation exposures on a 24 hour per day basis. Dose records for all individuals exposed to ionizing radiation at FPL's facilities are maintained.

All emergency response personnel under the authority of FPL who will potentially be exposed to radiation in the course of their duties will be monitored by the plant radiation exposure monitoring program. Personnel in this category will be issued the appropriate personal dosimetry devices.

Since, by their very nature, emergency exposures requiring immediate action are not planned, they are not controlled as a Planned Special Exposure. Dose received from exposure under emergency conditions will be added to the dose received during the current year, prior to the emergency, to determine compliance with the occupational dose limits in 10 CFR 20.

Doses above regulatory limits will require reporting pursuant to 10 CFR 20.2202 and 20.2203. Any dose in excess of the annual limits specified in Section 20.1201(a) will be accounted for in accordance with 10 CFR 20.1206(e). If an individual exceeds any of these limits, then that individual will not be available for additional dose under 20.1201(a).

### 3. Contamination Control and Decontamination Procedures

A personnel decontamination washroom and shower room with chemical decontamination agents is provided on the ground floor of the Auxiliary Buildings. Except in cases of serious injury, accepted decontamination practices will be employed on-site. Life endangering injuries or injuries such as extensive burns, serious wounds, or fractures shall receive prompt attention in preference to decontamination. Personnel with injuries involving radiation or radioactive contamination will be handled as discussed in Section 2.5.1. Decontamination of uninjured personnel must be attempted at contamination levels greater than minimum detectable activity as defined in Health Physics procedures.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.3 3. Contamination Control and Decontamination Procedures (continued)

Any item of equipment, once having been taken inside a controlled area, requires a survey for possible contamination prior to its removal from the controlled area. Equipment regularly required within a controlled area will be maintained within the controlled area. Areas within the Plant or items suspected of contamination will be checked before normal use is permitted. Laboratory analysis of swipes will be undertaken, and an area or item will be declared suitable for normal use if contamination levels are less than 1,000 dpm/100 cm<sup>2</sup>. Should contaminated equipment be discovered, it will be stored and either decontaminated or disposed of in accordance with Plant procedures.

Food for emergency workers will be brought in from off-site, if necessary. The plant drinking water is obtained from the Ft. Pierce water supply. It is unlikely that ingestion of contaminated food or water will occur.

Frequent surveys of habitable areas utilized for emergency response (i.e. Control Room, TSC and OSC) will be performed to assure these areas remain uncontaminated. Special attention to drinking water and food supplies will be given to assure that these supplies remain uncontaminated.

### 4. Radioactive Wastes

Radioactive wastes (resins, trash, etc.) accumulated during an emergency will be handled by normal plant procedures. Any special circumstances will be handled on a case-by-case basis.

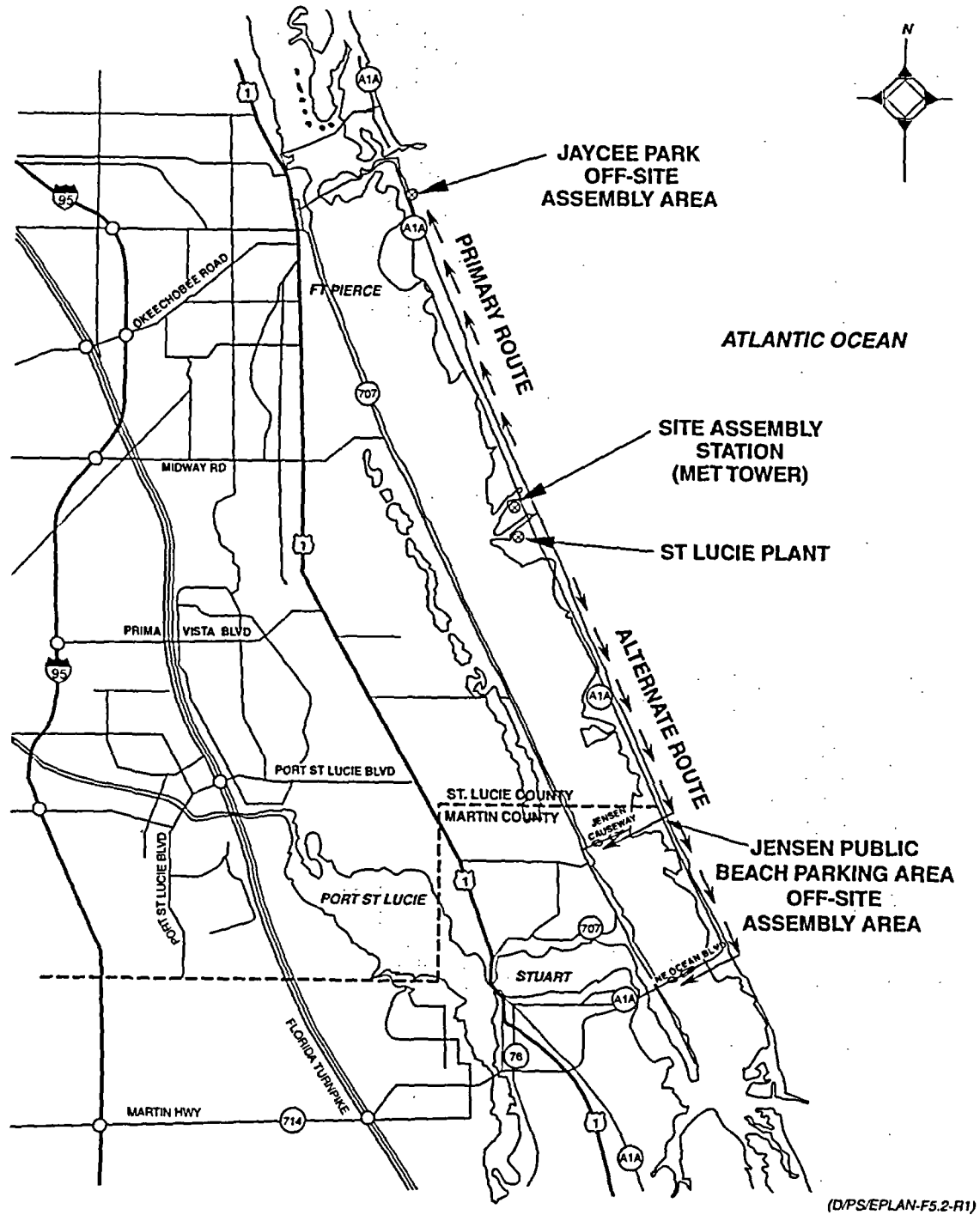


**TABLE 5-2  
EVACUATION TIME ESTIMATES**

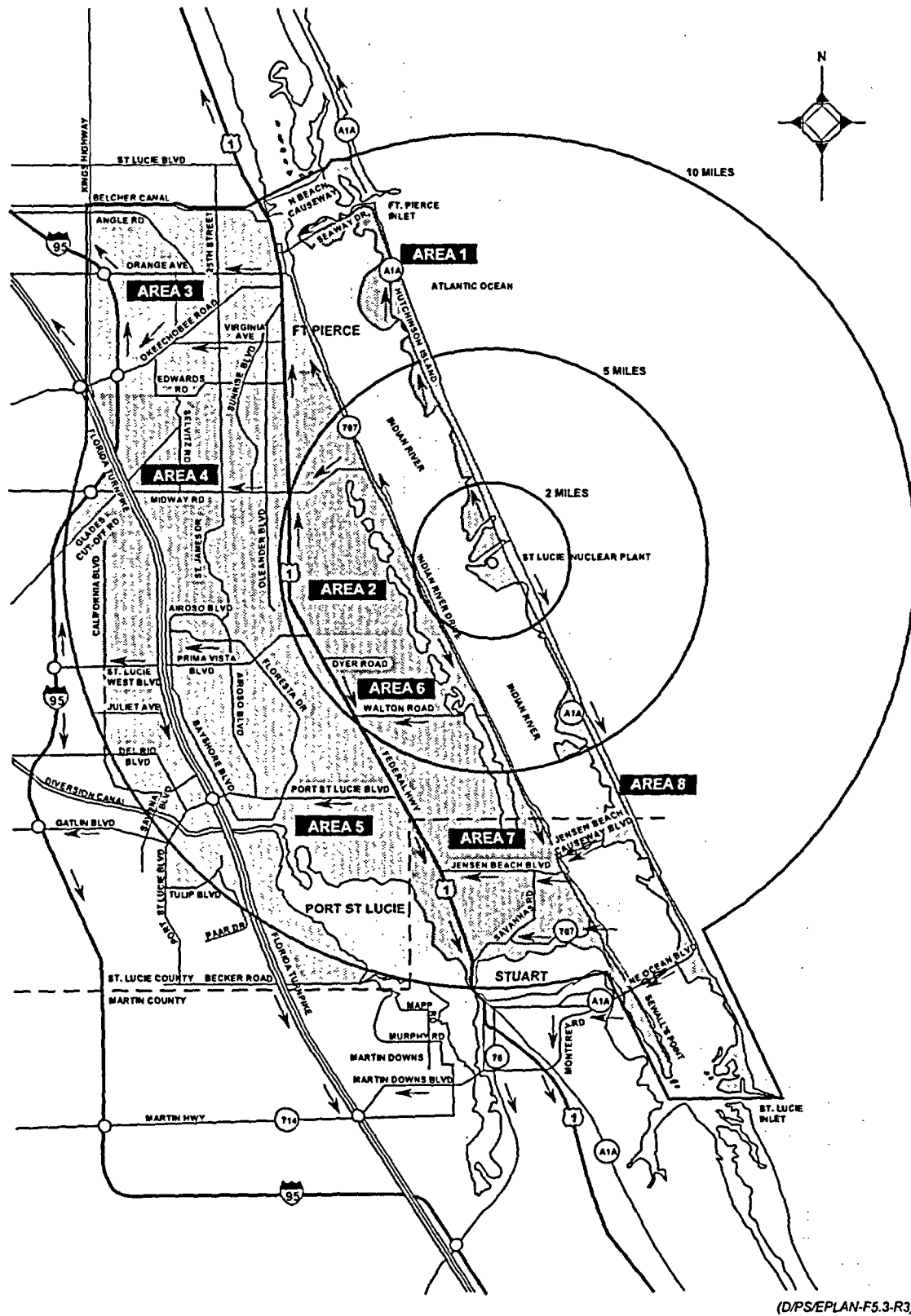
County Affected	Applicable Sectors	Estimated Number of Automobiles and Capacity (Autos per hour)	Population Evacuation Time Estimates (0-10 miles)			
			<u>Normal Weather</u>		<u>Adverse Weather</u>	
			Minutes	Hours	Minutes	Hours
St. Lucie	R, Q, P	28,499 (8,300)	401	6.69	416	6.94
St. Lucie	Q, P, N	25,138 (7,270)	401	6.69	416	6.94
St. Lucie	P, N, M	15,980 (9,350)	413	6.88	428	6.94
St. Lucie	N, M, L	18,202 (6,220)	326	5.47	341	5.69
St. Lucie/Martin	M, L, K	21,202 (8,300)	423	6.99	438	7.30
St. Lucie/Martin	L, K, J	19,473 (8,300)	423	6.99	438	7.30
St. Lucie/Martin	K, J, H	23,774 (8,300)	469	7.82	484	8.07
St. Lucie/Martin	J, H, G	18,818 (5,190)	469	7.82	484	8.07
St. Lucie/Martin	R, Q, P, N, M, L, K, J, H, G	68,887 (14,520)	475	7.92	490	8.17

The evacuation time estimates are obtained from Appendix III to Annex A, State of Florida Radiological Emergency Management Plan revision 2/00.

**FIGURE 5-2  
SITE EVACUATION ROUTES**



**FIGURE 5-3  
GENERAL PUBLIC EVACUATION ROUTES**



(DPS/EPLAN-F5.3-R3)

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.4 Recovery and Re-entry

#### 1. On-site

Once the hazard potential has passed, steps must be taken to recover from the incident. All actions should be preplanned in order to limit exposures. Access to the area will be controlled and personnel exposures will be documented.

The Recovery Manager/EC has the responsibility for determining when the on-site conditions are stable and it is appropriate to enter the recovery phase. The Recovery Organization consists of an augmented Expanded Emergency Response Organization consisting of existing FPL emergency personnel and additional resources from both the company and contracted agencies. The Emergency Response Managers would continue their assigned duties with additional personnel to use as necessary. The Recovery Manager (or EC) will evaluate the status of the plant by reviewing all current and pertinent data available from emergency response and/or monitoring teams. The recovery phase will begin only when plant conditions are stable and the following guidelines are met:

1. Radiation levels in all in-plant areas are stable or decreasing with time.
2. Releases of radioactive materials to the environment from the plant are under control or have ceased.
3. Any fire, flooding, or similar emergency conditions are controlled or have ceased.
4. The reactor is in a stable condition.

At the time of initiating activities to enter the recovery phase, the Recovery Manager will be responsible for informing all applicable agencies (e.g., Federal, State, and local agencies) that on-site conditions have stabilized and activities for recovering from the incident can now begin. Once these agencies and the Emergency Control Officer (ECO) have been informed, the Recovery Manager has the authority to de-escalate the emergency classification.

Planned recovery actions which may result in a radioactive release will be evaluated by the Recovery Manager and his staff in advance. Such planning and data pertaining to the possible release will be reported to the appropriate off-site emergency response organizations and agencies.

## 5. RESPONSE TO ACCIDENT CONDITIONS (continued)

### 5.4 1. On-site (continued)

Re-entry into an affected area may be required before entering the recovery phase. Re-entry into an evacuated area will be made by the Emergency Response Organization personnel when required for one or more of the following reasons:

1. To ascertain that all personnel who were in affected area have been evacuated, or to search for unaccounted personnel.
2. To assist in evacuating injured or incapacitated personnel from the affected area.
3. To perform operations which may mitigate the effect of the emergency or hazardous condition.
4. To determine the nature and extent of the emergency and/or radiological conditions.
5. To establish definite personnel exclusion area boundaries.

Re-entry to the affected areas on-site will take place only under the authority of the Emergency Coordinator. The TSC HP Supervisor is responsible for evaluating the existing emergency conditions and informing the Emergency Coordinator of the advisability of re-entry. For emergencies inside the Radiation Controlled Area (RCA), the TSC HP Supervisor will supervise the initial entry of the Emergency Response Organization personnel and all subsequent entries until radiation areas have been properly marked. More detailed guidance for re-entry teams is contained in plant procedures.

### 2. Off-site

State and County officials would be in control of recovery and re-entry off-site. Population exposure estimates are discussed in the State plan. Annex A (Chapter 11) discusses the Ingestion Exposure Pathway EPZ. The State Plan (Chapter 13, Recovery and Re-entry) also discusses population dose measurement.

/R44

## 6. PUBLIC INFORMATION

### 6.1 Preparatory Public Information Program

#### 1. Purpose

The purpose of the preparatory public information program is to inform the public of how they would be notified and what their actions should be in a radiological emergency.

#### 2. Program Execution

Florida Power & Light Company has the responsibility for conducting the public information program with the support from the State Division of Emergency Management and the St. Lucie County and Martin County Departments of Public Safety.

Annex A (Chapter 7) of the State Plan discusses the preparatory public information and education program. Education will be provided on an annual basis to local residents, transients, and news media in the manner described in Annex A (Chapter 7, Section VII) of the State Plan.

### 6.2 Florida Power & Light Company Emergency Public Information Program

This section delineates the organization, public information network, and facilities that would be made available as required in an emergency.

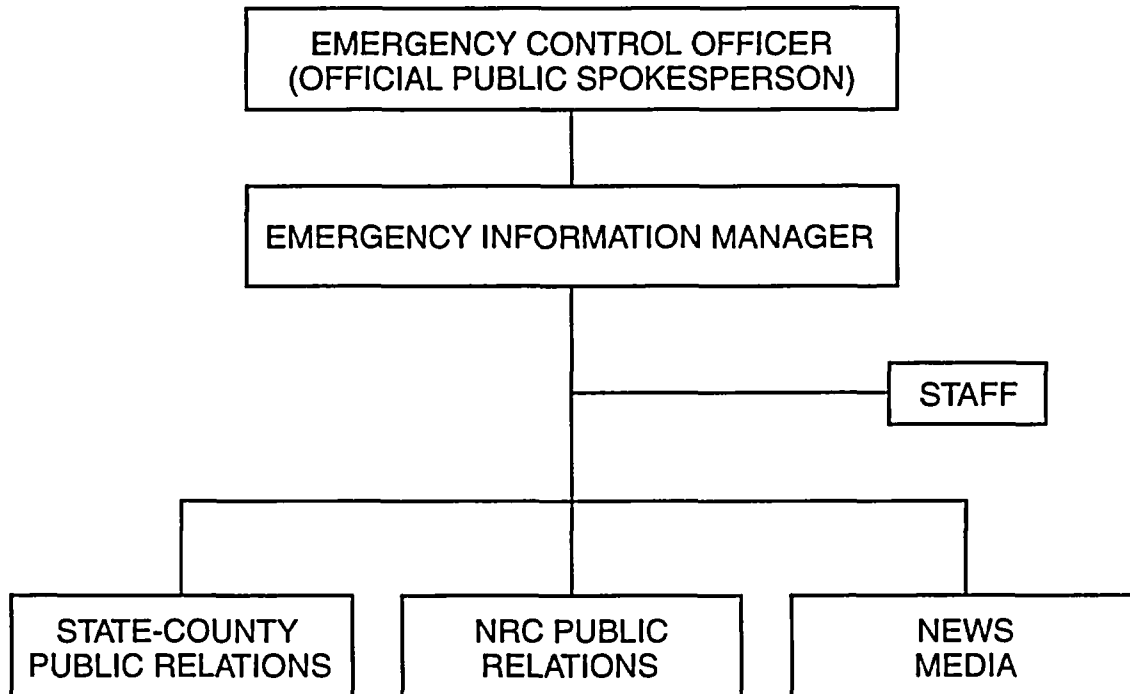
#### 1. Organization

The members of the emergency public information organization (see **Figure 6-1**) and their respective responsibilities are as follows:

##### **Emergency Information Manager (EIM)**

The EIM is a senior manager or designated member of the Corporate Communications Department experienced in media relations, having knowledge of nuclear plant operations. He/she is the FPL official responsible for coordinating dissemination of information to the public via the news media. Insofar as practical, the EIM will work with the NRC, State, and local news media representatives to effect coordinated releases and public appearances. He/she will work with other company officials to develop formal statements and responses. All press releases, other than routine "updating" of data coming from the Emergency Operations Facility, should originate with or be cleared by the EIM. He/she will assure that exchange of information among designated spokespersons is accomplished in a timely manner, when possible.

**FIGURE 6-1  
PUBLIC INFORMATION INTERFACES**



*(D/PS/EPLAN-F6.1-R34)*

6. PUBLIC INFORMATION (continued)

6.2 1. Organization (continued)

**Nuclear Information Staff**

A staff of public information and technical personnel will be assigned as needed to the Emergency News Center. Their responsibilities will be to:

1. Provide technical briefings to the press.
2. Inform company employees through a newsletter, bulletin board statements, or other in-place networks.
3. Inform the industry, so other companies both in the United States and overseas can deal with questions as they arise from their local media.
4. Prepare background material for features, historical context, profiles, etc.
5. Handle the photographic needs of the company.
6. Record or transcribe all press conferences and other official proceedings for the benefit of company management, official agencies and the news media.
7. Accredite and escort members of the press.
8. Provide its own stenographic and typing services for news releases, photo captions, reports, transcripts, etc.
9. Provide reference services for maintaining files of releases and photos, obtaining newspapers, monitoring wire services and news broadcasts, logging all clippings.

The staff of the Florida Power & Light Company Corporate Communications Department may be augmented by personnel from other utilities, consultants, or universities.

2. Emergency News Center (ENC)

The St. Lucie Plant Emergency News Center (ENC) is adjacent to the EOF. The Emergency Information Manager will report to the EOF. A designated ENC supervisor and his/her staff will man the ENC when the EIM deems it appropriate. The ENC/EOF is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of St. Lucie Plant.



## 6. PUBLIC INFORMATION (continued)

### 6.2 3. News Media Provisions

Florida Power & Light Company, in cooperation with the State of Florida and the risk counties, conducts an annual program to acquaint the news media with the emergency plans, information concerning nuclear power and points of contact for release of public information in an emergency.

In the event of an emergency, representatives of the news media will be provided space in the Emergency News Center for work and interview purposes.

### 4. Written Message for the Public

Sample formats that may be used for release of information by FPL to the public via the news media appear in **Tables 6-1 through 6-7**.

These releases include initial statements for each class of emergency and follow-up statements for the Alert class and higher.

### 6.3 Rumor Control

FPL will coordinate information exchange with State and County officials. This coordination will include awareness of media releases.

The timely exchange of information among designated spokespersons will aid in dispelling most rumors. In written material which is disseminated annually to the public in the Plume Exposure Pathway EPZ, means for obtaining timely and accurate information is provided. Annex A (Chapter 7, Section VI) of the State Plan also discusses Rumor Control.

**TABLE 6-1  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (     )     -     \_\_\_\_\_

**NEWS RELEASE**

**UNUSUAL EVENT**

HUTCHINSON ISLAND - Florida Power & Light Company has alerted State and Local Officials and the Nuclear Regulatory Commission that an "Unusual Event" has occurred at its St. Lucie Nuclear Power Plant located south of Ft. Pierce.

According to initial reports, the event related to (give plant/unit specific data)  
The situation was reported at (time).

Due to the nature of the event, FPL officials have determined that:

**(Options)**

- a. The unit can remain operational at this time without posing a health or safety hazard to plant employees or the general public;
- b. The power levels at the plant will be systematically reduced in order to investigate the extent of the problem. Full shutdown is expected later today; or
- c. The unit will be immediately brought off-line and orderly shutdown procedures will be initiated.

All safety systems are operating normally and officials have stated that no (or no significant) radioactivity has been released as a result of this event. No further information is available at this time. However, news media will be kept informed of the plant's status as it becomes available.

**TABLE 6-2  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (     )         -         \_\_\_\_\_

**NEWS RELEASE**

**ALERT**

HUTCHINSON ISLAND - St. Lucie Nuclear Power Plant has declared an Alert, based on problems at Unit # \_\_\_\_.

The unit had been (still operational), (under gradual power reduction), (in a full-scale, orderly shutdown following \_\_\_\_\_ (give data relating to alert) \_\_\_\_\_

---

FPL officials called for the Alert and have notified appropriate State, Local and Federal Officials.

**Option 1 (radiation release)**

Plant operators have detected small amounts of radiation being released to the atmosphere as a result of the problem. The minor releases are confined to the plant site and pose no health or safety hazard to FPL employees or the general public. Radiation monitoring teams have been deployed as a routine precaution.

**Option 2 (no radiation release)**

Plant operators report that no radiation has been released from the unit as a result of the problem. Monitoring teams have been deployed at the plant site as a routine precaution.

All Safety Systems are operating and the unit has been placed in an orderly shutdown mode as officials continue to investigate the problem. FPL officials caution that no public action is required and no health or safety problem exists at this time.

**TABLE 6-3  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (    )        -        \_\_\_\_\_

**NEWS RELEASE**

**SITE-AREA EMERGENCY**

HUTCHINSON ISLAND - Florida Power & Light Company has announced that a Site Area Emergency exists at St. Lucie Nuclear Power Plant. At \_\_\_\_\_ (a.m./p.m), all plant employees, except those with emergency response duties, were ordered to evacuate the plant site.

Plant officials called for the evacuation of non-emergency employees as a precautionary measure due to (insert plant specific data, is known). There are still approximately 90 personnel remaining on the plant site located in the Control Rooms, Technical Support Center, and Operational Support Center. This includes plant management, operators for both Units, and personnel from Health Physics, Chemistry, Maintenance, and Engineering departments. The cause and nature of the problem are being investigated and further details are not available at this time.

**Option 1 (radiation release)**

Monitoring equipment at the plant has detected (small/additional) amounts of radiation being released to the atmosphere as a result of the present situation at Unit # \_\_\_\_.

**Option 2 (no radiation release)**

No radiation releases have been detected as a result of the situation at Unit # \_\_\_\_.

The plant is continuing shutdown procedures and emergency cooling of the reactor core is continuing. Persons in the immediate vicinity of the plant should continue to monitor radio and television broadcasts for the latest information.

**TABLE 6-4  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (    )        -        \_\_\_\_\_

**NEWS RELEASE**

**GENERAL EMERGENCY**

HUTCHINSON ISLAND - Florida Power & Light Company, has notified State, County and Federal authorities, that a General Emergency exists at its St. Lucie Nuclear Power Plant as a result of escalating problems at Unit #\_\_\_\_.

Persons within a 10 mile radius of the plant are advised to monitor radio and television stations for more information. Please follow all instructions provided through emergency broadcast services.

At this time, the plant is experiencing (significant, but controlled), (significant, uncontrolled), (small, but controlled), (small, uncontrolled), (no) releases of radiation to the environment.

Non-essential plant personnel have left the site.

The public is advised to monitor and follow emergency broadcast messages on radio and television.

**TABLE 6-5  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

**NEWS RELEASE**

**LOSS OF POWER/CORE DAMAGE/RADIATION PLUME**

(Possible Follow-Up to General Emergency)

HUTCHINSON ISLAND - Significant equipment problems and loss of power to operate reactor core cooling systems have resulted in loss of coolant and partial uncovering of reactor fuel at St. Lucie Nuclear Unit #\_\_\_\_\_, FPL plant operators have reported.

Additional emergency systems are being employed. However, monitoring teams are registering radiation in the atmosphere around the plant site. Weather conditions are moving a radiological plume in a \_\_\_\_\_ direction.

The public is advised to monitor emergency broadcast messages on radio and television.

**TABLE 6-6  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

**NEWS RELEASE**

**EMERGENCY NEWS CENTER ACTIVATED**

HUTCHINSON ISLAND - The St. Lucie Emergency News Center is now operating. Information about the nuclear emergency will be provided at this facility, located at Midway Road and I-95, just west of Ft. Pierce. All affected agencies - County, State and Federal - will have representatives at the Emergency News Center to provide information about the emergency.

The Emergency News Center can be contacted by calling \_\_\_\_\_.

**IMPORTANT**

This telephone number is for news media only and  
should NOT be announced to the general public.

**TABLE 6-7  
FPL PRESS STATEMENT**

**SAMPLE**

Number: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

Florida Power & Light Company  
Emergency News Center  
9001 West Midway Road  
Ft. Pierce, FL 34945  
Phone: (     ) \_\_\_\_\_ - \_\_\_\_\_

**NEWS RELEASE**

**MEDICAL EMERGENCY**

HUTCHINSON ISLAND - Florida Power & Light Company has reported that one of its workers at the St. Lucie Nuclear Power Plant has been injured and requires medical treatment.

Preliminary reports indicate the employee suffered (state injury) while working in the plant's (location).

The worker has received some radioactive contamination, but further information of (his/her) condition is not available at this time.

Specialized equipment and protective procedures are in place to insure proper handling of any radioactive contamination.



## 7. MAINTAINING EMERGENCY PREPAREDNESS

### 7.1 Exercises and Drills

#### 1. Definitions

An exercise is an event that tests the integrated capability of a major portion of the basic elements existing within the Radiological Emergency Plan for St. Lucie Plant. An exercise normally includes mobilization of State and local governmental personnel and resources adequate to verify the capability to respond to an accident scenario.

A drill is a supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation. A drill is often a component of an exercise. A drill should be evaluated by the supervisory personnel conducting the drill.

#### 2. Purpose

Periodic exercises and drills will be conducted in order to test the state of emergency preparedness of participating personnel, organizations, and agencies. Each exercise or drill will be conducted to:

1. Ensure that participants are familiar with their respective duties and responsibilities.
2. Verify the adequacy of the Emergency Plan and Emergency Plan Implementing Procedures.
3. Test the communications network and systems.
4. Check the availability of emergency supplies and equipment.
5. Verify the operability of emergency equipment.

The results of the exercises will form the basis for prescribing action to eliminate identified deficiencies.

#### 3. Planning

The Manager, Plant Services will be responsible for the planning, scheduling, and coordinating of exercises involving off-site agencies. A sample format for exercise scenarios appears in **Table 7-1**. All exercises and drills involving the plant are subject to the approval of plant management.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.1 Exercises and Drills (continued)

#### 3. Planning (continued)

When an exercise is to be conducted, the Manager, Plant Services in conjunction with plant management, will:

1. Schedule a date for the exercise in coordination with the primary State and County emergency response agencies.
2. Obtain the approval of plant management.
3. Coordinate all FPL efforts with other participating personnel, organizations, and agencies.
4. Offer Federal, State, and local officials the opportunity to observe the exercise.
5. Assign personnel to prepare a scenario.
6. Assign personnel to assist in control and evaluation of the exercise.
7. Discuss and evaluate the exercise with observers and principal participants.
8. Ensure that for all identified deficiencies, corrective measures are recommended.
9. Review evaluations of the exercise with the Facility Review Group.
10. Prepare and submit documentation in accordance with plant procedures.

An Emergency Preparedness Coordinator may complete or coordinate completion of any of the above items. The Manager, Plant Services shall retain oversight and accountability through the requirements of EPIP-13, "Maintaining Emergency Preparedness - Emergency Exercises, Drills, Tests and Evaluations."

These exercises will simulate emergency conditions and may be scheduled such that two or more drills are conducted simultaneously. The Manager, Plant Services will normally notify the off-site emergency response organizations and agencies at least 30 days in advance of the scheduled date of an exercise.

**TABLE 7-1**  
**EXAMPLE SCENARIO FORMAT**  
(Page 1 of 2)

1. Basic objective(s) of exercise
2. Logistics
  - 2.1 Date(s)
  - 2.2 Time period
  - 2.3 Location(s)
  - 2.4 Participating organizations
3. The simulated events
4. Time schedule of real and simulated events
5. Narrative summary describing the conduct of the exercises

**NOTE**

5.1 through 5.5 are examples of subjects that might be discussed in Section 5.0 of the scenario.

- 5.1 Simulated casualties
- 5.2 Off-site fire-fighting assistance
- 5.3 Rescue of personnel
- 5.4 Radiological monitoring deployment
- 5.5 Public information activities
6. Duties of controllers
  - 6.1 Specific observer assignment by area
  - 6.2 Material provided to observers (i.e. check lists)
  - 6.3 Pre-drill meeting
    - A. Date
    - B. Time
    - C. Location

**TABLE 7-1**  
**EXAMPLE SCENARIO FORMAT**  
(Page 2 of 2)

7. Critique/evaluation

7.1 Date

7.2 Time

7.3 Location

7.4 Suggested Participants

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.1 4. Conduct of Exercises, Drills and Tests (continued)

#### 1. Exercises (Integrated Drills)

A radiological emergency response exercise will be conducted at least once every two calendar years to demonstrate the effectiveness of the Emergency Plan. Any exercise that will provide for coordination with and participation of off-site emergency response personnel, organizations, and agencies including those of Federal, State, and local governments will escalate to a Site Area Emergency or General Emergency. The exercise scenario will be varied from year to year such that all major elements of the Plan are tested at least every 6 years.

The major elements that should be tested every six years include the following:

- Off hours staffing (6 P.M. - 4 A.M.)
- Activation of Emergency News Center
- Use of fire control teams
- Use of medical support personnel
- Use of Security personnel for prompt access to emergency equipment or support
- Use of one or more portions of backup communications for notification
- Field monitoring
- Capability for determining the magnitude and impact of the particular components of a release
- Capability for post-accident coolant sampling and analysis
- Assembly and accountability
- Initial recovery planning activities

This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.1 4. 1. Exercises (Integrated Drills) (continued)

During the interval between biennial exercises, adequate emergency response capabilities will be maintained by conducting drills, including at least one drill involving a combination of some of the principal functional areas of emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, protective action decision-making, and plant system repair and corrective actions.

During this off-year drill, activation of all of the emergency response facilities (TSC, OSC, EOF) would not be necessary, there would be an opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills could focus on on-site training objectives.

#### 2. Radiological Monitoring Drill

A radiological monitoring drill will be conducted at least once every calendar year. These drills will include collection and analysis of sample media (i.e. air). As an integral part of this annual drill, communications and the understanding of messages between the off-site monitoring team(s) and the TSC HP Supervisor will be tested. Health Physics Department personnel will participate in health physics drills semi-annually and one of the semi-annual drills may be incorporated into the radiological monitoring drill.

As indicated in Annex A (Chapter 14, Section III) of the State Plan, off-site radiological monitoring drills will be conducted and these drills will involve the collection of sample media.

#### 3. Medical Emergency Drill

A medical emergency drill involving a simulated contaminated individual, with provisions for activation of the plant First Aid Team will be conducted at least once every calendar year. Participation by local support services (i.e., ambulance and off-site medical treatment facility) will be tested separately once per year or as part of the annual medical drill.

7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

7.1 4. 4. Fire Emergency Drill

Fire drills are conducted in accordance with 10 CFR 50, Appendix R, III.I.3. The Fire Protection Program is described in greater detail in plant administrative procedures.

5. Communications Tests and Drills

Communications with State and local governments within the Plume Exposure Pathway Emergency Planning Zone (EPZ) will be tested monthly. Communications with the NRC via the Emergency Notification System (ENS) will be tested monthly. On an annual basis, communications to the State EOC, St. Lucie and Martin County EOCs will be tested. As part of the annual test certain information will be exchanged. It will be determined whether or not the content of the drill messages was understood. The annual drill may be performed as part of an exercise.

As indicated in Annex A (Chapter 14, Section III) of the State Plan, the State conducts communications drills at least annually. These drills include "communications between the nuclear power plants, State, and local emergency operation centers and field assessment teams...". Annex A (Chapter 6) of the State Plan indicates the equipment tested during drills.

6. Unannounced Drills

At least one communications drill per year will be unannounced. This unannounced drill will include notification to all primary off-site response agencies (i.e. DEM, Department of Health, County Departments of Public Safety) and those FPL emergency response personnel required to be notified based upon the drill scenario. The unannounced communication drill could coincide with an exercise, or an actual Emergency Plan activation.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.1 5. Evaluation

During a drill or an exercise, controllers may take measures in response to actions taken by the participants that might affect the planned outcome (objective of the drill or exercise). Minor errors in procedures, techniques or inappropriate prompting by controllers will be noted and discussed during the post-drill/exercise evaluation.

Following an exercise, the Manager, Plant Services, plant management, FPL controller/evaluators, and principal participants in the exercise will discuss and evaluate the exercise. Drill evaluations will also be conducted, though personnel involvement may be different.

The evaluation should be based on the ability of participants to follow emergency procedures, the adequacy of emergency procedures, and the adequacy of emergency equipment and supplies. Plant management and staff will be responsible for recommending necessary changes in the Emergency Plan and/or Emergency Plan Implementing Procedures (EPIPs) to the Manager, Plant Services. The Manager, Plant Services or designee in Emergency Preparedness, is responsible for making changes to the Emergency Plan and/or EPIPs. Any changes to the Emergency Plan shall be reviewed by the Facility Review Group (FRG). The FRG shall review changes to EPIPs other than minor changes. Minor changes are defined in plant quality instructions.

### 7.2 Emergency Response Training

#### 1. Objectives

The primary objectives of emergency response training are as follows:

1. Familiarize appropriate individuals with the Emergency Plan and related Emergency Plan Implementing Procedures (EPIPs).
2. Instruct individuals in their specific duties to ensure effective and expeditious action during an emergency.
3. Periodically present significant changes in the scope or content of the Emergency Plan.
4. Provide refresher training to ensure that personnel are familiar with their duties and responsibilities.
5. Provide the various emergency organization groups with the required training that will ensure an integrated and prompt response to an emergency situation.



## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.2 2. Training of On-site Emergency Response Organization (ERO) Personnel

Training programs have been established for personnel working at the plant site. The programs include initial indoctrination and subsequent retraining.

The training program for members of the on-site ERO will include practical drills, in which each individual participating in the drill demonstrates an ability to perform assigned emergency functions. Participation in a drill or exercise is not required for initial training qualification in the ERO. Training requirements are delineated in EPIP-12, "Maintaining Emergency Preparedness - Radiological Emergency Plan Training."

The Site Training Manager is responsible for the conduct and documentation of initial training and annual retraining programs for on-site FPL Emergency Response Organization (ERO) personnel. Specific training is specified in the following subsections. The Emergency Preparedness Coordinator is responsible for the content and accuracy of the Emergency Plan Training. Each new employee permanently assigned to work at the St. Lucie Plant shall be given initial orientation training. For employees not assigned specific responsibility or authority under the Emergency Plan or Emergency Plan Implementing Procedures (EPIPs), such training shall, at a minimum, provide information describing the action to be taken by an individual discovering an emergency condition, the location of assembly areas, the identification of emergency alarms, and the action to be taken upon hearing those alarms.

Training must be current to be maintained in the Emergency Response Organization (ERO). Emergency Plan Training records for Security personnel are maintained by the Site Training Manager.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.2 2. Training of On-site Emergency Response Organization (ERO) Personnel (continued)

The following provides a description of the training provided to personnel filling the indicated positions.

#### 1. Emergency Coordinator

- a. Interpretation of plant and field data and how it relates to emergencies and their classification (i.e. Emergency Action Level (EAL) determination per Chapter 3).
- b. Prompt and effective notification methods, including the types of communication systems.
- c. Method of activating the Florida Power & Light Company Emergency Response Organization (ERO).
- d. The methods used for estimating radiation doses and recommending off-site protective actions.
- e. Emergency Plan familiarization.
- f. Emergency Plan Implementing Procedures (EPIPs) familiarization.
- g. Communications and record-keeping methods.
- h. Accident assessment and corrective action (licensed operators only).

#### 2. Shift Technical Advisor

- a. Emergency Plan familiarization
- b. Emergency Plan Implementing Procedures (EPIPs) familiarization.
- c. Technical Specifications (in-depth understanding)
- d. Specialized training in power plant and reactor specific core operating characteristics (normal and abnormal)
- e. Familiarization with other related plant programs, plans, and procedures with emphasis on accident assessment techniques.

7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

7.2 2. 3. Technical Support Center On-site Staff

- a. Emergency Plan familiarization
- b. Emergency Plan Implementing Procedures (EPIPs) familiarization.
- c. Communications and record-keeping methods
- d. Training for the various technical personnel that make up the TSC staff with emphasis on accident assessment and corrective action.

4. Other Emergency Responders

1. Health Physics Personnel

- a. Use of air sampling equipment
- b. Performance of radiation/contamination surveys
- c. Determination of air activity levels, and stay times based on DAC hours
- d. Determination of radiation levels.
- e. Emergency Plan familiarization through HP Emergency Procedures (200 series)
- f. Record-keeping methods
- g. In-depth knowledge of personnel and field monitoring/analyzing techniques
- h. Communications and coordination

2. Security Personnel

- a. Emergency Plan familiarization through the Emergency Plan Implementing Procedures.
- b. Personnel accountability procedures
- c. Site ingress and egress control procedures
- d. Deployment of Security Personnel
- e. Communications and coordination

7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

7.2 2. 4. 3. First Aid Team

- a. Emergency Plan familiarization through Emergency Plan Implementing Procedures familiarization
- b. Communications and coordination
- c. Description, storage location, and application of supplies and equipment
- d. Sequential steps for the assessment of contamination levels and treatment of personnel injury
- e. Familiarization with Personnel decontamination procedures
- f. Procedures for the evacuation of contaminated persons to off-site medical facilities
- g. Team members will satisfactorily complete the first aid portion of the American National Red Cross Standard (ANRCS) First Aid Course or equivalent and will re-qualify every three years. Requalification does not require completion of the CPR portion of the ANRCS course.

3. Training of FPL EOF Emergency Response Organization Personnel

The Site Training Manager is responsible for the conduct and documentation of initial training and annual retraining for FPL EOF Emergency Response Organization personnel.

1. Recovery Manager

- a. Prompt and effective notification methods, including the types of communication systems.
- b. Method of activating the Florida Power & Light Company off-site Emergency Response Organization.
- c. The methods used for estimating radiation doses and determining Protective Action Recommendations (PARs).
- d. Emergency Plan familiarization.
- e. Emergency Plan Implementing Procedures (EPIPs) familiarization.
- f. Familiarization with the Emergency Operations Facility and the Technical Support Center.

7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

7.2 3. Training of FPL EOF Emergency Response Organization Personnel (continued)

2. Emergency Control Officer, Emergency Information Manager, Governmental Affairs Manager, Emergency Security Manager, Emergency Technical Manager

- a. Emergency Plan familiarization
- b. Emergency Plan Implementing Procedures (EPIPs) familiarization

4. Training of Non-FPL Off-site Emergency Response Personnel

Off-site agencies who may be called upon to provide assistance in the event of an emergency shall be offered briefings annually. These briefings will discuss basic concepts in radiation protection, plant operations and security, emergency classification, protective action recommendations and emergency response as appropriate. The following groups will be offered these sessions:

- A. Fire and rescue
- B. Police
- C. Medical Support
- D. Principal decision makers for State and county emergency response agencies

1. Police and Fire Fighting Support

As indicated in Annex A (Chapter 15, Figure 15-1) to the State Plan, police and fire fighting personnel will receive training and retraining. Annex A (Chapter 15) describes the details of training.

2. Local Emergency Management Officials

As described in Annex A (Chapter 15) of the State Plan, disaster preparedness personnel will receive training and retraining.

3. Emergency Action Levels (EALs) Review

On an annual basis, the Emergency Action Levels (EALs) shall be reviewed with State and local governmental authorities.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.3 Planning Effort Development

Overall authority and responsibility for radiological emergency preparedness and planning lies with the Chief Nuclear Officer. As described below, through his/her staff (at the Plant and at Juno Beach), the FPL emergency planning and preparedness program is implemented. Major responsibility in this area has been delegated to the Manager, Plant Services and has been described throughout this plan.

#### 1. Emergency Plan Implementing Procedures (EPIPs)

Written procedures will be established, implemented, and maintained covering the activities associated with Emergency Plan implementation.

#### 2. Review of the Emergency Plan and Emergency Plan Implementing Procedures

The Emergency Plan and Emergency Plan Implementing Procedures will be under continuing review by the site emergency planning group. A comprehensive review of the Emergency Plan will be conducted annually. The Emergency Plan Implementing Procedures are reviewed during drills, exercises, and actual emergencies and revised as necessary to correct identified deficiencies. The Emergency Plan Implementing Procedures will undergo a thorough formal review at least once every two years and be revised as necessary. Notification lists and rosters will be updated at least quarterly. If changes affecting emergency response are identified, these changes will be made as needed. The revised Emergency Plan will be distributed with the latest revision number indicated on each page. Revision indication along the right margin will be used to indicate where changes have been made. If during these annual reviews no changes are needed, this will be documented.

Changes to the Emergency Plan will be submitted, in writing or with pages marked for revision, to the Manager, Plant Services, or designee, in Emergency Preparedness. All proposed changes to the Emergency Plan shall be reviewed by the Facility Review Group (FRG) and, prior to implementation, approved by the Chief Nuclear Officer.

The effective date of the revised Emergency Plan is determined by the Manager, Plant Services based on necessary training, coordinated implementation with other documents and other appropriate considerations. The effective date should not exceed the approval date by more than thirty days.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.3 2. Review of the Emergency Plan and Emergency Plan Implementing Procedures (continued)

The FRG shall review changes to EIPs other than minor changes. The Plant General Manager (PGM) shall approve EIP changes recommended by the FRG. Approval of minor changes to EIPs shall be by the Emergency Preparedness Supervisor.

Approved changes to the Emergency Plan and PGM-approved changes to the EIPs shall be submitted to the Chairperson of the Company Nuclear Review Board (CNRB) for review. The Chairperson will review any issues or concerns regarding the Emergency Plan and EIPs with the CRNB on an as-needed basis.

Document holders will receive revisions to the Emergency Plan as they are issued. The Manager, Plant Services is responsible for coordinating the periodic reviews of the Emergency Plan. The Manager, Plant Services will ensure that elements of the emergency organization (FPL, State, local, Federal) are informed of changes to the Emergency Plan.

The Manager, Plant Services is responsible for maintaining emergency preparedness. He/she maintains a roster of the Emergency Response Organization participants and their alternates. This roster is reviewed and confirmed periodically, typically once each calendar quarter. Each participant is responsible for advising the Manager, Plant Services when his/her duties are changed such that he/she can no longer participate. In the event of transfer or termination, the Manager, Plant Services should be notified by the employee's department head, and a replacement named and trained.

Responsibility for day-to-day emergency planning coordination lies with the Manager, Plant Services (this function may be delegated to the Emergency Preparedness Supervisor).

### 3. Review of Changes with On-site Personnel

The Site Training Manager will ensure that on-site Emergency Response Organization personnel are informed of relevant changes in the Emergency Plan and Emergency Plan Implementing Procedures.

### 4. Review of Changes with Off-site Personnel

Periodic correspondence and/or meetings will be held to inform off-site FPL emergency support personnel of changes in the Emergency Plan and Emergency Plan Implementing Procedures.

## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.3 5. Audits

The FPL Quality Assurance Department will perform an independent audit of the Emergency Preparedness Program. The audits will verify compliance with federal regulations to include evaluation of the adequacy of the interfaces with State and Local governments, and of drills, exercises, capabilities and procedures. This audit shall be conducted either:

- 1) At least every 12 months, or
- 2) As necessary, based on an assessment against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness, but no longer than 12 months after the change. In any case, all elements of the Emergency Preparedness Program must be reviewed once every 24 months.

The part of the review involving the evaluation for adequacy of interface with State and Local governments must be available to the appropriate State and Local governments.

Plant management, Manager, Plant Services, and the Chief Nuclear Officer will receive audit reports. Corrective actions, as delineated in the Quality Assurance Manual, will be assigned.

The audit findings shall be retained for a minimum of 5 years.

### 6. Document Distribution

St. Lucie Plant Document Control is responsible for distribution of the Emergency Plan and Emergency Plan Implementing Procedures to identified personnel and to Emergency Response Facilities. Document Control also distributes the Emergency Plan to off-site agencies and organizations. The Emergency Plan Implementing Procedures provide sufficient information to assure a thorough understanding of the various emergency response duties and responsibilities. Appendix C contains a listing of the Emergency Plan Implementing Procedures. The distribution of The State of Florida Radiological Emergency Management Plan is identified in Appendix A.

/R44



## 7. MAINTAINING EMERGENCY PREPAREDNESS (continued)

### 7.3 7. Emergency Preparedness Coordinator Training

Most training of FPL Emergency Preparedness Coordinators is through on-the-job training related to Plan preparation, periodic revisions, and drills and exercises for two nuclear facilities. Other training may be received through seminars, meetings, and discussions with other industry groups. FPL is a member of and participates in emergency planning programs sponsored by the Institute of Nuclear Power Operations (INPO), the Nuclear Energy Institute (NEI) and the Southeastern Utilities Emergency Planning Group (SUEPG).

### 7.4 Emergency Equipment Maintenance

All designated emergency equipment that is maintained in each Control Room, the TSC, OSC, EOF and the Site Assembly Station will be inventoried, operationally checked, and inspected at least once each calendar quarter and following each use.

### 7.5 Letters of Agreement

Agreements with supporting agencies will be confirmed annually (by direct contact, telephone, or in correspondence). The Letters of Agreement (LOAs) will be updated every third year. Purchase orders/contracts will be renewed as required.

**APPENDIX A**  
**THE STATE OF FLORIDA RADIOLOGICAL EMERGENCY MANAGEMENT PLAN**

/R44

The State of Florida Radiological Emergency Management Plan is maintained on file in the following locations:

/R44

1. St. Lucie Unit 1 Document Control Center
2. Technical Support Center
3. Emergency Operations Facility
4. Manager, Plant Services (at Juno Beach)
5. Emergency Planning Coordinator (St. Lucie)

## **APPENDIX B TECHNICAL SUPPORT AGREEMENTS**

Where a contract or purchase order is in place detailing the services an organization provides in support of the Plant, the contract date or purchase order number will be listed (along with the facility) in place of a Letter of Agreement. To safeguard personal and proprietary information, only the first page (or portion thereof) of each Letter of Agreement is included in this appendix. Complete letters are on file.

1. Westinghouse Electric (ABB/CE) (PO-00036635)
2. Washington Group (PO-00036636)
3. Institute of Nuclear Power Operations
4. U.S. Coast Guard
5. Florida Highway Patrol
6. St. Lucie County Sheriff's Department
7. St. Lucie County - Ft. Pierce Fire District
8. City of Ft. Pierce - Police Department
9. City of Ft. Pierce - City Manager
10. Martin County Sheriff's Department
11. Framatome Technologies
12. U.S. Department of Energy (Savannah River Operations)
13. U.S. Department of Energy (REAC/TS)
14. Lawnwood Regional Medical Center (September 1995 contract)
15. Martin Memorial Medical Center (PO-00028095)
16. Bechtel Power Corporation
17. Martin County Department of Emergency Services
18. Martin County Fire Rescue



**Institute of  
Nuclear Power  
Operations**

**Suite 100  
700 Galleria Parkway, SE  
Atlanta, GA 30339-5957  
770-644-8000  
FAX 770-644-8549**

September 24, 2004

Dear Ladies and Gentlemen:

This letter certifies that the plant emergency assistance agreement between INPO and its member utilities remains in effect. In the event of an emergency at your utility, INPO will assist you in acquiring the help of other organizations in the industry, as described in Section 1 of the *Emergency Resources Manual*, INPO 03-001. If requested, INPO will provide the following assistance:

- Facilitate technical information flow from the affected utility to the nuclear industry.
- Locate replacement equipment and personnel with technical expertise.
- Obtain technical information and industry experience regarding plant component and systems.
- Provide an INPO liaison to facilitate interface.

This agreement will remain in effect until terminated in writing. Should you have questions, please call me at (770) 644-8304 or e-mail [mossdj@inpo.org](mailto:mossdj@inpo.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'David J. Moss', is written over a horizontal line.

David J. Moss  
Manager  
Radiological Protection &  
Emergency Preparedness

DJM/wdw

U.S. Department  
of Transportation

United States  
Coast Guard



Commander  
Seventh Coast Guard District

909 SE First Avenue  
Miami, FL 3131-3050  
Staff Symbol: (opx)  
Phone: (305) 415-6870  
FAX: (305) 415-6848

*ANNUAL CONFIRMATION 1-14-03 PER TELCON W/ LT. CMDR CRUTHIS JRW*

3010  
27 November 2001

Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957  
Attn: J. Richard Walker

Gentlemen:

The following information is provided in response to your letter of November 6, 2001, and is an update to the information we provided in our letter of November 27, 1996.

1. Administrative point of contact: The Seventh Coast Guard District's Contingency Preparedness Officer and administrative point of contact is Lieutenant Commander Greg Cruthis at (305) 415-6870.



ANNUAL CONFIRMATION PER TELCON W/J.W. PAGE 1-13-03 JKW

November 29, 2001  
FANP-01-2940

Mr. J. Richard Walker  
Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957

Subject: Emergency Response Support

Reference: FPL letter, Calabrese to Renner, dated November 6, 2001 on same subject

Dear Mr. Walker:

In response to your referenced letter, I would like to take this opportunity to confirm that Framatome ANP commits to provide assistance to Florida Power & Light (FPL) in the event of an emergency at your Turkey Point or St. Lucie Nuclear Plants. Services will be provided by FRA-ANO to FPL upon request and authorization by an official representative of FPL in accordance with our existing Master Services Agreement.

The designated point of contact at Framatome ANP is Skip Hudson with J.W. Page and Dennis Renner as first and second alternates respectively. Skip is located in Singer Island, Florida with J.W. and Dennis located in the FRA-ANP offices in Lynchburg, Virginia. Our business and home phone numbers are listed below.



**State of Florida**  
**DEPARTMENT OF**  
**HIGHWAY SAFETY AND MOTOR VEHICLES**  
**TALLAHASSEE, FLORIDA 32399-0500**

**FRED O. DICKINSON**  
Executive Director

January 6, 2004

Mr. D. M. Calabrese  
Emergency Preparedness Supervisor  
St. Lucie Nuclear Plant  
Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

Re: St. Lucie Nuclear Plant Emergency Plan  
(Contract # F017-04)

In response to your letter of October 3, 2003, enclosed are the following:

- (1) Policy # 16.01 of the Florida Highway Patrol Manual will apply in cases of accidents or emergencies at the St. Lucie nuclear power plant.
- (2) Page 13 through page 20 of the Florida Department of Law Enforcement's Florida Mutual Aid Plan is also applicable.

Mr. J. Richard Walker,  
Emergency Planning Coordinator  
St. Lucie Plant, Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

I have reviewed the letter of agreement between the St. Lucie County Sheriff's Office and Florida Power and Light Company. My signature below confirms that the existing letter of agreement, dated December 2, 2002 remains in effect as written.

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Date





**Sheriff**  
**KEN J. MASCARA**

Telephone: (772) 462-3200 • Fax: (772) 489-5851  
4700 West Midway Road • Fort Pierce, Florida 34981



December 2, 2002

Mr. J. Richard Walker  
Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957

Dear Mr. Walker:

In the event of a radiological or security emergency at the St. Lucie Power Plant on Hutchinson Island, the Sheriff's Office of St. Lucie County will render response as quickly and safely as possible.

Communications equipment is mounted in all vehicles and personnel will also be issued hand-held radios. Our personnel are trained in radiological monitoring, traffic control and first aid.

It is important to note that not all personnel will be available immediately. It will take some time for notification to go out for off-duty personnel to respond.

Any questions regarding this matter, please contact Major Thomas McInerney, Director of Law Enforcement, at 772-462-3257.

Sincerely,

  
Ken J. Mascara  
Sheriff

Ds

C. Ms. Donna Calabrese

**ST. LUCIE COUNTY FIRE DISTRICT  
OFFICE OF THE CHIEF**

**Jay Sizemore, Fire Chief**  
Karen Jones, Admin. Assistant



**2400 Rhode Island Ave.  
Fort Pierce, FL 34950  
Phone: 772.462.8301  
Fax: 772.462.8461**

November 3, 2003

Mr. D.M. Calabrese  
Emergency Preparedness Supervisor  
St. Lucie Nuclear Plant  
6501 S. Ocean Drive  
Jensen Beach, FL 34967

Dear Mr. Calabrese:

I have reviewed the existing Letter of Agreement between the St. Lucie County Fire District and Florida Power & Light Company and find that the current information is correct.

As previously stated, The St. Lucie County Fire District currently attests in the event of a nuclear power reactor incident that:

Mr. J. Richard Walker,  
Emergency Planning Coordinator  
St. Lucie Plant, Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

I have reviewed the letter of agreement between the Ft. Pierce Police Department and Florida Power and Light Company. My signature below confirms that the existing letter of agreement, dated November 13, 2001 remains in effect as written.

  
\_\_\_\_\_  
Signature

10.28.03  
Date



"Dedicated To Excellence"

**Eugene G. Savage**  
Chief of Police

# CITY OF FORT PIERCE *Florida*



**Police Department**

November 13, 2001

Mr. J. Richard Walker  
Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

Enclosed please find an executed Emergency Letter of Support for Florida Power and Light Company for the Fort Pierce Police Department, as requested.

Sincerely, I am

  
**Eugene G. Savage**  
Chief of Police

EGS/ner  
Enclosure

Mr. J. Richard Walker,  
Emergency Planning Coordinator  
St. Lucie Plant, Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

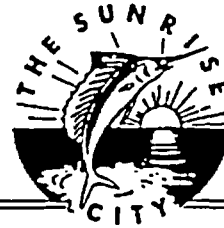
Dear Mr. Walker:

I have reviewed the letter of agreement between the Office of the City Manager for the City of Ft. Pierce and Florida Power and Light Company. My signature below confirms that the existing letter of agreement, dated November 12, 2002 remains in effect as written.

Dennis W. Berd  
Signature

10 - 28 - 03  
Date

# CITY OF PORT PIERCE *Florida*



OFFICE OF THE CITY MANAGER  
CITY HALL, 100 NORTH U.S. 1  
P.O. BOX 1480  
FORT PIERCE, FLORIDA 34954-1480

TEL. (772) 460-2200  
FAX (772) 467-9264  
[www.cityoffortpierce.com](http://www.cityoffortpierce.com)

November 12, 2002

Mr. D. M. Calabrese  
Emergency Preparedness Supervisor, St. Lucie Nuclear Plant  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957

Dear Mr. Calabrese:

I am in receipt of your letter dated November, 2002, requesting an updated letter of support regarding the use of Jaycee Park.

This correspondence confirms FPL's authorization to use Jaycee Park on South Beach for emergency parking in the event of an emergency at the Saint Lucie Nuclear Power Plant. It is understood and agreed that Florida Power & Light will repair or pay for the repair of any damage to the grass, park facilities or paved areas resulting from your emergency use of this park.

Your office has requested the name of the City's administrative point of contact. This will be the Director of Public Works, Gary M. Ferch. He can be reached at 772-460-2200, ext. 400 or through 911. His address is Post Office Box 1480, Fort Pierce, FL 34954-1480.

Sincerely,

Dennis W. Beach  
City Manager

DWB/btp

cc: Gary M. Ferch, Director of Public Works  
Eugene G. Savage, Chief of Police  
Hector P. Arias, City Engineer  
Robert V. Schwerer, Assistant City Attorney

Robert L. Crowder  
Sheriff



Office of the Sheriff

Martin County, Florida

(772) 220-7000 FAX (772) 220-7015

October 31, 2003

Mr. D. M. Calabrese  
Emergency Preparedness Supervisor  
St. Lucie Nuclear Plant  
6501 South Ocean Beach  
Jensen Beach, FL 34957

RE: LETTER OF SUPPORT

Dear Mr. Calabrese:

Your administrative point of contact will be Major William Snyder. He can be reached at the main Sheriff's Office, 800 S.E. Monterey Road, Stuart, Florida, 34994. His telephone number is (772) 220-7146 and fax number is (772) 220-7043.

The resources and support that would be available are as follows:



Available for the following duties: Law Enforcement Functions, Traffic and Crowd Control

The procedure to obtain this support would be to:

1. Call direct via telephone at (772) 220-7146
2. Call the Martin County Emergency Management (772) 288-5694

Our authority would be within Martin County unless we are requested to assist St. Lucie County under Mutual Aid. The extent of our resources commitment would be contingent upon the law enforcement demands of Martin County during any on-going situation.

We, the Martin County Sheriff's Office, will respond in the best possible manner to assist in an emergency situation.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Crowder".

Robert L. Crowder, Sheriff

RLC:WDS:bab

MAILING ADDRESS  
800 SE MONTEREY ROAD  
STUART, FL 34994-4599



CIVIL DEPARTMENT ADDRESS  
100 EAST OCEAN BOULEVARD  
STUART, FL 34994



ADMINISTRATIVE & JAIL COMPLEX  
800 SE MONTEREY ROAD  
STUART, FL 34994-4599



ANNUAL CONFIRMATION PER TELCON W/J.W. PAGE 1-15-03 JKW

November 29, 2001  
FANP-01-2940

Mr. J. Richard Walker  
Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957

Subject: Emergency Response Support

Reference: FPL letter, Calabrese to Renner, dated November 6, 2001 on same subject

Dear Mr. Walker:

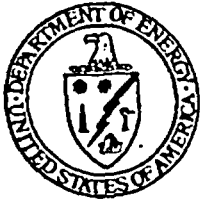
In response to your referenced letter, I would like to take this opportunity to confirm that Framatome ANP commits to provide assistance to Florida Power & Light (FPL) in the event of an emergency at your Turkey Point or St. Lucie Nuclear Plants. Services will be provided by FRA-ANO to FPL upon request and authorization by an official representative of FPL in accordance with our existing Master Services Agreement.

The designated point of contact at Framatome ANP is Skip Hudson with J.W. Page and Dennis Renner as first and second alternates respectively. Skip is located in Singer Island, Florida with J.W. and Dennis located in the FRA-ANP offices in Lynchburg, Virginia. Our business and home phone numbers are listed below.



**Letter to File:**        Regarding status of letter agreement with U.S. Department of  
Energy (Savannah River Operations)

Per phone conversation following Hurricane Frances, confirmation of letter agreement, 8  
September, 2004.



**Department of Energy**  
Savannah River Operations Office  
P.O. Box A  
Aiken, South Carolina 29802

NOV 25 1982

Mr. R. G. West, Plant General Manager  
St. Lucie Nuclear Plant  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, FL 34957

Dear Mr. West:

**SUBJECT: Department of Energy (DOE) Letter of Agreement for Emergency Support**

Assurance is hereby given that DOE will respond to requests for radiological assistance from licensees and Federal and State agencies involved in or cognizant of an incident believed to involve source, by-product, or other special nuclear material as defined by the Atomic Energy Act of 1954, as amended, or other ionizing radiation sources. Assistance as indicated above would be made available to the Florida Power & Light Company with respect to incidents occurring at its St. Lucie Nuclear Plant upon request and in consonance with response activities conducted by State, local, and private industry emergency response personnel.

Unless DOE or a DOE contractor is responsible for the activity, ionizing radiation source, or radioactive material involved in the incident, DOE radiological assistance will be limited to advice or monitoring and assessment actions essential for the control of the immediate hazards to health and safety. DOE radiological assistance will be terminated when it is no longer needed or the necessary assistance is available from State, local, or commercial services. Therefore, responsibility for post-accident recovery, including further actions for the protection of individuals and the public health and safety, should be assumed by the appropriate government agency or private authority as soon as emergency conditions are stabilized.

Requests for DOE radiological assistance should be directed to the Savannah River Site Operations Center at the 24-hour emergency assistance telephone number (803) 725-3333. Questions regarding the DOE Radiological Assistance Program may be directed to me at (803) 952-6613.

Sincerely,

A handwritten signature in dark ink, reading "Christina T. Edwards".

Christina T. Edwards  
Regional Response Coordinator  
DOE Region 3

VG-03-006

cc:  
Richard Walker, FP&L  
Director, CMD, DOE-SR

**Letter to File:**        Regarding status of letter agreement with U.S. Department of  
Energy (REAC/TS)

Per phone conversation following Hurricane Frances, confirmation of letter agreement, 8  
September, 2004.



## Department of Energy

Oak Ridge Operations Office  
P.O. Box 2001  
Oak Ridge, Tennessee 37831—

November 18, 2002

Mr. J. Richard Walker  
Emergency Planning Coordinator  
St. Lucie Nuclear Plant  
Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

### **LETTER OF AGREEMENT - RADIATION EMERGENCY ASSISTANCE CENTER/TRAINING SITE (REAC/TS) SUPPORT**

Please reference D. M. Calabrese's letter of November 8, 2002, requesting that the Department of Energy (DOE) REAC/TS facilities and team be available to provide back-up capability and assistance to the Florida Power and Light Company in the event of a radiological emergency at the St. Lucie Nuclear Plant. This response constitutes our agreement to provide this service upon your request.

We wish to remind you that our REAC/TS facilities in the Oak Ridge Institute for Science and Education (ORISE) are government controlled and operated by the Oak Ridge Associated Universities under contract with DOE. Therefore, REAC/TS is prohibited from competing with commercial firms, which can provide radiological emergency services. Only if the magnitude or uniqueness of a radiological emergency exceeds your in-house and commercially available capabilities would REAC/TS be authorized to provide back-up services.

Since these facilities are government controlled, no fee or retainer is required to assure the availability of back-up services by REAC/TS. However, if you utilize the services of REAC/TS, we should expect to recover those costs, which could reasonably be related to handling such an incident, including all charges billed to DOE or ORISE by hospitals and physicians. Information concerning the REAC/TS facilities, staff, services available, and procedures for seeking REAC/TS assistance can be obtained by direct contact with the REAC/TS Director, Dr. Robert C. Ricks, ORISE, Post Office Box 117, Oak Ridge, Tennessee 37831, or at (865) 576 3131.

Sincerely,

A handwritten signature in cursive script that reads "Gregory A. Mills".

Gregory A. Mills  
Contracting Officer's  
Representative (Alternate)

LM-121:Chung

**Letter to File:**        Regarding status of letter agreement with Bechtel Power Corporation

Per phone conversation following Hurricane Frances, confirmation of letter agreement, 8 September, 2004.



November 21, 2002

Mr. J. Richard Walker  
Emergency Planning Coordinator  
St. Lucie Plant, Florida Power & Light Company  
6501 S Ocean Beach  
Jensen Beach, FL 34957

Subject: Florida Power & Light Company  
St. Lucie Plant  
Bechtel Job No. 21701  
Emergency Response Assistance  
Letter No.: 21701-2002-00001

File: 0260

Mr. Walker,

Enclosed is the latest Bechtel emergency contact list for your use.

If you have any questions, please do not hesitate to contact me at 301-228-6254 or e-mail [gfalibot@bechtel.com](mailto:gfalibot@bechtel.com).

Sincerely,

Gerald J. Falibota  
Project Manager

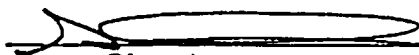
GJF/dfs

Attachments: Emergency Contact List

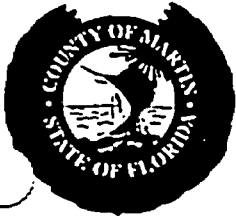
Mr. J. Richard Walker,  
Emergency Planning Coordinator  
St. Lucie Plant, Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

I have reviewed the letter of agreement between the Martin County Department of Emergency Services and Florida Power and Light Company. My signature below confirms that the existing letter of agreement, dated November 13, 2001 remains in effect as written.

  
\_\_\_\_\_  
Signature

10/30/03  
\_\_\_\_\_  
Date



**MARTIN COUNTY**  
**BOARD OF COUNTY COMMISSIONERS**  
2401 S.E. MONTEREY ROAD • STUART, FL 34996

**DOUG SMITH**  
Commissioner, District 1

**DENNIS H. ARMSTRONG**  
Commissioner, District 2

**LEE WEBERMAN**  
Commissioner, District 3

**ELMIRA R. GAINEY**  
Commissioner, District 4

**MICHAEL DITERLIZZI**  
Commissioner, District 5

**RUSS BLACKBURN**  
County Administrator

**STEPHEN FRY**  
County Attorney

November 13, 2001

Telephone: 561-288-5693  
Fax: 561-221-1457  
File: esa021.041.aw

Mr. J. Richard Walker  
Emergency Planning Coordinator  
Florida Power & Light Company  
6501 South Ocean Drive  
Jensen Beach, Florida 34957

Dear Mr. Walker:

Your organization is authorized to use Jensen Public Beach parking area at the intersection of State Road A1A and County Road 722 as a staging area during an emergency at the St. Lucie Nuclear Power Plant.

Sincerely,

A handwritten signature of Steven H. Wolfberg, consisting of a stylized 'S' and 'W' followed by a horizontal line.

Steven H. Wolfberg  
Emergency Services Director

SHW/tp

cc: Russ Blackburn, County Administrator  
Bob Denison, Parks & Recreation Director  
Keith Holman, Emergency Management Director

TELEPHONE  
561-288-5400

WEB ADDRESS  
<http://www.martin.fl.us>





**MARTIN COUNTY**  
**BOARD OF COUNTY COMMISSIONERS**  
2401 S.E. MONTEREY ROAD • STUART, FL 34996

**DOUG SMITH**  
Commissioner, District 1

**SUSAN L. VALLIERE**  
Commissioner, District 2

**LEE WEBERMAN**  
Commissioner, District 3

**SARAH HEARD**  
Commissioner, District 4

**MICHAEL DITERLIZZI**  
Commissioner, District 5

**RUSS BLACKBURN**  
County Administrator

**STEPHEN FRY**  
County Attorney

October 22, 2004

Telephone: 772-467-7170

Fax:

File: esr051.046.aw

Mr. Don M. Calabrese  
Emergency Preparedness Supervisor  
St. Lucie Plant, Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, FL 34957

Dear Mr. Calabrese:

We are in receipt of your letter dated October, 2004. The resources and support Martin County Fire Rescue can provide are Fire Rescue, Emergency Medical Services, Hazardous Materials Response Team and Technical Rescue Team.

In those instances where the needs of the patient(s) exceed our capabilities, arrangements will be made to obtain appropriate transport services.

All capabilities can be arranged through the St. Lucie 911 System or the State-Wide "Ring Down System." We also agree to participate in periodic drills and evaluations conducted in association with the St. Lucie Nuclear Power Plant.

Sincerely,

Thomas M. Billington,  
Fire Rescue Chief

TMB/lt

cc: Steven H. Wolfberg, Emergency Services Director

TELEPHONE  
772-288-5400

WEB ADDRESS  
<http://www.martin.fl.us>

**APPENDIX C**  
**EMERGENCY PLAN IMPLEMENTING PROCEDURES**

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>
EPIP-00	Discovery and Identification of an Emergency Condition (Including Chemical, Fire, and Natural Emergencies)
EPIP-01	Classification of Emergencies
EPIP-02	Duties and Responsibilities of the Emergency Coordinator
EPIP-03	Emergency Response Organization Notification/ Staff Augmentation
EPIP-04	Activation and Operation of the Technical Support Center
EPIP-05	Activation and Operation of the Operational Support Center
EPIP-06	Activation and Operation of the Emergency Operations Facility
EPIP-07	Conduct of Evacuations/Assembly
EPIP-08	Off-site Notifications and Protective Action Recommendations
EPIP-09	Off-site Dose Calculations
EPIP-10	Off-site Radiological Monitoring
EPIP-11	Core Damage Assessment
EPIP-12	Maintaining Emergency Preparedness - Radiological Emergency Plan Training
EPIP-13	Maintaining Emergency Preparedness - Emergency Exercises, Drills, Tests, and Evaluations
HP-90	Emergency Equipment
HP-200	Health Physics Emergency Organization
HP-201	Emergency Personnel Exposure Control
HP-202	Environmental Monitoring During Emergencies
HP-203	Personnel Access Control During Emergencies
HP-204	In-plant Radiation and Contamination Surveys During Emergencies
HP-205	Emergency In-plant Air Sampling
HP-206	Analysis of Emergency In-plant Air Samples
HP-207	Monitoring Evacuated Personnel During Emergencies
HP-208	Personnel Decontamination During Emergencies
COP-06.06	Guidelines for Collecting Post Accident Samples
COP-06.11	Establishing Remote Laboratory for Analyses of Accident Samples