Supplemental Information

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Levy County Emergency Management
Radiological Emergency Preparedness Plan

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SECTION I INTRODUCTION / PLAN OVERVIEW

1. GENERAL

Progress Energy owns and operates the Crystal River Energy Complex in Citrus County and the Levy Energy Complex in Levy County.

1.1 Progress Energy Complex Locations and descriptions

Both of these facilities have in effect many rigidly enforced safety features and programs associated with the handling of radioactive materials. It is nevertheless possible that a radioactive release incident, seriously affecting public health and safety in Levy County, could occur. Therefore, it is both prudent and appropriate to plan for such a contingency through the effective use of the resources of the County and its political jurisdictions in order to ensure the health and safety of the public and is in accordance with Federal Government Regulations, Title 10, Part 50, and Title 44, Part 350. These resources can be supplemented as necessary by assistance from the State and Federal governments.

1.1.1 Crystal River Energy Complex

The Crystal River Energy Complex is located in Citrus County approximately seven and one-half miles northwest of the City of Crystal River, and approximately four and one-half miles south of the towns of Inglis and Yankeetown in Levy County. It consists of four coal fired electrical generation plant and one nuclear power electrical generating plant. The nuclear power plant is referred to Unit #3. **(See Figure 1A for map of Crystal River Energy Complex).**

Parts of Levy and Citrus counties lie within the 10-mile plume exposure pathway Emergency Planning Zone (EPZ) and they are considered risk counties. All or parts of Alachua, Dixie, Gilchrist, Lake, Levy, Marion, Citrus, Hernando, Sumter and Pasco counties lie within the 50-mile ingestion pathway. A map of the **10-mile Emergency Planning Zone (EPZ)** is shown in **Figure 1A** and a map of the **50-mile Ingestion Pathway Zone (IPZ)** are shown in **Figure 2A**.

Normal prevailing wind is from the northwest blowing to the southeast; however, any response action will be based upon the actual meteorological data at the time of the incident.

1.1.2 Levy Energy Complex

Levy Energy Complex is located in Levy County. This s a large, primarily rural area located approximately 7 miles north of the Crystal River Energy Complex. **(See Figure 1B for map of the Levy Energy Complex).**

Parts of Levy, Citrus, and Marion counties lie within the 10-mile plume exposure pathway Emergency Planning Zone (EPZ) and are considered risk counties. All or parts of Alachua, Dixie, Gilchrist, Lake, Levy, Marion, Citrus, Hernando, Sumter, Pasco and Putnam counties lie within the 50-mile Ingestion Pathway Zone. A map of the **10-mile Emergency Planning Zone (EPZ)** is shown in **Figure 1B** and a map of the **50-mile Ingestion Pathway Zone (IPZ)** are shown in **Figure 2B**.

Normal prevail winds if from the northwest blowing to the southeast; however, any response action will be based upon the actual meteorological data at the time of the incident.

1.2 Nuclear Facility Operator (NFO)

The Progress Energy Corporation is the licensed operator (the licensee) of the Crystal River Nuclear Power Plant and Levy Nuclear Power Plants.

1.3 Progress Energy Emergency Operations Facility (EOF)

The Progress Energy Emergency Operations Facility (EOF) for both Crystal River and Levy nuclear power plants is located in the Progress Energy Nuclear Training Facility at 8200 West Venable St, approximately 0.5 miles east of Highway 19 (adjacent to the Crystal River Airport, and is outside the **10-mile Emergency Planning Zone (EPZ) for both sites (See Figure 9 "Emergency Operations Centers and Facilities Map").**

The EOF provides a location for the following functions:

1.3.1 Communication of event notifications with the State Warning Point –Tallahassee; Florida Department of Health in Orlando; and Levy and Citrus County Emergency Operations Centers or directly to representatives of each agency.

1.3.2 Off-site dose projections and Protective Action Recommendations (PARs) for the public to local and State agencies.

1.3.3 Technical and logistical support activities for Progress Energy.

1.3.4 Assembly of Federal, State, local emergency support organizations and industry support teams.

1.3.5 Support to the State Emergency Response Team.

1.3.6 Communications with the CR-3 Control Room and the Technical Support Center (TSC).

1.4 Emergency News Center (ENC) / Joint Information Center (JIC)

An Emergency News Center (ENC) / Joint Information Center (JIC) room with accommodations for media representatives is located adjacent to the Progress Energy's EOF. Public Information Officers (PIO's) for Progress Energy, Levy County Sheriff's Office, Levy County Board of Commissioners, Citrus and the State of Florida will report to the ENC / JIC upon notification of a Site Area Emergency or General Emergency, or for an Alert if conditions warrant. **(Refer to Figure 9 for map of EOF/ENC)**.

The ENC / JIC are the primary location for releasing information to the news media. At this location, public information staff (including technical experts) from the Progress Energy, state, Levy County, Citrus County and Marion County will provide news releases. Official spokespersons from each organization will conduct periodic press conferences as conditions warrant.

1.5 Levy County Emergency Operations Center (EOC)

The Levy County Emergency Operations Center is located at 9010 NE 79th Avenue in Bronson. It is at this facility that emergency response activities will be coordinated under the direction and control of the Emergency Management Director or designee. The backup EOC is located in the Levy County Courthouse located at 355 S. Court Street Bronson. **(See Figure 9 for map of EOC)**.

2. PURPOSE

The purpose of this Plan is to provide guidance for the health, safety and welfare of Levy County and all Florida residents and visitors who would be affected by a radiological emergency at the Crystal River Nuclear Power Plant and Levy Nuclear Power Plants. The emergency event type could be a Hostile Action Based event, equipment failure or accident. It provides for preparedness and response activities to lessen or eliminate damage to life and property within the 10-mile emergency planning zone (EPZ) of both nuclear plant sites. It also provides for recovery to normal conditions as quickly as possible.

As defined by the NRC, a Hostile Action is "an act toward a nuclear power plant or its personnel that included the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force."

This Plan assigns duties and responsibilities to various local, private, public and volunteer agencies, which have the capabilities to successfully protect life and property in the affected area. This Plan also makes apparent the need for a coordinated planning and response effort by officials to alleviate a radiological emergency situation. It outlines a course of action to satisfy those coordinated response efforts, along with methods of obtaining supplemental assistance from other sources.

3. SCOPE

This plan provides for the coordination of assistance furnished by all levels of government and the interface with all outside agencies to accomplish the purpose of this plan which include the following:

- The Organizational Responsibilities for assuring continuity of resources to support 24-hour operations for an extended period of time. Each emergency response organization or sub-organization having an operations role is responsible for their own Standard Operating Procedures (SOPs) which describe in detail its concept of operations and its relationship to the total effort. **(Refer to Section III, Part 1 "Organization and Responsibilities")**.

- The Direction and Control of the emergency situation. **(Refer to Section III, Part 2.1 "Direction and Control for the Initial Radiological Response")**.

- The early notification of responsible officials and agencies. **(Refer to Section III, Part 2.2, "Emergency Mobilization")**.

- The controlled and coordinated sounding of the sirens and the release of information to the public through the use of the EAS System. **(Refer to Section III, Part 2.3.2 "Release of Public Information During a Declared Emergency")**. The CodeRED System may also be used in conjunction with the EAS System in providing information to the general public. **(Refer to Section III, Part 2.3.2.2 "CodeRED System")**

- A communications network to be employed in response to a radiological emergency. **(Refer to Section III, Part 2.4 "Emergency Communication")**.

- A Reception Center, Personnel Monitoring Stations and Vehicle Wash Down Stations to monitor and decontaminate evacuees and vehicles leaving an evacuation area. **(Refer to Section III, Part 2.5 "Reception Center Radiological Personnel Monitoring Station and Wash Down Stations")**.

- Local resources to support Federal Emergency Responders. **(Refer to Section III, Part 2.6 "Local Resources to Support the Federal Emergency Responses")**.

- The evaluation of the severity of the situation and implementing the appropriate Protective Action Decisions (PADs) **(Refer to Section III, Part 2.7 "Radiological Assessment and Evaluation of Protective Action Response Options")**.

- Ways to control the Radiation Exposure and Contamination to the Emergency Responders and General Public. **(Refer to Section III, Part 2.8 "Radiological Exposure Control")**.

- The initiation of Protective Actions to safeguard life, health and property. **(Refer to Section III, Part 2.9 "Protective Action Response Options")**.

- To relocate persons living in contaminated areas; to allow re-entry of persons needing to re-enter contaminated areas to work, gather possessions, take care of livestock and to allow the return of persons who have been evacuated and who live in areas which turn out to be uncontaminated or slightly contaminated, **Refer to Section IV, Part 1 "Relocation and Re-entry"**.

- Recovery of the effected area(s) when the radiological emergency has been brought under control and no further significant releases are anticipated. **(Refer to Section IV, Part 2 "Recovery and Return")**.

Federal guidance for the preparation of radiological emergency response plans is provided in the document entitled, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (NUREG-0654/FEMA REP-1 Rev.1) This document is issued jointly by the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA). It establishes 16 planning standards, 15 of which specify items to be addressed in local radiological emergency response plans. Items to be addressed by state and licensee (Progress Energy's) response plans are similarly indicated.

Although this plan follows the federal guidance and evaluation criteria specific to nuclear power plants, the emphasis is placed on Levy County's ability to respond realistically and effectively to a radiological emergency.

3.1 Emergency Planning Zones / Ingestion Pathway Zones

There are two Emergency Zones which must be addressed for each individual energy complex site. These zones are defined as the areas for which planning is needed to assure that prompt and effective actions can be taken to protect the public in the event of an accident. They have been designed in size to accommodate the need for actions in regard to the potential degree of radiological exposure. The first is the Plume Exposure Pathway and the second is the Ingestion Exposure Pathway.

The **Emergency Planning Zone (EPZ)** is that area around the nuclear reactor which is within 10 miles of the Crystal River Energy Complex and 10 miles of the Levy Energy Complex. **(See Figure 1A "Crystal River Nuclear Plant 10-mile EPZ and 1B Levy Nuclear Plant 10-mile EPZ")**. Although the radius for an EPZ implies a circular area, the actual shape depends upon the physical and demographic features within that zone. The guidance in NUREG-0654/FEMA-REP-1 states "The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from plume and from deposited material; and (b) inhalation exposure from the passing radioactive plume." The time of potential exposure could range in length from hours to days. **(Refer to Section III,**

Part 2.9.7 "Implementation and Execution of General Public Evacuation" for more information on the 10-mile EPZ).

Ingestion Pathway Zone (IPZ) is that area within a radius of 50 miles, including the 10 mile EPZ, from the Crystal River nuclear Plant site and 50 miles, including the 10-mile EPZ, from the Levy Nuclear Plants. The principal exposure from this pathway would be from ingestion of contaminated water or foods such as milk, fresh vegetables, or fish. **(See Figure 2A "Crystal River Nuclear Plant 50-mile IPZ and 2B "Levy Nuclear Plant 50-mile IPZ").** The time of potential exposure could range in length from hours to months. The state of Florida has the primary responsibility for developing emergency plans for the Ingestion Exposure Pathway. **(Refer to Section III, Part 2.9.12 Control of Foodstuffs" for more information on the 50-mile IPZ)**.

The concept of these zones and their respective sizes represent a judgment on the kind and extent of planning which must be done and on the appropriate types of response activities needed for the effective protection of the public health. In a given emergency, Protective Actions might be restricted to a small part of either or both 10-mile EPZ or 50-mile IPZ planning zones.

The information for determining the two planning areas for each Nuclear Plant Site for both counties and defining their parameters can be found in NUREG-0396/EOA 520/1-78-016

3.2 Emergency Classifications

A standardized method has been established by the Nuclear Regulatory Commission for all Nuclear Facility Operators, including Progress Energy, to classify the severity of an incident at the nuclear plant. These classifications have been adopted by all local, State and Federal governments and are used by Levy County.

The NRC requires that when initiating conditions for any of the four emergency classes exist, Progress Energy will provide early and prompt notification to Levy County, Citrus County, Marion County, State and Federal officials. The following emergency classes are used for such notifications.

Refer to Section III, Part 2.2 "Emergency Mobilization", for more information on response actions to the following declared Emergency Classifications.

3.2.1 Unusual Event

Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant at the Crystal River Energy Complex or Levy Energy Complex. It may also involve an event which indicates a security threat to plant or facility protection. No releases of radioactive material requiring offsite response of monitoring are expected unless further degradation of safety systems occurs.

3.2.2 Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant at the Crystal River Energy Complex or Levy Energy Complex. It may also indicate a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act (Hostile Action Base event). Any releases are expected to be limited to small fractions of the EPA Protective

Action Guideline exposure levels. **(Refer to Figure 3A** "**EPA Protective Action Guidelines" and**, **Section III, Part 2.9.1 "Protective Action Guidelines")**.

3.2.3 Site Area Emergency

Events are in progress or have occurred which involve actual or likely major failures of plant functions at the Crystal River Energy Complex or Levy Energy Complex which are needed for protection of the public. It may also involve a security event (Hostile Action Based event) that results in intentional damage or malicious act; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to exceed EPA Protection Action Guideline exposure levels except near the site boundary. **(Refer to Figure 3A** "**EPA Protective Action Guidelines"**, **Section III, Part 2.9.1 "Protective Action Guidelines")**.

3.2.4 General emergency

Events are in progress or have occurred that involve actual or imminent substantial reactor core degradation or melting with potential loss of containment integrity of the Crystal River Nuclear Plant or Levy Nuclear Plants. It may also involve a security event (Hostile Action Based event) that results in an actual loss of physical control of the plant/facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area. **(Refer to Figure 3A** "**EPA Protective Action Guidelines"**, **Section III, Part 2.9.1 "Protective Action Guidelines")**.

4. CONCEPT OF OPERATIONS

Levy County REP Organization has been developed to provide a response to a radiological emergency at the Crystal River Nuclear Power Plant and Levy Nuclear Power Plants to effectively protect the health and safety of the public. Its objective is to make timely and accurate Protective Action Recommendations to the public and effectively implement those actions, as necessary. The Radiological Emergency Preparedness Plan calls for the following sequence of events for effective response to an emergency:

4.1 Initial Notification and Mobilizations

To begin a response to an emergency, the Radiological Response Organization must be notified and mobilized. "**Notification and EOC Activation"** is described in **Section III, Part 2.2.** and "**Emergency Communications"** to notify and mobilize the Radiological Response Organization are described in **Section III, Part 2.4**.

4.2 Emergency Assessment

To determine if Protective Actions must be taken for the public, an "Accident Assessment" must be conducted. The first step of the assessment is to determine which plant site is having the emergency event, Crystal River Energy Complex or Levy Energy Complex. Confirm which emergency classification is being declared. The weather conditions should also be evaluated. Determine the type of event occurring at the plant (Hostile Action Based event, equipment failure or accident) Radiological monitoring teams could be sent out to

measure radiation levels. These teams will pass on data to the Progress Energy's EOF and Levy County EOC, where it will be evaluated along with information from the effected plant. The evaluation consists of calculations to predict the effects of a radiation release to the public in the 10-mile EPZ. (**Refer to Section III, Part 2.7.1 "Radiological Assessment")**. These predictions will be compared to **Early Phase Environmental Protection Agency's Protective Action Guidelines (PAGs) (see Figure 3A)** for allowable radiation levels. **(Refer to Section III, Part 2.9.1 "Protection Action Guidelines"** for explanation of PAGs**)**. Once the predicted effects are compared to the PAGs, a decision will be made by the Emergency Management Director or designee, which incorporates other pertinent decision-making information, on what Protective Actions must be taken. **(Refer to Section III, Part 2.7.2 "Evaluation of Input Parameters by the Emergency Management Director or designee")**.

4.3 Protective Response

This Radiological Emergency Preparedness Plan contains information and refers to the Levy County REP SOPs for determining appropriate Protective Action Decisions (PADs) based on which Nuclear Power Plant sites is having the emergency event, which emergency category has been declared and the comparisons discussed as above in **Part 4.2. "Emergency Assessment"**. These Protective Action Decisions (PADs) are described in **Section III, Part 2.9** "**Protective Action Response Options"** and **Appendix 4 "PADs and Maps")**.
The Emergency Management Director or designee with coordination with Citrus County and Marion County Emergency Management Directors or designees may recommend sheltering or staying indoors (In Home Sheltering) or he may declare a full or partial evacuation for designated Emergency Planning Zones (Crystal River Nuclear Plant EPZ 1, 2 or 3 or Levy Nuclear Plant EPZ C1, C3, C4, L5, L6, L7, L8 and M9. This will also depend on if this is a Hostile Action Based event occurring at the nuclear plants. **(See Figure 14A "Public Shelter Location Map, Figure 14B "Public Shelter List" and Figure 18 "Evacuation Routes" and also Refer to Section III, Part 2.9 "Protective Action Response Options").** Public notification of the need to take shelter will be accomplished through use of the Emergency Alert System (EAS), **(refer to SOP 8 "PIO's in the EOF", SOP 9 "PIO's in the EOC", SOP 10 "Coordinate Sounding Siren"),** utilization of the CodeRED System **(refer to Section II, Part 3.2.8 "CodeRED System" and Section III, Part 2.3.2.2 "CodeRED System" to sub-part 2.3.2.2.6),** and/or Backup Alerting. **(Refer to SOP 29 "Back Up Alerting")**. Sheltering actions may be terminated when the likelihood of exposure to radiation levels in excess of the Early Phase PAGs no longer exists. **(Refer to Section III, Part 2.9.1 "Protection Action Guidelines" for explanation of PAGs) and (Refer to Section III, Part 2.3 "Notification of the Public" and Section III, Part 2.9 "Protective Action Response Options").**

Depending on which Nuclear Plant site is having the emergency event, traffic control points will be established and potential impediments to evacuation will be removed by tow trucks or other heavy equipment. **(Refer to Section III, Part 2.9.7.4 "Establish Traffic Control")**.

There is one public school within both the Crystal River Nuclear Plant and Levy Nuclear Plants 10-Mile EPZ. The Yankeetown School which goes from grades K- 8th. If the emergency event is associated with the Crystal River and/or Levy Nuclear Plant site and depending on which emergency classification is being declared and if it is not a Hostile Action Based event, Public Schools within the Crystal River and/or Levy Nuclear Plant 10-mile EPZ may be directed to evacuate to pre-designated public shelter locations as referred to **Section III, Part 2.9.9.2 "Evacuation of Schools and Early Learning Centers"** in the event of a declared "Site Area Emergency" by Progress Energy**. (Refer to SOP 3 "Site Area Emergency" and SOP 20 "School Board")**.

The Emergency Management Director or designee may recommend the Evacuation of Mobility Impaired individuals/Special Needs and will be coordinated with Nature Coast Transit, Health Department., Public School Board and the Emergency Medical Services. **(Refer to Section III, Part 2.9.9.1 "Evacuation of Mobility Impaired Residents/Special Needs")**.

The Emergency Management Director or designee will direct the Levy County Health Dept. to open the Reception Center in the event Progress Energy declares a "Site Area Emergency" or "General Emergency" at the Crystal River Nuclear Plant or Levy Nuclear Plants. If this is a Hostile Action Based event the Emergency management Director has the option of not opening the reception center due to the potential of hostile forces in the community. The Reception Center will be located at the Old Bronson High School located on 350 School Street Bronson, FL. The Public Reception Center will provide registration and other assistance along with monitoring and decontamination of evacuees should these activities be required. **(Refer to Section III, Part 2.5 "Reception Center, Personnel Monitoring Stations and Wash Down Station")**.

4.4 Emergency Worker Protection

All Radiological Response Organization emergency workers who enter the 10-mile EPZ during a declared General Emergency will carry a monitoring instrument on them called Dosimetry to monitor their exposure to radiation. **(Refer to Section III, Part 2.8.1 "Emergency Personnel")**.

4.5 Public Education/Information

Effective response to a radiological emergency requires that the public be informed about procedures to be followed and actions that would be taken. Important to the overall effectiveness of the plan is public knowledge and understanding before, during and after a radiological emergency at both the Crystal River and Levy Nuclear Plants. To accomplish this, the County has developed a complete public information program for the public. (**Refer to Section III, Part 2.3 "Notification of the Public")**. This program involves the sub-parts below:

4.5.1 Advance information

Advance information in case of an Emergency at the Crystal River Nuclear Plant and Levy Nuclear Plant. Levy County Emergency Management provides public information to residents, special needs, transients, schools, Early Learning Centers, and other special facilities in the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plant 10-mile EPZ on an ongoing basis through mail out brochures, telephone book inserts, signs and public information speeches through clubs and civic organizations.

4.5.2 Emergency Information

Levy County EOC will advise the public of the status of any Crystal River Nuclear Plant emergency or Levy Nuclear Plant emergency and of any recommended Protective Actions using the Emergency Alert System (EAS). Information will focus on the nature of the emergency and the recommended response, if any. The release of information will be coordinated with appropriate Federal, State and County authorities and Progress Energy. **(Refer Section III, Part 2.3.2.5)**

5. GENERAL RESPONSIBILITIES

Radiological emergency responsibilities are shared by all levels of government and Progress Energy. These responsibilities will be met at the local or county level until such time that the County's resources have been exhausted. At that point, in addition to technical guidance and evaluation, the County will request State and Federal Government resource assistance.

The Chairperson of the Levy County Board of County Commissioners and the Emergency Management Director or designee, with support of the Mayors of Inglis and Yankeetown, has the overall responsibility for radiological emergency response planning, and for assuring the accuracy of applicable portions of this plan. The Chairperson, in conjunction with the Levy County Emergency Management Director or designee, will be responsible for initiating actions and providing direction and control at the local level, to include consideration of In Home Sheltering or evacuation as options for protection of the public, and for conducting emergency operations to cope with the effects of a radiological emergency. (**Refer to Section III.1 "Organization and Responsibilities", also refer to Figure 14A "Public Shelter Location Map" and Figure 14B "Public Shelter List")**.

5.1 County Responsibility

For Levy County Emergency Management Division to meet its responsibility to its residents in a radiological emergency, it will be necessary to perform the following operations:

5.1.1 Monitor and assess the scope and magnitude of the incident. **(Refer to Section III, Part 2.7 "Radiological Assessment and Evaluation of Protective Action Response Options")**.

5.1.2 Evaluate and decide which of the nine Protective Action Decisions (PADs) should be implemented if the emergency event was at the Crystal River Nuclear Plant or which of the 17 Protective Action Decisions should be implemented if the emergency was at the Levy Nuclear Plants. **(Section III, Part 2.7.2 "Evaluation of Input Parameters by the Emergency Management Director or designee" and Part 2.9 "Protective Action Response options")**.

5.1.3 Implement the appropriate Protection Action Decision. **(Refer to Section III, Part 2.9.8 "Evacuation Areas and Route Descriptions/Protective Action Decisions" and Appendix 4 "PADs and Maps")**.

In addition to these actions, the successful implementation of this plan will depend on efficient and effective coordination with other emergency response organizations, Citrus County Emergency Management, Marion County Emergency Management and Progress Energy.

5.2 State Responsibility

It is the responsibility of the State of Florida to recommend and/or order Protective Actions which will prevent or minimize radiation exposure to the population in the event of a radiological release incident. The State will also provide technical guidance and evaluation. Other than the extension of credit, assistance in the forms of personnel, equipment, supplies, services and facilities may be provided when local resources are insufficient to cope with the effects of the emergency. The State shall take the necessary actions to respond in those instances where a county does not have the capability to implement all or part of its Radiological Emergency Preparedness Plan. The State will dispatch the Florida Department of Emergency Management Area 3 Coordinator to the Levy County Emergency Operations Center (EOC), who will coordinate the support from the Florida Department of

Emergency Management EOC. The State has the responsibility to contact federal organizations and coordinate their response. **(Refer to Section III, Part 2.1.4 "State Responsibilities")**

5.3 Federal Government Responsibility

If it is necessary, in the opinion of the Governor, the State will request Federal assistance. The two major federal agencies are the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA). The NRC is responsible for onsite technical response including monitoring, assessment, technical control and predication of the impact of a radiological release. FEMA is responsible for offsite non-technical response. This would include coordinating with State and local agencies and offering assistance where possible.

The third federal agency is the Department of Energy (DOE). At the direction of the State Commissioner of Health, DOE, through the Federal Radiological Emergency Response Plan, will coordinate all offsite monitoring, evaluation, assessment and reporting of the activities of participating Federal agencies.

State resources such as command posts and communications will be made available to support the federal response.

5.4 Progress Energy

Progress Energy, the operator of the Crystal River Nuclear Power Plant and Levy Nuclear Power Plants, in a radiological emergency has a responsibility to offsite authorities. They have the initial responsibility for declaring and assessing an incident or event at both nuclear plant sites, providing dose projections, Protective Action Recommendations (PARs) and taking immediate actions to mitigate or terminate the emergency. It is their responsibility to notify the State and local governments and the NRC. In addition to notification, they are responsible for onsite and offsite monitoring and sample collection. They must remain in contact with the State and local officials for consultation and assessments of the emergency's progression. **(Refer to Section III, Part 2.1.3 "Progress Energy Notification Plan")**.

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SECTION II PREPAREDNESS

MISSION

The Federal, State of Florida, Levy County Government and Progress Energy have the responsibility to prepare for the protection of the general public's health and safety in the event of a radiological emergency at the Crystal River Nuclear Power Plant and at the Levy Nuclear Power Plant. A radiological emergency is a situation in which an offsite Protective Action may be necessary to reduce radiation exposure to the population as a result of an incident at the Crystal River Nuclear Power Plant or Levy Nuclear Power Plant. **(Refer to Section III, Part 2.9 "Protective Action Response Options").**

Preparedness is the first phase of the Radiological Emergency Preparedness (REP) Program. Its primary purpose is to enable state and local officials to eliminate or reduce the effects of a radiological emergency. Plan writing is a major component of this phase for it documents the REP Program.

Adequate preparation for radiological emergencies includes, but is not limited to the following:

1. Administration
2. Logistics
3. Exercises and Drills
4. Technical Assistance
5. Training
6. Public Education/Awareness

PREPAREDNESS ACTIVITIES

The Levy County Emergency Management Director, through the designation of an REP Coordinator, is responsible for the establishment and maintenance of the Levy County Radiological Emergency Preparedness (REP) Program. He or she will be responsible for the following preparedness activities:

1. STAFFING AND RESOURCES

Assure adequate staff and resources are available to the Levy County Division of Emergency Management to facilitate implementation of the REP Program.

2. REP COORDINATOR

Designation of an REP Coordinator to implement all aspects of the REP Program, update and improve the program as necessary, review and update the REP Plan and Procedures (SOPs) with it's supporting plans and their sources on an annual basis, and keep the Emergency Management Director or designee informed of all information associated with the REP Program.

3. REP COORDINATOR RESPONSIBILITIES - APPROPRIATE PREPAREDNESS ACTIVITIES

Assure the individual County Emergency Response Agencies accomplish appropriate preparedness activities within their own agencies and coordinate these activities with the **REP Coordinator.**

The **REP Coordinator** is responsible for maintaining, updating, improving and the implementation of the REP Program. He or she is responsible for the following activities:

3.1 Administration

3.1.1 Distribution of this REP Plan and SOPs

Control the distribution of copies of this plan and REP SOPs.

3.1.2 Prompt distribution of Plan updates

Provide for the prompt distribution of amendments and updates of this plan and REP SOPs to each Emergency Response Organization or agency. Revised pages shall be dated and marked to show where changes have been made.

3.1.3 Annual Letter of Certification

Conduct reviews and updates of this plan and the REP Program annually. An "Annual Letter of Certification" will be written to the Florida Division of Emergency Management to testify that the plan is current and the REP Program is compliant with FEMA and DHS Standards.

3.1.4 Submit revisions of this REP Plan to the Florida Division of Emergency Management

Submit revisions of this plan and REP SOPs to the Florida Division of Emergency Management and the Florida Department of Health/Bureau of Radiation Control. The Florida Division of Emergency Management should coordinate the revisions of the plan with appropriate State and Federal agencies. Each revised section should be dated and marked to show where the latest changes have been made. Revisions should also be noted on the Table of Contents.

3.1.5 Coordinate with other Emergency Response Agencies

Coordinate with other County Radiological Emergency Response Agencies to ensure the completeness and correctness of their individual REP SOPs for the applicability of this plan.

A). All REP SOPs must be reviewed by the REP Coordinator, Emergency Management Director and by the appropriate agency head.

B). Each REP SOP assigned to an agency shall be reviewed by that agency head. Acknowledgement of the procedure contents shall be documented by the designated authorized agency head by signing the first sheet, (Approval Sheet), of the REP SOP in the space provided.

3.1.6 Update all Emergency Response Agency contact phone numbers at least quarterly.

Continuously monitor for any change in Emergency Response Agency contact phone numbers. The list of numbers should be updated at least quarterly. **(Refer to Appendix VI, "E.M. Call List).**

3.2 Logistics

3.2.1 Maintain a state of readiness

Maintain up-to-date inventories of equipment and resources that can be mobilized in the event of a radiological emergency. This is accomplished by a program of periodic inventories, inspections and operational equipment checks. This also includes a 24-hour Emergency Communications Point at the Levy County Sheriff's Office

3.2.2 Operational readiness

Ensure the operational readiness of the following:

A). Levy County Emergency Operation Center (EOC).

B). Communications network between Crystal River Nuclear Plant, Levy Nuclear Plant, Citrus County Sheriff's Office EOC, Levy County Sheriff's Office, Marion County EOC, and State Warning Point.

C). REP Emergency Response Trailer

D). Radiation instruments

3.2.3 Instruments, supplies and equipment

Develop a method for the distribution, inventory inspection and operational check and calibration of emergency equipment and supplies required to implement the Levy County Radiological Emergency Preparedness (REP) Plan.

Refer to Figure 31 for a list of equipment in the REP Inventory

Individuals or agencies receiving emergency equipment and supplies must agree to inventory, inspect and operationally check the equipment.

3.2.3.1 Allocation

The allocation of instruments and supplies for each Emergency Response Kit/location and requirements for calibrating and operationally checking the equipment has been established by the REP Coordinator or designee.

3.2.3.2 Inventory List

An inventory list for each kit/location with an allocation of emergency equipment and supplies should be prepared. This should include physical count of each item, and if applicable, a serial number and calibration date for the item.

3.2.3.3 Equipment distribution

Some of the equipment and supplies may be issued to other agencies for the purpose of being readily available and/or training.

Distribute the equipment and supplies to each location, if appropriate, and fill out the **"Radiological Equipment Issue Form" refer to Figure 26.** In signing the Radiological Equipment Issue Form the receiving individual or agency acknowledges their responsibility for the following:

A). To inventory, inspect and operationally check the equipment upon receipt, before and after each use.

B). To store and safeguard the equipment properly

C). To replace lost, stolen, expired or inoperable equipment through the REP Department.

D). Leave one copy of the inventory list with the Kit/location

E). File one copy of the inventory list at the REP Department.

F). Periodically review the inventory lists on file. Recalibrate, replace or remove equipment and supplies prior to expiration dates.

3.2.3.4 Inventory, Inspection and Operational Checks

A). Inventory, inspect and operationally check all equipment and supplies, as appropriate, per appropriate inventory list upon receipt, before and after each use and within each calendar year thereafter.

B). Inspect all instruments to be free from physical damage, inoperability or dead batteries. (Make sure that no batteries are left in instruments when no longer in use. Leaky batteries will cause damage to the internal components of the instruments).

C). Inspect that the KI supply is adequate and is within the current shelf life date.

D). Inspect the protective clothing equipment supply to be sure that an ample supple is available in storage.

E). Inspect the Emergency Response Kits. Verify that the appropriate number of kits is made up and available. Verify the "Radiological Equipment Issue Forms" are correct as to the kits issued and the proper quarterly inspection/calibration is being performed. **(See Figure 26, "Radiological Equipment Issue Form").**

F). Recalibrate, replace or remove from service, equipment and supplies before their expiration date.

G). Replace lost, stolen inoperable, defective or out of calibration equipment and supplies.

3.2.3.5 Thermoluminesent Dosimetry (TLD)

TLD Badges are Dosimetry that provide a more accurate means of measuring radiation exposure to Radiological Emergency Response Workers and will be issued during a severe accident at the Crystal River Nuclear Plant and/or Levy Nuclear Plants. The TLD Badges respond to beta and gamma radiation. One Control Badge will be included in the sealed package to record the background radiation during storage.

A). Two hundred (200) TLD Badges will be delivered to the Levy County EOC semiannually by the Bureau of Radiation Control (BRC) during the first two weeks of March and October.

B). The REP Coordinator or designee will be responsible for acceptance, storage and disposition of the TLD Badges. He/she and the BRC delivery person will sign an acceptance receipt when each new batch of TLD Badges is delivered and collected. The BRC delivery person will keep the original copy and the REP Coordinator or designee will be given a copy of the receipt.

C). The TLD badges will be delivered and stored in sealed packages. The TLD Badges must be stored in the designated container at a location determined to be at a normal background level of radiation The storage location will be surveyed for radiation by the BRC delivery person. The surveys should be made with a low range survey meter and be made at the time of delivery and pick up of the badges. It is important that several people know where the badges are stored in case the REP Coordinator is not accessible. If the storage location for the TLD badges is to be changed, prior approval must be obtained from BRC and a new radiation survey must be obtained.

D). A TLD Badge Issue Form is to be used when the TLD Badges are issued during an emergency. The TLD Badges shall only be removed from the storage location during emergencies involving radiation; they are not to be used for occupational exposure or as general area monitoring devices during non-emergencies. The BRC must be notified immediately when it is necessary to issue an emergency badge. The BRC fax number is (407)-297-2085. **Do not issue the Control Badge.**

E). During an emergency, when the TLD Badges have been issued, TLD Badge results should be reported to the REP Coordinator within 45 days after collection.

F). An annual report should be submitted to the DEM, Progress Energy and Citrus County REP within 30 days of the end of the fiscal year (June 30). The Bureau of Radiation Control will maintain permanent dose record of all TLD Badges.

3.2.3.6 REP Emergency Response Trailer

A trailer will be equipped to contain equipment and supplies to set-up the Vehicle Wash Down Station and Personnel Monitoring Station. Refer to Figure 30 to see a list of all the equipment and supplies contained in the REP Trailer. The trailer should be inspected on a monthly basis using the REP Inspection Sheet to insure an immediate state for readiness. **(Refer to Figure 30 "REP Inspection Sheet".**

3.2.4 Emergency Communications

The Levy County 24-hour Emergency Communications Point at the Levy County Sheriff's Office is considered the County Warning Point and is located at the Sherriff's Office Dispatch Station. **(Refer to SOP 23 "Emergency Operation Center Dispatch")**

The purpose of the County Warning Point is to provide the Emergency Management Division with efficient communications during emergency situations at the Crystal River Nuclear Plant and/or the Levy Nuclear Plants.

3.2.4.1 Hot Ring Down Telephone System

The Primary means of 24-hour per day emergency communications between the Crystal River Nuclear Plant and Levy Nuclear Plants to communicate with the Florida Division of Emergency Management State Warning Point, the Florida Department of Health, and the Levy County, Citrus County and Marion County Warning Points is the Hot Ring Down Telephone System. This system allows our County Emergency Management Division and the Florida Emergency Management to receive emergency notification messages simultaneously.

This system is tested on a weekly bases.

3.2.4.2 Commercial Telephone

Commercial telephone service is available at each emergency response facility and will be used as the primary back-up system for the Hot Ring Down Circuit.

Telephone Communications is used on a daily basis which requires no testing records to be performed.

3.2.4.3 ARES/RACES

The Amateur Radio Emergency Service (ARES) and The Radio Amateur Civil Emergency Services (RACES) are viable ancillary communications networks among county agencies and/or between county and state organizations. During an emergency, a pool of CERT/ARES/ RACES volunteers may be utilized by the State of Florida and Citrus County Divisions of Emergency Management.

Testing of this system is performed on a regular basis set forth by the leaders of the CERT/ARES/ RACES organization.

3.2.5 Staffing rosters and notification lists

Maintain up-to-date staffing rosters and notification lists of emergency response personnel. **(Refer to Appendix 1 "Emergency Management Response Call List").**

3.2.6 Letters of Agreement

Maintain up-to-date Letters of Agreement with appropriate facilities, resources and support organizations. (**Refer to Figure 25)**

3.2.7 Emergency Sirens

The sirens should be tested for the Crystal River Nuclear Plant 10-mile EPZ and the Levy Nuclear Plant 10-mile EPZ every Friday at 12:00 noon. This is performed by using the Siren Computer System located at the Citrus County Sheriff's Office EOC/Fire Dispatch Station. All the sirens in Citrus County, Levy County and Marion County are activated and sounded for about 30 seconds. The PA and sirens together will be tested periodically as directed by the Emergency Management Director or designee. The results of the Friday Siren System Tests should be reviewed by the REP Coordinator or designee for any anomalies or failures when completed. These anomalies and failures will be investigated. The Backup Computer System should be used to test the sirens once a month to test the operability of the Backup Computer System. **(Refer to SOP 11 "Siren Computer System")**.

3.2.7.1 False Activations

In the event of false siren activation, the REP Coordinator or designee should be contacted immediately. The REP Coordinator should make proper notification to the proper personnel at the Crystal River Nuclear Plant and/or the Levy Nuclear Plant. Levy County and Marion County Emergency Management should also be notified and informed of the false siren activations. The Communications Supervisor or his/her designee should contact the radio stations (Listed on the Emergency Notification form) and advise them of the accidental activation. **(Refer to SOP 11 "Siren Computer System")**.

3.2.7.2 Notification to Progress Energy's Nuclear Emergency Preparedness Staff When Siren Outage Thresholds Are Met.

(Refer to appendix 5 "Progress Energy's Nuclear Emergency Preparedness Staff contact phone numbers").

The Citrus County Sheriff's Office Emergency Management Division has 40 Sirens located within the Crystal River Nuclear Plant 10-Mile EPZ. ? sirens are located within the 10-mile radius of the Levy Nuclear Plant EPZ. In the event that the result of the Friday siren test or the Siren Control System indicates a loss of greater than four sirens **(4 out of 40)**, **during normal working hours**, notify Progress Energy's Nuclear Emergency Preparedness Staff at their office.

If there is a failure of four to eight **(4 to 8)** sirens **after normal working hours,** notify Progress Energy's Nuclear Emergency Preparedness Staff the next working day. A loss of four sirens is **not** a reportable incident to NRC, but warrants Progress Energy's attention.

If there is a loss of **greater than eight (8)** sirens at **any time**, **IMMEDIATELY** notify Progress Energy's Nuclear Emergency Preparedness Staff. For Progress Energy phone numbers, refer to **Appendix 5 "Progress Energy's Nuclear Emergency Preparedness Staff Contact phone numbers"**.

NOTE: If a significant portion of the Siren System is lost (10 sirens) for greater than two hours, notification of the NRC by Progress Energy is required.

3.2.8 CodeRED System

Levy County also has an option to implement the **CodeRED System** to call and alert specific residences with in the Crystal River Nuclear Plant 10-mile EPZ and/or Levy Nuclear Plant or anywhere in the County as desired. This system is an internet based Emergency Telephone calling system with the capability of making approximately 60,000 calls per hour. This is a replacement to the previous Reverse 911 System.

This system can be used in addition to the EAS System to provide recorded messages to residents within the Crystal River Nuclear Plant 10-mile EPZ and/or Levy Nuclear Plant. It also has the capability of using a mapping system. **(Refer to Section III, Parts 2.3.2.2 for more detailed discussions on when and how the CodeRED System is used during a declared emergency).**

3.3 Exercises and Drills

Coordinate required exercises simulating offsite response to a radiological release for the Levy County Emergency Response Agencies in conjunction with Progress Energy, Florida Division of Emergency Management, Citrus County and Marion County. Exercises and drills must be conducted periodically to evaluate the adequacy of the State Radiological Emergency Management Plan (Annex A), Levy County Radiological Emergency Preparedness (REP) Plan and SOPs, and the skills of county response organizations and agencies.

Provisions have been made for the critique of the emergency drills and exercises by qualified federal, state or local observers. FEMA observed exercises will be conducted on a biennial bases.

Mechanisms will be established for using the results of drills and exercises as a basis for improving this plan and REP SOPs.

3.3.1 Exercises (REP Exercises)

An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within the REP plan and organizations. An emergency-response exercise will be conducted at least annually. FEMA-observed exercises will be conducted on a bi-annual basis. Each exercise should

test the current overall emergency response capabilities of the Crystal River Nuclear Plant and Levy Nuclear Plant. Each exercise should also test the overall emergency response capabilities of the Levy County Emergency Management Division and the emergency response capabilities of the State of Florida, Citrus County and Marion County to respond to an emergency at the Crystal River Nuclear Plant and/or Levy Nuclear Plant that results in offsite radiological releases.

The exercise scenario should be varied from year to year so that all major elements of the REP Plan and all preparedness organization are tested within a **six-year period.**

Ingestion and Plume Pathway Exercise

An Ingestion and Plume Pathway exercise will be conducted by Progress Energy at least once every six years. An Ingestion and Plume Pathway exercise is designed to demonstrate the emergency preparedness and response capabilities of counties within 50 miles of the Crystal River Nuclear Plant and the Levy Nuclear Plants.

3.3.2 Drills

Drills are supervised instruction periods designed to test, develop and maintain skills in a particular response function and to provide maintenance checks of emergency response equipment. Drills are often components of exercises and are evaluated by designated observers.

In addition to those drills conducted to satisfy federal regulatory requirements, additional drills may be conducted to exercise and maintain proficiency within specialized areas of the emergency organization.

3.3.2.1 Communication Drills

Communications between Progress Energy and Levy County Division of Emergency Management will be tested as described in Section 1.3.2.4 “Emergency Communications”. The test of communications with field response and monitoring teams should be incorporated into the exercises.

3.3.2.2 Medical Services Drills

Levy County is not required to do Medical Service Drills as the closest hospitals are in Citrus County. Emergency Medical Services drills (MS-1) involving a simulated radiological contaminated injured person(s) should be conducted biennially by the Citrus County Radiological Emergency Planner for the Crystal River Nuclear Plant and the Levy Nuclear Plants. Participation by Nature Coast EMS, Seven Rivers Regional Medical Center and Citrus Memorial Hospitals will be required for evaluation by FEMA biennially

3.3.2.3 Radiological Monitoring Drills

Personnel and vehicle Radiological monitoring drills for the appropriate Levy County Response Personnel may be conducted as

part of the required exercise. The drills may include monitoring, provisions for communications and record keeping.

3.3.3 Coordination with other agencies for Scenario Development

Pending the development of exercise scenarios by Progress Energy and the Florida Division of Emergency Management before each FEMA observed exercise, the REP Coordinator will coordinate with the appropriate County, State and Progress Energy personnel the following information:

A). The basic objective(s) of the exercise and appropriate evaluation criteria.

B). Specific "observables" to be demonstrated by Levy County Emergency Responders.

C). The date, time period, place and participating organizations.

D). The simulated events.

E). A time schedule of real and/or simulated events.

F). A narrative summary describing the conduct of the exercises or drills to include required simulated events.

G) Description of arrangements for advance materials to be provided to observers.

3.3.4 Critique and Reports

A critique will be conducted after each exercise to evaluate the capability of the participation of State and Levy County Emergency Management Division to implement the REP Plan and SOPs in response to a nuclear plant emergency. Participating agencies may be requested to submit critique notes in writing as input for an After-Action Report on the exercise. The After-Action Report will contain all deficiencies and strengths noted and will be grouped according to operational area. The deficiencies will then be forwarded to the appropriate operational section for implementation and correction.

3.4 Resources Maintenance

The testing and calibration of radiological instruments, equipment, warning systems and communications is coordinated with Progress Energy, the Florida Division of Emergency Management and other appropriate organizations.

3.5 Training

Establish a suitable training program that is specifically oriented toward radiological emergencies for all County Emergency Response Agencies including support organizations. This training program will provide for periodic retraining on an annual basis. The training program must ensure that the guidelines listed in the **NUREG-0654** are provided for the emergency response personnel for decision making, planning and response.

New County Emergency Response Personnel will be scheduled annually to be trained on their associated agency SOPs and be familiarized with this plan.

Provide relevant, up-to-date radiological emergency planning information, as appropriate, to the County Emergency Response Agencies.

Maintain records of training including materials taught, attendees, date, place, time and duration of training session.

Training and retraining programs are provided for the following Emergency Response Personnel:

A). Fire Rescue and Fire Departments

B). Levy County Sheriff's Deputies (LCSO)

C). Levy County Emergency Medical Services (EMS)

D). Yankeetown Coast Guard

The Goal of for the Training Program is to ensure a high percentage of responders to be trained. Training will be offered to 100 % of the agencies and organizations responding to radiological emergencies.
The Training Program material will be maintained by the REP Coordinator or designee. The training program content will be reviewed annually to ensure its consistency with the REP Plan and Implementing SOPs. The Training Program material includes classroom training sessions, practical demonstrations both in the field and in the classroom, drills and FEMA graded exercises.

3.5.1 Training Levels

The training program is established with three separate levels. These levels are as follows:

A). **Level I**
Level I training is designed to provide a basic overview of the Radiological Preparedness Program. It can be used as an orientation to new County employees or presented to such citizen groups as churches, homeowner/condo associations or any type of public awareness program.

B). **Level II**
Level II training is designed to give County agencies a basic understanding of emergency response plans and procedures.

C). **Level III**
Level III training should give specific training to each agency according to their role as outlined in this plan and associated SOPs.
Specialized training courses offered by Federal, State, County or private agencies will be used to the extent practical. These include, but are not limited to, the following:

- Radiological Emergency Response Operations

- Radiological Emergency Preparedness Planning
- Radiological Emergency Management Decontamination, Dose Assessment
- Handling of Radiation Accidents by Emergency Personnel
- Fundamentals Course for Radiological Monitors
- Fundamentals Course for Radiological Response Team
- Hospital Emergency Department Management of Radiation Accidents

3.5.2 Training Standard

Personnel who would normally be used in a radiological emergency shall receive formal radiological emergency preparedness training. Formal training for additional emergency personnel will be at the discretion of the Emergency Management Director or designee. Formal refresher training will be provided on an annual basis. The Radiological Emergency Planner/Coordinator should receive continuous Radiological Planning Course specific training that consist of industry, event or other activity courses deemed appropriate to enhance his or her skills.

3.5.3 Organizations Requiring Training

The County organizations which require Radiological Emergency Response training and the required levels of training are shown in **Figure 27 "Levels of Training Needed for County Personnel".**

Specific tasks and responsibilities of each agency responding to a Radiological Emergency are described in their associated REP SOPs.

Additional State agency training will be provided based on County government resources short falls. The REP Coordinator will identify the type and amount of personnel resources required of the State to supplement the County's response organizations operations.

3.5.4 Training Schedule

Training will be conducted as required or a minimum of once per year. Each agency listed in **Figure 27, "Levels of Training Needed For County Personnel",** will receive either Level I, II, III training annually. The REP Coordinator will determine the level of training required by each agency based on existing Emergency Response Plans and procedures. Specialized courses will be scheduled as appropriate. All newly assigned emergency response personnel should receive training within one year of assignment.

3.5.5 Classroom Training

Levy County personnel attend training sessions covering the overall emergency response plus training sessions geared to specific emergency activities.

Training sessions may include, but are not limited to the following:

3.5.5.1 General Emergency Preparedness Overview

A). Emergency Planning basis – Emergency Planning Zones
B). Emergency Classification System
C). Levy County's Role
D). State of Florida's Role
E). Federal Role

3.5.5.2 Radiation Protection

Provide an understanding of the following:

A). Basic radiation physics
B). Biological health effects
C). Common sources of radiation
D). How to control exposure to radiation
E). Personnel Dosimetry

3.5.5.3 Notification

Specifics of the notification and mobilization process:

A). Equipment utilized to initiate notifications
B). Implementing procedure specifics
C). Logistics of mobilization

3.5.5.4 Communication

Instructions on the type and specific applications of the communication systems employed by Levy County are:

A). Hot Ring Down
B). CodeRED System

3.5.5.5 Personnel Dosimetry

Training on the application and utilization of Radiation Dosimetry to be used by Emergency Workers.

3.5.5.6 Personnel Monitoring

Provide an understanding of radiological monitoring and decontamination process.

3.5.5.7 Specific Emergency Response Training Topics

A). EOC Activation
B). Public Notification Methods and Procedures
C). Reception Center Operations
D). Personnel/vehicle Monitoring and Decontamination
E). Traffic Control Operations
F). Potassium Iodide distribution
G). Available Protective Actions (Evacuations or In-Home Shelter in Place)

H). Special Evacuation Operations (School Children & Special Needs)
I). Command and Control
J). Public Information (Coordination & Rumor Control)

3.5.6 Retraining/Refresher

Training sessions may include, but are not limited to the following:
A). Radiation Protection
B). Notification
C). Personnel Dosimetry
D). Personnel Monitoring using Radiation Instruments
E). EOC Activation
F). Reception Centers
G). Protective Actions
H). Donning and Removing Protective Clothing
I). Responding to vehicle accidents containing radioactive materials

3.5.7 Records

An Emergency Preparedness Training Record will be maintained for all Levy County Emergency Response Personnel. Individualized records should include documentation of satisfactory completion of initial emergency response training which includes:

A). Name to Class
B). Student's name and Position, Department or District
C). Instructor's name
D). Date

3.6 Public education/Awareness

3.6.1 Public Education and Awareness Program

Develop a public education program in conjunction with the County Public Information Officers, Progress Energy, and the State of Florida to provide information about the Crystal River Nuclear Plant and the Levy Nuclear Plant. Included in this program is the preparation and distribution of information and materials to advise residents and transients within the 10-mile Emergency Planning Zone (EPZ) for each nuclear plant site of appropriate protective measures to take during a radiological emergency. This information can be in the form of a brochure, mailings and/or information page in the local telephone books. This information should be revised annually in local phone books. The information brochure should be disseminated every two years to businesses and residents within the 10-mile EPZ of each nuclear plant site. The information should provide but is not limited to the following information:

A). Explanation of radiological concepts.
B). Emergency Alert System (EAS) stations.
C). Power plant operation. (Mailing information only)
D). Protective measures.
E). Evacuation Zones, and evacuation routes
F). Reception Center information

G) Public Shelter information. (Refer to Figure 14A "Public Shelter Location Map" and Figure 14B "Public Shelter List").
H). Special Needs population accountability.
I). Additional contacts for information.

A revised version of this material should also be published yearly in the local telephone book.

3.6.1.1 Accountability of Individuals with Special Needs

Develop, acquire data and maintain an accountability system to provide assistance to the individuals with Special Needs living within the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plants. Individuals with Special Needs are people with disabilities, confinement medical impairments, etc that may need assistance during an evacuation.

The information brochure or mailings, mentioned in Part 3.6.1, should contain a post card that can be filled out by the Individual with Special Needs or caregiver and mailed back to the Emergency Operations Center (EOC). This information will then be maintained in the EOC. A list of all the Individuals with Special Needs will then be provided to the Levy County Health Department. Levy County Health Department and it's Volunteers will be our primary means of notifying the Individuals with Special Needs if a decision to evacuate has been declared by the Emergency Management Director or designee. A list of the Individuals with Special Needs can also be maintained on the CodeRED System as a back-up.

3.6.1.2 Information for the Transient population

The information brochures and/or mailings mentioned in Part 2.3.6 will be distributed to transient lodging facilities within the Crystal River Nuclear Plant 10-mile EPZ and/or Levy Nuclear Plant 10-mile EPZ to provide information to the transient population. Appropriate signs/notices will also be posted in certain areas within the EPZ of both plant sites. **(Refer to Part 3.6.2 for information about signs/notices)**.

3.6.2 Public notices using various signs

Appropriate public signs/notices should be posted in parks, beaches, boat ramps and other outdoor recreational facilities within the Crystal River Nuclear Plant 10-mile Emergency Planning Zone (EPZ) and Levy Nuclear Plant 10-mile EPZ that are under the control of the State, County and City governments. Each individual siren should also have a sign attached to each siren pole.

This sign will inform the transient population of appropriate actions to take when they hear an Emergency Alert Signal (Siren).

All the signs/notices will be inspected periodically to verify its condition. Records will be maintained of any repairs and replacements of the signs.

3.6.3 Education of the Media

Coordinate with Progress Energy, County Public Information Officers, and the State of Florida for an annual news media education program to acquaint the news media with the County Emergency REP Plan. This Program familiarizes media representatives with the Levy County Emergency Plans and Procedures, basic radiation concepts and nuclear power plant operations, the process for release of public information in an emergency, as well as the activation and operation of the Emergency News Center (ENC). This program takes the form of either a verbal presentation or the distribution of a Crystal River Nuclear Plant and Levy Nuclear Plant Emergency Planning Manual, press packets, or educational material to the media.

3.7 Potassium Iodide (KI)

3.7.1 KI inventory supply and change out

The Florida Department of Health/Bureau of Radiation Control in Orlando will provide KI to the Levy County Emergency Operations Center (EOC) and the Levy County Health Department. The Bureau of Radiation Control keeps records pertaining to the expiration dates of their inventory of KI and will exchange the inventory at the Levy County EOC and the Levy County Health Department, as necessary.

3.7.2 Procurement

Supplies of KI will be stored at the Emergency Operations Center for distribution to Emergency Response Workers. The Levy County Health Department will procure a supply for the distribution to the General Public. The total number of doses stored at both locations will be determined by the REP Coordinator and County Health Dept. Administrator or designee on a need by need cases and the forms of KI available for procurement. KI will be available in two forms; tablet form and liquid form.

3.7.2.1 Tablet Form

Each tablet form contains 130 milligrams of KI. One tablet is equal to one adult dose.

3.7.2.2 Liquid Form

The liquid KI will be in a bottle that will contain 30 milliliters of KI at 65 milligrams of KI per milliliter. Each bottle will contain 15 adult doses. This liquid KI will be administered to personnel by using a measured eye dropper that is attached to the cap of the bottle. Two milliliters (130 milligrams) of liquid KI is equal to one adult dose and will be deposited on the tongue of the individual by the use of the provided oral dropper.

3.7.3 Storage

KI should be stored between 59 degrees and 86 degrees Fahrenheit. Keep containers tightly closed and protected from any light sources. The REP Coordinator at the Levy County Emergency Operations Center (EOC) and the

County Health Department Administrator or designee will ensure that the KI has not exceeded its shelf life.

3.7.4 KI Administration

KI will be administered only after receipt of a recommendation from the Fl. Dept. of Health/Bureau of Radiological Control and such authority through the Emergency Management Director or designee and the Chairperson of the Board of County Commissioners or designee. One dose of KI (130mg) daily for two (2) days, for a total of two doses will be issued or administered to the individuals determined to be a risk. Individuals over the age of one year should take one adult dose (130mg) immediately when recommended and the next dose in 24 hours. Individuals under the age of one year should be given ½ an adult dose (65mg) immediately when recommended and the ½ and adult dose (65mg) in 24 hours. Doses will be issued by personnel of the Health Department at the Reception Center KI Distribution Point for the general public. KI for the Emergency Workers will be issued by the REP Coordinator or designee and self administered by the Emergency Worker.

3.7.5 Other Institutions That May Require KI

Other institutions within 10-miles of the Crystal River Nuclear Plant and the Levy Nuclear Plant might possibly be contaminated if they were in the 10-mile EPZ Plume Exposure Pathway of each plant site. Inclement weather or other factors could prevent evacuation of any or all of these facilities. In that event and only on specific direction from Emergency Management Director and the County Health Department Administrator, KI may be delivered to the following:

A. Florida Sheriff's Youth Ranch, Inglis

B. Division of Forestry Work Camp, Lebanon Station

3.7.6 References

FDA procedural guidance document, "Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies", November 2001.

LEVY COUNTY
RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
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1.5 Inglis Police Department

1.5.1 Assistance to the Levy County Division of Emergency Operations
1.5.2 Assistance to the Sheriff's Office Patrol Division

1.6 Levy County School Board

1.6.1 The Levy County School Board will provide the following resources in support of evacuation, reception, care, and food service operations:

1.6.1.1 School buses and drivers
1.6.1.2 School facilities to accommodate reception centers and shelters with food service for the evacuees
1.6.1.3 Personnel to augment reception center and shelter staffs in registering the evacuees, to assist in shelter management, and to provide food service support

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SECTION III RESPONSE

MISSION

The Federal, State and County Governments and Progress Energy have the responsibility to protect public health and safety in the event of a radiological emergency.

Response is the second phase of the Radiological Emergency Preparedness (REP) program. Its purpose is to enable state and local officials to reduce the effects of a radiological emergency. Adequate response to radiological emergencies are listed below and described in the following parts.

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2.9 Protective Action Response Options

1. ORGANIZATION AND RESPONSIBILITIES

The following organizations are responsible for assuring continuity of resources to support 24-hour operations for an extended period of time. Each emergency response organization or sub organization having an operations role is responsible for their own REP Standard Operating Procedures (SOPs) which describe in detail its concept of operations and its relationship to the total effort. The relationship of these organizations and their responsibilities are graphically represented in **Figures 4A, 4B, 5A and 5B**. In addition, each county jurisdiction of the State of Florida is authorized in Sections 252.35, 252.37, and 252.60 of the Florida Statutes to participate in cooperative relationships to accept services, equipment, supplies, materials, or funds for emergency management efforts.

1.1 Chairperson of Levy County Board of County Commissioners

The Chairperson of Levy County Board of County Commissioners in coordination with the Emergency Management Director, with support of the Mayors of Inglis and Yankeetown, has the overall responsibility for radiological emergency response planning and for assuring the accuracy of applicable portions of this plan. The Chairperson, in conjunction with the Levy County Emergency Management Director or designee, will be responsible for initiating actions and providing direction and control at the local level. This would include consideration of In Home Sheltering or evacuation as options for protection of the public, and for conducting emergency operations to cope with the effects of a radiological emergency. **(Refer to Section III, Part 2.1, "Direction And Control For Initial Radiological Response and Part 2.2, Emergency Mobilization")**.

The Chairperson in coordination with the Emergency Management Director or designee will be responsible for assuring continuity of resources, administration and materials, to support 24-hour operations for a protracted period and for coordinating with Federal, state and local government response agencies.

The Chairperson should review and reference the first four REP SOPs prior to and as each Emergency Classification is declared by Progress Energy. **(Refer to REP SOP 1 "Unusual**

Event", REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency" and REP SOP 4 "General Emergency").

The Chairperson or designee in coordination with the Emergency Management Director or designee, acting upon the recommendation of the Operations Officer of the Florida DOH/Bureau of Radiation Control, is responsible for authorizing Levy County emergency workers to incur exposure in excess of 500 mR. In no case will this dose exceed that recommended in the "Early Phase PAG" for emergency workers except when engaged in a lifesaving situation. **(Refer to Figure 3A, "Early Phase EPA PAG Limits")**. **(Refer to Section III, Part 2.91 "EPA Protection Action Guidelines")**.

1.2 Levy County Division of Emergency Management

1.2.1 Emergency Management Director or designee

Levy County Emergency Management Director or designee is responsible for the coordination, development and maintenance of all the Standard Operation Procedures (SOPs) associated with this Radiological Emergency Preparedness (REP) Plan for implementing the required portions of this plan consistent with the emergency conditions. The Emergency Management Director or designee in coordination with the REP Coordinator will also provide input for annual plan revisions by the State Division of Emergency Management and the Florida Department of Health/Bureau of Radiation Control. The Emergency Management Director or designee will be responsible for coordinating emergency operations at the local level and keeping local governmental officials advised on the status of operations. The Emergency Management Director or designee will also coordinate overall emergency operations and support needs with the State Division of Emergency Management, State and Federal support agencies, and Progress Energy Corporation.

The Emergency Management Director or designee is responsible for determining which Progress Energy's Nuclear Plant is having the emergency event, (Crystal River Nuclear Plant or Levy Nuclear Plant). He/she will also be responsible for determining the type of event occurring at the plant site, (Hostile Action Based event, equipment failure or accident). As defined by the NRC, a Hostile Action is "an act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force."

The Emergency Management Director or designee will be responsible for contacting Citrus County and Marion County Emergency Management Directors to confirm all information associated with the emergency event and coordinate response actions. He/she will be responsible for early warning and notification of the population within the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plant 10-mile EPZ in Levy County. **(Refer to Section III, Part 2.3 "Notification of the Public").** The Emergency Management Director or designee is also responsible for activating the Levy County Emergency Operations Center (EOC) when required and notifying all local governmental and non-governmental departments and agencies supporting emergency operations in accordance with established county procedures. **(Refer to Section III, Part 2.2 "Emergency Mobilization")**.

The Chairperson of the Board of County Commissioners or designee in coordination with the Emergency Management Director or designee, acting upon the recommendation of the Operations Officer of the Florida DOH/Bureau of Radiation Control, is responsible for authorizing Levy County emergency workers to incur exposure in excess of 500 mR. In no case will this dose exceed that recommended in the "Early Phase PAG" for emergency workers except when engaged in a lifesaving

situation. **(Refer to Figure 3A, "Early Phase EPA PAG Limits")**. **(Refer to Section III, Part 2.91 "EPA Protection Action Guidelines")**.

The Emergency Management Director or designee should review and reference the first four REP SOPs prior to and as each Emergency Classification is declared by Progress Energy. **(Refer to REP SOP 1 "Unusual Event", REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency" and REP SOP 4 "General Emergency").**

1.2.2 REP Coordinator

The REP Coordinator or designee should review and reference the following REP SOPs prior to and as each Emergency Classification is declared by Progress Energy: **(Refer to REP SOP 1 "Unusual Event", REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency", REP SOP 4 "General Emergency" and REP SOP 14 "Levy County REP Coordinator").**

The REP Coordinator has many responsibilities in preparation for a Radiological incident. **Refer to Section II, Part 1.3 "APPROPRIATE PREPAREDNESS ACTIVITIES-REP COORDINATOR RESPONSIBILITIES" and all 1.3 sub-parts.**

Along with the preparation responsibilities, the REP Coordinator or designee will be contacted by the Levy County Sheriff's Office dispatch whenever a notification comes across the Hot Ring Down Phone lines or any incident involving the Crystal River Nuclear Plant and/or Levy Nuclear Plant. **(Refer to Section III, Part 2.2.1 "Emergency Mobilization/Notification").**

During a Radiological Emergency the REP Coordinator will relay all data and information he would receive from Progress Energy and provide recommendations and assistance to the Emergency Management Director or designee

During the mobilization of emergency responders, any person whose exposure has reached **500 mR** or more will be directed to leave the area and report to a personnel monitoring station for appropriate actions. The worker's supervisor will report the exposure to the REP Coordinator or designee, who will then report the worker's name and total exposure to Florida DOH and County Health Department personnel. **(Refer to Section III, Part 2.8.1 "Radiological Exposure Control/Emergency Personnel").**

The names, addresses and contamination information of evacuees requiring decontamination will be recorded on the **"Personnel Contamination Form"**, and the individual will then be submitted to the Levy County Health Department. **(See Figure 24)**. They will forward the data to the REP Coordinator or designee at the Sheriff's Office EOC. The REP Coordinator or designee will maintain a record of all evacuees that have become contaminated and provide a copy to the Levy County Health Department. **(Refer to Section III, Part 2.9.10.2 "Personnel Decontamination").**

At the termination of the emergency, the Emergency Worker's TLD Badges will be returned to the Bureau of Radiation Control when the emergency is over or conditions have returned to normal. The TLD Badges will be returned by the Bureau of Radiation Control to the vender for reading. The Bureau of Radiation Control will receive all emergency worker exposure records from the vendor. The records will be sent to the REP Coordinator for distribution to the workers. A copy will be retained by the Bureau of Radiation Control. **(Refer to Section III, Part 2.8.1 "Radiological Exposure Control/Emergency Personnel").**

1.3 Citrus County Fire Rescue

The Fire Chief and/or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference the following REP SOP prior to and as each Emergency Classification is declared by Progress Energy: **REP SOP 21 "Fire Rescue".(Refer to Step 2.5 "Reception Center, Radiological Personnel Monitoring Stations and Wash Down Station"**

If the emergency event was initiated by the Crystal River Nuclear Plant and if directed by the Emergency Management Director or designee, the Crystal River Fire Department should, if resources are available, assist in the dissemination of warning notification in the City of Crystal River.

The Citrus County Fire Rescue and the Crystal River Fire Departments will also maintain communications with the Citrus County Sheriff's Office EOC and coordinate support needs and operations with other agencies.

The Citrus County Fire Rescue will perform and provide the following services in support of radiological emergency response operations:

1.3.1 Monitoring and Decontamination of Emergency Workers, people and vehicles evacuated from the Crystal River and/or Levy Nuclear Plant 10-mile EPZs.

1.3.2 Assistance to the Sheriff's Office EOC in the dissemination of emergency information, and the provision of communications support.

1.3.3 Fire surveillance and suppression services at the reception center and public shelter area(s).

1.3.4 Assistance in decontamination in area(s) affected by the emergency.

1.4 Levy County Sheriff's Office

The Operations Lieutenant or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference **REP SOP 22, "Levy County Sheriff's Office"**, prior to and as each Emergency Classification is declared by Progress Energy.

The Levy County Sheriff's Office will provide the following services in support of emergency operations:

1.4.1 Countywide law enforcement activities, including traffic control, control of ingress and egress, and establishment of traffic control points to ensure safe passage of evacuees to the Reception Center and public shelters. The Sheriff's Office provides for crowd control and security at the Reception Center and public shelters. **(Refer to Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones" Figure 17B "Levy Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones", Figure 18A "Crystal Rive Nuclear Plant 10-mile EPZ Evacuation Routes", Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data", Figure 18C "Levy Nuclear Plant 10-mile EPZ Evacuation Routes", Figure 18D "Levy Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data"). (Refer to Section III, Part 2.9.7.4 "Establish Traffic Control"). (Refer to Section III, Part 2.9.7.7 "Security of Evacuated Areas").**

1.4.2 Surveillance of the area to determine that all individuals have been evacuated **1.4.3**

A) If the emergency event was initiated by the Levy Nuclear Plants, provide and maintain area security and law enforcement with the Levy Nuclear Plant 10-mile EPZ.

B) If the emergency event was initiated by the Crystal River Nuclear Plant, provide and maintain area security and law enforcement within the towns of Inglis and Yankeetown and the Crystal River Nuclear Power Plant 10 Mile EPZ in Levy county

1.4.4 Traffic control and law enforcement measures to assist in the evacuation of the population and the recovery and re-entry operations.

1.4.5 Provide security for the Levy County Emergency Operations Center (EOC).

The Levy County Sheriff's Office will also maintain communications with the Levy County Emergency Operations Center and coordinate support needs and operations with other agencies.

1.5 Inglis Police Department

If the emergency was initiated by the Levy Nuclear Plant, the Officers assigned to the townships of Inglis & Yankeetown should be particularly aware of the situation prior to and as each Emergency Classification is declared by Progress Energy.

If the emergency was initiated by the Crystal River Nuclear Plant, the Officers assigned to the townships of Inglis & Yankeetown should be on standby and in constant communication with the EOC.

Officers will maintain communications with the Sheriff's office dispatch and be constantly updated on the radiological conditions in the area and the situation at the nuclear plants.

1.5.1 Assistance to the Levy County Emergency Operations Center in disseminating emergency information, and providing field and traffic updates to the EOC.

1.5.2 Assistance to the Sheriff's Office Patrol Division in maintaining traffic control, law enforcement and security as needed during evacuation and in recovery and re-entry operations in the affected areas. **(Refer to Figure 18A "Crystal River Nuclear Plant Evacuation Routes" and Figure 18B "Crystal River Nuclear Plant Population and Protective Action Maps Data"). (Refer to Section III, Part 2.9.7.4 "Establish Traffic Control"). (Refer to Section III, Part 2.9.7.7 "Security of Evacuated Areas").**

1.6 Citrus County School Board

The Levy County School Board Superintendent or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference **REP SOP 20, "School Board"** prior to and as each Emergency Classification is declared by Progress Energy.

The Emergency Management Director or designee in coordination with the Levy County School Board Superintendent or designee has the responsibility to manage adequate public sheltering and transportation to and from the public shelters within Levy County if the situation warrants. It is his responsibility to ensure that adequate food service and health care is available within the public shelters for evacuees. This effort will be aided by the local American Red Cross Chapter. **(Refer to Section III, Part 2.9.9 "Special Population Evacuation")**.

1.6.1 The Levy County School Board will provide the following resources in support of evacuation, reception, care, and food service operations:

1.6.1.1 School buses and drivers to assist in moving evacuees from the area to be evacuated to the reception center and public shelters.

1.6.1.2 School facilities to accommodate reception centers and public shelters, with food service for the evacuees.

1.6.1.3 Coordinate with the Levy County Health Department to provide personnel to augment reception center and public shelter staffs in registering the evacuees, to assist in public shelter management and to provide food service support.

The Levy County School Board Superintendent or designee will also maintain communications with the Levy County Emergency Operations Center and coordinate support needs and operations with other agencies.

1.7 Levy County Health Department

The Levy County Health Department Director or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference the following REP SOPs: **REP SOP 16 "Citrus County Health Department", REP SOP 17 "Storage and Distribution of Potassium Iodide" and REP SOP 27 "Personnel and Vehicle Monitoring"**, prior to and as each Emergency Classification is declared by Progress Energy.

The Levy County Health Department Director and the Emergency Management Director or their designees will coordinate with and assist the Florida DOH with radiological accident assessment. They will also be responsible for the coordination with the Florida DOH in determination of proper Protective Action Recommendations to the Emergency Management Director or designee in accordance with **Section III, Part 2.7 "Radiological Evaluation" and Section III, Part 2.9 "Protective Action Response Options"** of this REP Plan. This will also include the administration of potassium iodide (KI) to designated individuals if deemed necessary and directed by the coordination between the Emergency Management Director or designee and the Chairperson of the Board of County Commissioner or designee. **(Refer to REP SOP 16 "Levy County Health Department", REP SOP 17 "Storage and Distribution of Potassium Iodide" and REP SOP 27 "Personnel and Vehicle Monitoring")**.

The Director of the Levy County Health Department will also maintain communications with the Health Department personnel in the Levy County Emergency Operations Center and coordinate support needs and operations with other agencies.

1.7.1 The Levy County Health Department will provide the following health care services to evacuees in support of emergency operations in the reception centers, public shelter facilities and the Special Needs shelter:

1.7.1.1 The Levy County Health Department will be responsible for setting up Hilltop School as the Reception Center with coordination with Fire Rescue, American Red Cross and the maintenance of KI for the general public of

Levy County. **(Refer to Part 2.8.1.6. "Potassium Iodide (KI), Part 2.9.2 "Potassium Iodide Thyroid Protection" and Part 2.9.11 "Reception Center")**

1.7.1.2 Health services and disease prevention and control measures.

1.7.1.3 Sanitation and personal hygiene services, and waste disposal.

1.7.1.4 Procurement of medical service support.

1.7.2 <u>The Levy County Health Department Director or designee will assure that the following are implemented as appropriate:</u>

1.7.2.1 Necessary health orders, restrictions and emergency information. This will be directed to evacuees housed in the Reception Center, public shelter facilities and to the general Public.

1.7.2.2 The Director or designee will also facilitate disease prevention and control measures, sanitation and waste disposal and insure that the food and water supply in the affected area(s) is safe.

1.8 Citrus Memorial Health System and Seven Rivers Regional Medical Center

The Citrus Memorial Health System and Seven Rivers Regional Medical Center will provide the following services in support of emergency operations:

1.8.1 In-patient hospital care and hospital facility support.
1.8.2 Professional medical service support in reception centers and public shelter facilities.
1.8.3 Treatment of radiological contaminated victims when necessary.

Citrus Memorial Health System and Seven Rivers Regional Medical Center will also maintain communications with the Sheriff's Office EOC and coordinate support needs and operations with other agencies. **(Refer to REP SOP 30 "Seven Rivers Regional Medical Center" and REP SOP 33 "Citrus Memorial Health System")**. **(Refer to Section III, Part 2.9.9.3 "Hospitals")**.

1.9 Levy County Emergency Medical Services

The Levy County Emergency Medical Services Director or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference **REP SOP 25 "Emergency Medical Services"** prior to and as each Emergency Classification is declared by Progress Energy.

Levy County Emergency Medical Services will maintain communications with the Levy County Emergency Operations Center and coordinate support needs and operations with other agencies. **(Refer to Section III, Part 2.9.9.1 "Evacuation of Mobility Impaired Residents / Special Needs")**.

Levy County Emergency Medical Services will provide the following services in support of emergency operations:

1.9.1 Transportation of injured persons to Seven Rivers Regional Medical Center.

1.9.2 Assistance in evacuating patients from hospitals or care centers for disabled persons.

1.9.3 Coordinate and assist in the evacuation of non-ambulatory patients from the affected area.

1.10 Levy County Road Department

The Levy County Road Department Director or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference **REP SOP 19 "Road Department"** prior to and as each Emergency Classification is declared by Progress Energy.

The Levy County Road Department Director or designee will provide assistance to the Levy County Division of Emergency Management in disseminating warning and emergency information. Communications support and the following services in support of emergency operations will also be provided: **(Refer to REP SOP 19 "Road Department")**.

1.10.1 Assistance to the Levy County Sheriff's Office in traffic control and area security for evacuation and recovery and re-entry operations. **(Refer to Figure 18A "Crystal River Nuclear Plant Evacuation Routes" and Figure 18B "Crystal River Nuclear Plant Population and Protective Action Maps Data", 18C "Levy Nuclear Plant Evacuation Routes" and Figure 18D "Levy Nuclear Plant Population and Protective Action Maps Data")**.

1.10.2 Establishment of road blocks, route markers and traffic control signs to support evacuation operations.

1.10.3 Equipment and personnel to assist in decontamination of the affected area(s).

1.10.4 Equipment and personnel support for maintenance and sanitation operations at the Reception Center and public shelters.

1.10.5 Waste pickup and disposal at the Reception Center and public shelters.

The Levy County Road Department will also maintain communications with the Levy County Emergency Operations Center and coordinate support needs and operations with other agencies.

1.11 Levy County AG / Extension Office

The Levy County AG / Extension Office Director or designee should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference the following REP SOPs prior to and as each Emergency Classification is declared by Progress Energy: **REP SOP 29 "Extension Office" and REP SOP 31 "Control of Food Stuffs"**.

The Levy County AG / Extension Services will provide the following services in support of emergency operations:

1.11.1 Transportation and financial assistance to indigent persons.

1.11.2 Transportation for people with special evacuation needs.

1.11.3 Assistance to State ESF 8 and the support agencies in the monitoring and control of potentially contaminated foodstuffs. **(Refer to Section III, Part 2.9.12 "Control of Foodstuffs").**

1.12 Levy County Public Information Officers for the Sheriff's Office and Levy County Board of County Commissioners.

The Levy County Public Information Officers for both BOCC and Sheriff's Office should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference the following REP SOPs prior to and as each Emergency Classification is declared by Progress Energy: **REP SOP 7 "Citrus County Sheriff's Office PIO/Citizens Information System", REP SOP 8 "Citrus County Sheriff's Office PIO", REP SOP 9 "Citrus County Sheriff's Office PIO in the EOC" and REP SOP 12 "PIO at Progress Energy's EOF"**.

The Public Information Officer for both the Sheriff's Office and BOCC is responsible for coordinating information with each other and PIOs from Marion and Citrus County and Progress Energy. The PIOs will then be responsible for the dissemination of information to the public through the facilities of Progress Energy's Emergency Operations Facility (EOF)/Emergency News Center (ENC)/Joint Information Center (JIC). The County Public Information Officer is the key liaison between the news media and county emergency response operations. **(Refer to Section III, Part 2.3.2.1 "Release of public information").**

1.13 Towns of Inglis & Yankeetown

The Inglis and Yankeetown Mayors or designees should determine it the emergency event is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. He/she should review and reference **REP SOP 15 "Towns of Inglis & Yankeetown"** prior to and as each Emergency Classification is declared by Progress Energy.

The Inglis and Yankeetown Mayors with coordination with Levy County Emergency Management Director or designee and the Chairperson of the Levy County Board of Commissioners have the overall responsibility for Radiological Emergency Response in the townships of Inglis and Yankeetown. They will also be responsible for initiating actions and providing direction and control within their respected towns. This would include consideration of In Home Sheltering or evacuation as options for protection of the citizens of Inglis and Yankeetown and for conducting emergency operations.
(Refer to Section III, Part 2.9.8 "Protective Action Decisions (PADs) / Evacuation Areas and Route Descriptions", Part 2.9.9 and all its associated Sub-parts "Special Population Evacuation").

2. IMPLEMENTATION OF RESPONSES ACTIVITIES

2.1 Direction and Control for Initial Radiological Response

Levy County Emergency Management Director or designee in coordination with the Chairperson of the Board of County Commissioners is responsible for initial radiological emergency response operations. They will coordinate emergency operations through the Levy County Emergency Operations Center (EOC). They should coordinate all response action decisions with Citrus County and Marion County Emergency Management Directors or their designees.

2.1.1 Levy County Responsibilities

During a Crystal River Nuclear Plant Emergency or Levy Nuclear Plant Emergency, the Chairperson of the Levy County Board of County Commissioners and the Emergency Management Director or designee, with support of the Mayors of Inglis and Yankeetown, has the overall responsibility for the health and welfare of all residents of Levy County. The Chairperson of the Levy County Board of County

Commissioners will provide personnel and equipment from all County departments and agencies necessary to achieve this objective.

The Chairperson of the Levy County Board of County Commissioners, through the Levy County Emergency Management Director or designee, shall assume command and control of and direct the overall County response operations. In the Chairpersons absence, responsibility will be delegated according to established County procedures for continuity of government. The County will coordinate such actions through the Emergency Management Director or designee. The **Organization of Levy County Emergency Response Agencies** will follow the Incident Command System (ICS) which is outlined in **Figure 5B "ICS Organizational Chart**. The Levy County Emergency Operations Center (EOC) will be the facility that emergency response activities will be coordinated under the direction and control of the Emergency Management Director or designee. **(Refer to Section III, Part 2.2 "Emergency Mobilization")**.The **Primary and Support Functions and Responsibilities** of each Levy County agency are outlined in **Figure 4A.**

Emergency Management Division has access to several agencies and organizations associated with providing emergency support and recovery functions which coordinate together to achieve the mission of protecting the general public. These agencies and organizations are referred to as "Emergency Support Functions" (ESF) **(Refer to Figure 4B "Emergency Support Functions – ESF").**

2.1.2 Levy County EOC and Staffing

The Emergency Operations Center (EOC) for Levy County is located at 9010 NE 79th Avenue Bronson, Florida. The alternate EOC for Levy County will be the County Courthouse basement, located on 355 S. Court Street Bronson **(Refer to Figure 9 for location maps).** Upon notification of an **"Alert Emergency**" from the Crystal River or Levy Nuclear Plant, the EOC will be staffed by essential personnel as per the Emergency Management Director or designee. During a declared "**Site Area** or **General Emergency**" from the Crystal River Nuclear Plant or Levy Nuclear Plants; staffing of the EOC in accordance with established county procedures may include, but not be limited to, representatives from the following agencies: **(For a "List of Federal, State and County ESFs", Refer to Figure 4B).**

- **A.** Levy County Emergency Management Director
- **B.** REP Coordinator
- **C.** Levy County Board of County Commissioners (ESF 7)
- **D.** Levy County Public Works (ESF 1, 3, 9)
- **E.** Levy County School Board (ESF 1, 6)
- **F.** Levy County Fire Representative (ESF 4, 9, 10)
- **G.** Levy County Health Department (ESF 6, 8)
- **H.** Levy County Animal Control (ESF 17)
- **I.** American Red Cross, Alachua County Chapter (ESF 6, 7, 11)
- **J.** Electric Utilities (ESF 12)
- **K.** Nature Coast Transportation (ESF 1)
- **L.** Levy County Emergency Medical Services (ESF 8, 9)
- **M.** Levy County Public Information Officer (ESF 14)
- **N.** Levy County Extension Services (ESF 11)
- **O.** Florida DOH (State ESF 6, 8)
- **P.** Towns of Inglis & Yankeetown (ESF 3, 7, 16)
- **Q.** Levy County Sheriff's Office (ESF 9, 16)
- **R.** Other organizations as needed

The Emergency Management Director or designee should activate the Levy County EOC to a Level III during a **Notification of Unusual Event** from the Crystal River or

Levy Nuclear Plants. The EOC is usually activated to a **Level II** during a declared **Alert Emergency** but **MAY** be activated to a **Level I** during the "Alert Emergency" category upon the direction of the Chairperson of the Board of County Commissioners and/or the Emergency Management Director or designee if the situation warrants. The EOC **SHALL** be activated to a **Level I** during a declared "**Site Area Emergency**" or a "**General Emergency**" category. **(Refer to Section III, Part 2.2.2 "Levels of EOC Activation").**

During a declared "**Site Area Emergency**" or "**General Emergency**", activation of the EOC will involve immediate staffing of designated personnel and notification of emergency response personnel who will be placed on standby status in accordance with established county procedures. **(Refer to Section III, Parts 2.2.3 to 2.2.3.4 for "Emergency Classification System and Actions for Notification and EOC Activations").**

The Emergency Management Director or designee will activate the Reception Center and the Vehicle Wash Down and Monitoring station upon receipt of a Site Area Emergency notification. **(Refer to Section III, Part 2.5 "Reception Center, Radiological Personnel Monitoring Station and Wash Down Station").**

2.1.3 Emergency Management Director or designee responsibilities

The following are REP SOP's that shall be implemented during a declared emergency at the Progress Energy Nuclear Power Plant and who would be responsible for implementing those procedures. The Levy County Emergency Management Director or designee should read the following procedures and be prepared to respond to pertinent situations:

SOP 1	All parts ----------	Unusual Event
SOP 2	All parts ----------	Alert
SOP 3	All parts ----------	Site Area Emergency
SOP 4	All parts ----------	General Emergency
SOP 5	All parts ----------	Special Needs
SOP 6	All parts ----------	Red Cross
SOP 7	Parts 3.1, 3.2 and 4.6 ----------	Citizens Information
SOP 8	Parts 4.2, 4.3, 4.3.2.4, 4.4 and 4.4.2.3 ----------	County PIO
SOP 9	Parts 4.2.3, 4.3.4, 4.4.4, and 4.5.2 ----------	PIO in the EOC
SOP 10	Parts 4.3.2, 4.3.4, 4.4.2, 4.4.4, And 4.5.2 ----------	Coordinating Siren Activation
SOP 13	All parts ----------	EOC Activation
SOP 15	Parts 3.3.3, 3.3.9, 3.3.10, 3.4.4 3.4.5 and 3.4.6 ----------	Towns of Inglis and Yankeetown
SOP 16	Parts 4.3, 4.3.3, 4.3.6, 4.3.8, 4.3.9, 4.4, 4.4.6 and 4.4.7 ------	Health Department
SOP 19	Parts 3.2, 3.3, 3.3.5, 3.4 and 3.4.5 ----------	Road Department

SOP 20 All parts ----------	School Board
SOP 21 All parts ----------	Inglis & Yankeetown Fire
SOP 22 All parts ----------	LCSO
SOP 25 Parts 3.2, 3.3, 3.3.5, 3.3.8, and 3.4 ----------	EMS
SOP 26 All parts ----------	Recovery
SOP 28 All parts ----------	Backup Route Alerting
SOP 29 All parts ----------	County Ag. Agent
SOP 31 All parts ----------	Control of Food Stuffs
SOP 32 All parts ----------	FWC
Appendix 2 ----------	EAS Messages
Appendix 4A ----------	Crystal River Nuclear Plant PADs & MAPs
Appendix 4B _----------_	Levy Nuclear Plant PADs and MAPs

The Emergency Management Director or designee shall implement **REP SOP 1 "Unusual Event"**. If appropriate, implement **REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency", REP SOP 4 "General Emergency"**, **REP SOP 5 "Special Needs", REP SOP 7 "Citizen Information", REP SOP 10 "Coordinate Sounding the Sirens", REP SOP 13 "EOC Activation",**

The Emergency Management Director or designee will be receiving and reviewing a constant flow of information from Progress Energy, Florida Department of Health and the staff at the EOC. He or she will also receive and review information as to which Progress Energy Complex is having the emergency event, (Crystal River Nuclear Plant or Levy Nuclear Plants, the type of event occurring at the plant (Hostile Action Based event, equipment failure or accident), event classification, escalation, real or potential radiation hazards and Protective Action Recommendations (PARs) for appropriate protective responses from the staff at Progress Energy's EOF. Based on the Florida DOH and Progress Energy's recommendations and after review of available resources, the Emergency Management Director or designee will formulate the County's position regarding the Protective Action Decisions (PADS) required. **(Refer to Section III, Part 2.7.2 "Evaluation of INPUT PARAMETERS by the Emergency Management Director or designee" and Section III, Part 2.9 "Protective Action Response Options"). Also (Refer to REP SOP 1 "Unusual Event", REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency", REP SOP 4 "General Emergency"). Also refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**.

Having determined the County's position, the Emergency Management Director or designee will then confer with Citrus County and Marion County Emergency Management Directors or their designees and the State EOC to ascertain their recommendations regarding the situation. **(Refer to REP SOP 10 "Coordinate Sounding The Sirens With Citrus and Marion County")**.

As the emergency situation progresses, the Emergency Management Director or designee may recommend the County Commission declare a Local State of Emergency.

Upon determination of a protective response, (PAD), the Emergency Management Director or designee, through the response organization representatives (ESFs) at the EOC, will direct the implementation of the appropriate Protective Actions Decisions

(PADs). **(Refer to Section III, Part 2.9 "Protective Action Response Options" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps").**

The Emergency Management Director or designee may make a formal request for State assistance. The request is forwarded to the Governors Office through the Florida Division of Emergency Management or the State Emergency Response Team, (SERT), depending upon the State Emergency Operations Center's level of activation. In support of the State Emergency Response Team, the Florida Division of Emergency Management drafts, and may sign, an Executive Order which recommends that the Governor declare a State of Emergency as warranted.

Unusual Event — It is anticipated that during an Unusual Event emergency classification the Levy County EOC will maintain primary responsibility for coordinating the emergency response.

Alert Emergency Or Higher — During an Alert Emergency classification, or higher, an Executive Order **should** be drafted and **may** be signed declaring a State of Emergency and designating a State Coordinating Officer. The Levy County EOC serves as the central clearinghouse for information collection and coordination of response and recovery resources within the county. During a major emergency in Florida, non-impacted counties may also be requested by the Florida Division of Emergency Management to activate their emergency operation centers for provision of emergency assistance.

2.1.4 State Responsibilities

The State will support Levy County Emergency Operations from the State EOC. If conditions warrant, the Florida Division of Emergency Management will activate the State EOC to provide coordination with Levy County Emergency Operations. Should the scope of the emergency exceed the response capability of Levy County, 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 252.36, Florida Statutes. Upon issuance of such an Executive Order, Levy County EOC will continue to coordinate county response operations.

State government response is coordinated by the Florida Division of Emergency Management from the State Emergency Operations Center as spelled out in Section IV (Method of Operations) of the State of Florida Comprehensive Emergency Management Plan.

The Florida Department of Health, Bureau of Radiation Control will provide radiological monitoring and assessment support to Levy County for all levels of an emergency. Increased State actions may be warranted for emergencies which involve multiple jurisdictions or when Levy County believes the emergency is beyond the capabilities of local resources. These conditions could occur at any emergency class during an incident, but it is anticipated that they will most likely occur when a **Site Area** or **General Emergency** is declared. When Levy County requests State assistance, the Florida Division of Emergency Management will request an Executive Order be executed by the Governor's Office allowing for

enhanced State assistance coordination from the State Emergency Operation Center. The Florida Division of Emergency Management will also escalate the activation of the State Emergency Response Team and the State Emergency Operation Center to the appropriate level.

2.1.5 Progress Energy Notification Plan

The notification plan is initiated when the Progress Energy Nuclear Power Plant Operations Shift Supervisor from Crystal River Nuclear Plant or Levy Nuclear Plants determines that there exists an initiating condition for any of the four Emergency Classifications. Upon this determination, the Progress Energy's Emergency Coordinator or designee, shall notify the State Warning Point in Tallahassee, the warning point in Levy County, the warning point in Citrus County, the warning point in Marion County and the Florida DOH simultaneously via the Hot Ring Down telephone system within **15 minutes**. The State Warning Point will verify that all warning points have picked up on the Hot Ring Down system. The commercial telephone system is the secondary notification system. ESATCOM can also be used as a backup system.

The notification message will include which Nuclear Plant is having the Emergency event (Crystal River Nuclear Plant or Levy Nuclear plants, details of the emergency and relevant meteorological data as required by the State of Florida Nuclear Plant Emergency Notification Form. **(Refer to Figure 10, "State of Florida Nuclear Plant Emergency Notification Form")**. The State Warning Point will verify receipt of the message by Levy County, Citrus County, Marion County and Florida DOH. The State Warning Point will also notify other emergency response organizations in accordance with the procedures outlined in the **State of Florida Radiological Emergency Management Plan, Annex A, Chapter 5 (Notification and Activation)**.
Due to the nature of the event, notification of a security emergency may be abbreviated.

2.1.5.1 Progress Energy's Emergency Operation Facility (EOF)

Progress Energy's Emergency Operations Facility (EOF) is located on West Venable Street in Crystal River, Florida, adjacent to the Crystal River airport.

The licensee will activate the EOF upon declaration of a Site Area Emergency or General Emergency, or as emergency conditions warrant. Representatives from the State, Levy, Citrus and Marion counties will be dispatched to the Progress Energy EOF.

2.1.5.2 Emergency News Center (ENC)

An Emergency News Center with accommodations for media representatives will be located adjacent to the Progress Energy's EOF. Public Information Officers from Progress Energy, State, Levy County, Citrus County and Marion County will report to the Emergency News Center (ENC) upon notification of a Site Area Emergency or General Emergency or for an Alert, if conditions warrant.

The ENC is the primary location for releasing information to the news media. At this location, public information staff (including technical experts) from the utility, State and counties will provide news releases. Official spokespersons from each organization will conduct periodic press conferences as conditions

warrant (**Refer to Section III, Part 2.3.3.1 "Sheriff's Office Public Information Officer (PIO)).**

2.2 Emergency Mobilization

Upon declaration of a radiological emergency at the Crystal River Nuclear Power Plant or Levy Nuclear Plants, Progress Energy's Emergency Coordinator, or designee will notify the State Warning Point in Tallahassee, the Warning Point in Levy County EOC, Citrus County/Fire Dispatcher, Marion County EOC and the Florida DOH simultaneously via the Hot Ring Down telephone system within 15 minutes. The State Warning Point will verify that all warning points have picked up on the Hot Ring Down system. The commercial telephone system is the secondary notification system. ESATCOM can also be used as a backup system.

The notification message will include if the emergency event is initiated for the Crystal River Nuclear Plant or Levy Nuclear Plants, details of the emergency and relevant meteorological data as required by the **"Florida Nuclear Notification Form" (see Figure 10)**. The State Warning Point will verify receipt of the message by Levy County, Citrus County, Marion County and Florida DOH. The State Warning Point will also notify other State emergency response organization in accordance with the procedures outlined in the **State of Florida Radiological Emergency Management Plan, Annex A, Chapter 5 (Notification and Activation).**

2.2.1 Notification

The Dispatch Station, located at the Levy County Sheriff's Office, will be the designated Levy County Warning Point in the event of a radiological emergency at the Crystal River or Levy Nuclear Plant. As such, the Dispatch personnel at the Sheriff's Office is responsible for receiving notification of an emergency from Progress Energy Crystal River or Levy Nuclear Power Plants, using and filling out the **"Florida Nuclear Plant Notification Form" see Figure 10**. Dispatch shall implement **REP SOP 23 "County Warning Point/Hot Ring Down Telephone"**. The Florida Nuclear Plant Notification Form utilizes a numbering system for the "**Emergency Action Level (EAL)", see Figure 11**, for an easier and consistent description of the reason for the emergency. The Dispatch shall verify the information contained in the notification messages and alert the Levy County REP Coordinator or designee and Emergency Management Director or designee. **(Refer to REP SOP 23 "County Warning Point/Hot Ring Down Telephone")**.

The Emergency Management Director or designee shall be responsible for alerting key Levy County emergency response personnel and key Emergency Support Functions (ESF) personnel if appropriate, by the use of the **"Emergency Management Response Call List", refer to Appendix 1**. The Emergency Management Director or designee is also responsible for providing warning and instructions to the general public. **(Refer to Section III, Part 2.3.2 "Release of Public Information During a Declared Emergency")**. If a determination that an event or emergency classification has occurred at either Crystal River or Levy Nuclear Plants or is imminent, the Emergency Management Director or designee shall notify key EOC staff, key Progress Energy Emergency Management Personnel and the Florida Division of Emergency Management.

Once the Levy County Emergency Operations Center (EOC) is activated, provisions will be instituted to ensure 24-hour operations. Each response agency will establish 24-hour (12-hour shifts) duty assignments. **(Refer to Section III, Part 2.2.2 "Levels of Activation" and Part 2.2.3 "Emergency Classification System and Actions for Notification and Sheriff's Office EOC Activations")**.

The Chairperson of the Levy County Board of County Commissioners or designee will activate respective county response plans. Levy County emergency response organizations will be notified of the emergency by the Levy County Emergency Management Director or designee. The notification message will specify which Nuclear Plant is having the emergency classification, the type of emergency event occurring at the plant (Hostile Action Based event, equipment failure or accident), that the organization stand by or start to mobilize emergency response personnel depending on the Emergency Classification. Levy County emergency response personnel will be called to duty using established Agency REP SOPs. Should mobilization be required, Levy County emergency response personnel will report to their agency response center for specialized equipment and further instructions.

When the determination has been made that State resources will be needed to supplement local resources, the Florida Division of Emergency Management personnel will notify the State Emergency Coordinator for each of the required emergency support functions. The State Emergency Coordinating Officers will be responsible for alerting and activating necessary personnel with their respective emergency support functions. This will ensure the ability to respond to an emergency situation on a 24-hour basis.

Procedures for notification and activation of county emergency response organizations at each emergency class are outlined in **REP SOP 1 "Unusual Event", REP SOP 2 "Alert", REP SOP 3 "Site Area Emergency", REP SOP 4 "General Emergency", and REP SOP 13 "Sheriff's Office EOC Activation"**.

2.2.2 Levels of Sheriff's Office EOC Activations

The Levy County Warning Point Communication Officers are on duty at the Sheriff's Office, in Bronson, on a 24-hour basis. Specific information to be included in the **"Florida Nuclear Power Plant Notification Form"** initial and follow-up notification messages is shown in **Figure 10**. The associated Nuclear Plant **"Emergency Action Level**" list is in **Figure 11**.

The Levy County EOC will function under the following levels of activation depending on the classification of emergency declared by Progress Energy:

2.2.2.1 Level III – Monitoring Activation – Level III is typically a "monitoring phase". In the event of a nuclear power plant emergency that is an Unusual Event Classification, the Levy County EOC will remain at a Level III.

2.2.2.2 Level II – Partial Activation – Level II is a limited agency activation. In the event of a nuclear power plant emergency that has escalated to an Alert classification, the Levy County EOC may be activated to this level, depending on plant conditions.

2.2.2.3 Level I – Full Scale Activation- Level I is a full scale activation of the Levy County EOC. In the event of a nuclear power plant emergency that has

escalated to a Site Area or General Emergency classification, the Levy County EOC will be activated to this level.

2.2.3 Emergency Classification System and Actions for Notification and EOC Activations

Four classes of emergency in increasing order of significance are established: Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency. This emergency classification system will normally develop sequentially; gradation is provided to ensure adequate emergency management preparations for more serious indicators.

These classes of emergency are anticipated to develop sequentially; however, the possibility exists that the first indication of a problem could result in immediate declaration of any of the emergency classes.

2.2.3.1 Notification of Unusual Event

(Refer to REP SOP 1)

Classification Description:

Unusual Events are situations that either are in the process of occurring or have occurred which indicate a potential degradation of the level of safety at the Crystal River or Levy Nuclear Plants or indicate a security threat to the plants or facility's protection.

Release Potential:

No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

Purpose:

The purpose of offsite notification is to assure that the first step in future response has been carried out, to bring the operations staff to a state of readiness and to provide systematic handling of Unusual Event information and decision-making.

Notification:

Upon receipt of Notification of an **Unusual Event** from the Progress Energy's emergency communicator, the Dispatch personnel at the Sheriff's Office County Warning Point will verify the receipt of the message with the State Warning

Point via the Hot Ring Down telephone system. Should the emergency notification come in on any circuit other than the Hot Ring Down telephone system, the authenticity of the message will be verified by the State Warning Point.

Activation and Actions:

The Levy County Emergency Operations Center is anticipated to be activated to a **Level III Activation** for the Notification of an **Unusual Event** emergency classification. This will be a monitoring phase. The Emergency Management Director or designee and the REP Coordinator will monitor the situation and be prepared to react if escalation to a higher classification is warranted or standby until verbal closeout of the emergency.

2.2.3.2 Alert Emergency

(Refer to REP SOP 2)

Classification Description:

Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the Crystal River or Levy Nuclear Plants. It may also involve a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. (Hostile Action Based Event).

Release Potential:

Any releases of radioactive materials are expected to be limited to small fractions of the Environmental Protection Agency Protective Action Guide exposure levels and will not significantly affect offsite areas. (Refer to Step 2.9.1 "EPA Protective Action Guidelines".

Purpose:

The purpose of this classification is to assure that emergency personnel are readily available to respond if the situation becomes more serious or to perform confirmatory radiation monitoring if required, and provide offsite authorities current information on plant status and parameters.

Notification:

Upon receipt of an **Alert Emergency** from the Progress Energy's Emergency Communicator, the Dispatch personnel at the Sheriff's Office County Warning Point will verify the receipt of the message with the State Warning Point via the Hot Ring Down telephone system. Should the emergency notification come in on any system other than the Hot Ring Down telephone system, the authenticity of the message will be verified by the State Communications Operator.

Activation and Actions:

At this emergency classification, designated response organizations will be notified by the Levy County warning point to standby until verbal closeout or escalation to a more severe class. Because of the possible threat to life and property, upon receipt of a notification of an **Alert**, the Levy County Emergency Management Director or designee should augment their resources by activating the Emergency Operations Center to a **Level II Activation**. This is considered a "Partial Activation". The Levy County Emergency Management Director or designee will also alert to standby status key local emergency response personnel, or may instruct them to report to the EOC, if the situation warrants. All emergency response organizations will remain on Alert status until verbal closeout or escalation to a more severe classification.

Upon notification of the **Alert Emergency**, the State Coordinating Officer may authorize the deployment of an Advance Team or Liaison Team. The deployment of an Advance Team will be initiated according to the **State of Florida State Emergency Response Team Standard Operating Procedures for Field Operations Team** as indicated in **Chapter 3, Section II.B (Direction and Control) of Annex A** and **Chapter 5, Section II.B (Notification and Activation)** of the **"State of Florida Radiological Emergency Management Plan"**. As the situation warrants, the Florida Department of Health staff may also be dispatched. The lead organization for each Emergency Support Function will be responsible for alerting or notifying necessary personnel within their respective Emergency Support Functions.

2.2.3.3 Site Area Emergency

(Refer to REP SOP 3)

Classification Description:

Events are in process or have occurred which involve actual or likely major failures of Crystal River or Levy Nuclear Plant functions needed for protection of the public. It may also involve a security event (Hostile Action Based event) that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public.

Release Potential:

Any releases of radioactive materials are not expected to exceed Environmental Protection Agency Protective Action Guide exposure levels except within plant boundaries. (Refer to Step 2.9.1 "EPA Protective Action Guidelines".

Purpose:

The purpose of the **Site Area Emergency** declaration is to assure that emergency response centers are staffed, to assure that monitoring teams are dispatched, to assure that

personnel required for evacuation of areas near the plant are at duty stations if the situation becomes more serious, to provide consultation with offsite authorities, and to provide updates to the public through government authorities.

Notification:

Upon receipt of a **Site Area Emergency** from the Progress Energy's emergency communicator, the Dispatch personnel at the Sheriff's Office County Warning Point will verify the receipt of the message with the State Warning Point via the Hot Ring Down telephone system. Should the emergency notification come in on any system other than the Hot Ring Down telephone system, the authenticity of the message will be verified by the State Communications Operator.

Activation and Actions:

Upon receipt of a notification of a **Site Area Emergency**, the Levy County Emergency Management Director or designee will activate the Levy County Emergency Operations Center to a **Level I Activation**. This is a "Full Scale Activation". Local emergency response organizations will be activated and will report to their duty stations in accordance with established county procedures.

Based on the Florida DOH and Progress Energy's recommendations and after review of available resources, the Emergency Management Director or designee will formulate the County's position regarding the Protective Action Decisions (PADs) required if any.

Depending on the situation at the Crystal River and/or Levy Nuclear Plant, (refer to Steps 2.7.2 to Steps 2.7.2.7", all children in Early Learning Centers (Day Care) in or near the Crystal River and/or Levy Nuclear Plant 10-mile EPZ, all School Children in Public Schools and all Special Needs Citizens in the Crystal River and/or Levy Nuclear Plant 10-mile EPZ should be evacuated during a declared **Site Area Emergency**. During a Hostile Action Based event at the Crystal River and/or Levy Nuclear Plant the school children may not be relocated due to the potential threat of hostile forces present in the community. School lock down instead may be recommended. **(Refer to Section III, Part 2.8.3 "School Children" and Section III, Part 2.9.9.2 "Evacuation of Early Learning Centers (Day Care) and Schools").**
There is one Public School (Yankeetown School) within the Levy County side of Crystal River Nuclear Plant 10-mile EPZ. One school (Yankeetown School) is in the Levy County side of the Levy Nuclear Plant 10-mile EPZ.

If In Home Sheltering or evacuation near the Crystal River Nuclear Plant or Levy Nuclear Plants is appropriate, the Chair Person for the Board of County Commissioners should sign a Local State of Emergency. Levy, Citrus and Marion Counties will then activate the public notification systems. **(Refer to Section III, Part 2.3.5 "Sounding the Siren System"). Also (Refer to REP SOP 10 "Coordinate Sounding The Sirens with Levy and Marion County"). Also (Refer to Figure 14A "Public Shelter Location Map" and Figure 14B "Public Shelter List").** The CodeRED System may also be utilized to provide information to the general public. **(Refer to Section III, Part 2.3.2.2 "CodeRED System"**

Levy, Citrus and Marion county officials will provide the public within a 10-mile radius of the Crystal River or Levy Nuclear Power Plants with periodic updates on the status of the emergency. If the Emergency News Center is operational, all public information will be coordinated through this facility. **(Refer to Section III, Part 2.3.2.1 "Notification of the Public").**

Depending on which Nuclear Plant site is having the emergency event, recommend farmers to place milk animals within **2-miles** of the Crystal River or Levy Nuclear Plant on stored feed and asses the need to extend the distance further out if needed. **(Refer to Section III, Part 2.9.12 "Control of Foodstuffs").**

Florida DOH will provide offsite radiological monitoring and protective action recommendations upon arrival at the area. Prior to deployment of the Florida DOH field monitoring teams, Progress Energy will provide dose projection data and protective action recommendations to Levy County and will advise appropriate State Division of Emergency Management personnel of those recommendations.

The State Division of Emergency Management will activate the State EOC in Tallahassee as indicated in **Chapter 3, Section II.B (Direction and Control) of Annex A** and **Chapter 5, Section II.B (Notification and Activation)** of the **"State of Florida Radiological Emergency Management Plan".** All other response actions will be as for the previous classification.

2.2.3.4 General Emergency

(Refer to REP SOP 4)

Classification Description:

Events are in process or have occurred that involve actual or imminent substantial reactor core degradation or melting with potential for loss of containment integrity. It may also involve a security event (Hostile Action Based event) that result in an actual loss of physical control of the facility at Crystal Rive Nuclear Plant or Levy Nuclear Plants.

Release Potential:

Releases of radioactive material can be reasonably expected to exceed Environmental Protection Agency Protective Action Guide exposure levels offsite. (Refer to Step 2.9.1 "EPA Protective Action Guidelines".

Purpose:

The purpose of the General Emergency declaration is to initiate predetermined Protective Actions for the general public, to provide continuous assessment of information from Progress Energy's Crystal River Nuclear Plant or Levy Nuclear Plants and offsite radiation measurements, to initiate additional measures as indicated by actual or potential releases, to provide consultation with offsite authorities, and to provide updates for the general public through government authorities.

Notification:

Upon receipt of a **General Emergency** from the utility's Emergency Communicator, Dispatch personnel at the Sheriff's Office County Warning Point will verify the receipt of the message with the State Warning point via the Hot Ring Down telephone system. Should the emergency notification come in on any system other than the Hot Ring Down telephone system, the authenticity of the message will be verified by the State Communications Operator.

Activation and Actions:

Upon receipt of a notification of a **General Emergency**, the Levy County EOC should be activated to a **Level I Activation** if not already. The Emergency Management Director or designee will notify all local emergency response organizations and activate all emergency response centers. The public notification systems may be activated in Levy, Citrus and Marion counties. **(Refer to REP SOP 10 "Coordinate Sounding The Sirens With Citrus and Marion County")**.

Based on the Florida DOH and Progress Energy's recommendations and after review of available resources, the Emergency Management Director or designee will formulate the County's position regarding the Protective Action Decisions (PADs) required.

If it has not been previously performed, the Chairperson for the Board of County Commissioners should sign a Local State of Emergency.

Depending on the situation at the Crystal River or Levy Nuclear Plants, (refer to Steps 2.7.2 to Steps 2.7.2.7", the Evacuation of the General Public in the Crystal River Nuclear Plant 10-mile EPZ and/or Levy Nuclear Plants 10-mile EPZ should be implemented during this declared emergency. During a Hostile Action Based event at the Crystal River or Levy Nuclear Plants the General Public may not be evacuated due to the potential threat of hostile forces present in the community. In-house sheltering and lock down may be recommended. **(Refer to Section III, Part 2.8.2 "General Public" and Section III, Part 2.9. "Protective Actions Response Options" and all associated 2.9 Sub-Parts).**

All other response actions will be as for the previous emergency class with the addition of recommending the farmer to place the milk animals within **10-miles** of the Crystal River and/or Levy Nuclear Plants on stored feed and asses the need to extend the distance if needed.

2.3 Public Information

2.3.1 Public Education

A coordinated distribution of an information brochure will be conducted every two years in the EPZ surrounding the Crystal River and Levy Nuclear Power Plants to keep the residents and the media informed of the possible consequences of a nuclear power plant emergency and the response plans for management of the emergency.

Progress Energy, Levy County, Citrus County and Marion County will jointly develop and maintain the public information brochure containing appropriate educational material. This publication will include but not be limited to the following information:

A. Explanation of radiological concepts.

B. Telephone numbers to contact for further information.

C. Emergency Alert System stations

D. Information on protective measures, including evacuation zones, evacuation routes, reception centers, public sheltering, and the identification of (EAS) stations that will be used to broadcast emergency information.

E. **Public** Shelter Information. **(Refer to Figure 14A "Public Shelter Location Map" and Figure 14B "Public Shelter List").**

F. Specific information for the handicapped.

G. Power plant operation.

The information brochure will be distributed to the permanent population within the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plants 10-mile EPZ. Updated information will be provided every two years. A condensed version of the information brochure is contained in the Citrus County Phone Book.

2.3.1.1 Special Needs

The Progress Energy Information Brochure contains a return postcard on which special needs individuals, i.e., people with disabilities, confinement, medical impairments, etc., can be identified. This information is recorded and tracked by the EOC staff. Special evacuation provisions are designed to accommodate these hardship cases on an individual basis. A special phone number will be announced in a news release to enable these individuals to request assistance during the emergency. A list will be provided to Levy County Volunteers. Levy County Volunteers will be our primary means of contacting the Citizens with Special Needs when an evacuation has been declared by the Emergency Management Director or designee. This list is also programmed in the CodeRED System to be used as a back-up calling system.

2.3.1.2 Transient Population

Information brochures will be distributed by Progress Energy to managers of transient lodging facilities within the Crystal River Nuclear Plant 10-mile Emergency Planning Zone (EPZ) and Levy Nuclear Plant 10-mile EPZ for use by transients. Appropriate public sign notices will be posted at beaches and other outdoor recreational facilities within the Crystal River and Levy Nuclear Plants 10-mile EPZs that are under the control of state and local government. Signs are also posted on each siren pole. These signs will inform the transient population of appropriate actions to take when they hear an Emergency Alert Signal.

2.3.2 Release of Public Information During a Declared Emergency

2.3.2.1 Sheriff's Office Public Information Officer (PIO)

To ensure the controlled and coordinated release of information to the public, the Levy County Sheriff's Office Public Information Officer (PIO) is the source for all releases of information to the news media and the public coming from the EOC. One Sheriff's Office PIO will be assigned to the Sheriff's Office EOC and the other Sheriff's Office PIO will be assigned to Progress Energy's Emergency Operations Facility/Emergency News Center (EOF/ENC) during a declared Site Area Emergency and a General Emergency. The Emergency Management Director or designee will coordinate with the Sheriff's Office PIO at the EOC to prepare the broadcast of pre-designed EAS messages to the general public. These EAS messages will depend on which Nuclear Plant, (Crystal River or Levy) is having the emergency event, the emergency situation occurring at the plant (Hostile Action Based event, equipment failure or accident). The Sheriff's Office PIO at the EOC will instruct the EAS stations to broadcast the EAS messages every 15 minutes for one hour. **(Refer to Appendix 3 "EAS Stations")**. The Sheriff's Office PIO will coordinate and Verify all news release with the Emergency Management Director or designee prior to release to the public. The Public Information Officer for both the sheriff's Office and BOCC is responsible for coordinating information with each other and PIOs from Citrus County, Marion County and Progress Energy. The PIOs will then be responsible for the dissemination of information to the public through the facilities of Progress Energy's Emergency Operations Facility (EOF) Emergency News Center (ENC)/Joint Information Center (JIC). **(Refer to REP SOP 7 "Citizens Information System", REP SOP 8 "PIOs at the EOF ENC/JIC", REP SOP 9 "Sheriff's Office PIO at the EOC"). Also (Refer to Appendix 2 "EAS Messages" and Appendix 4A "Crystal Rive Nuclear Plant PADs and Maps and Associated EAS Messages" and Appendix 4B "Levy Nuclear Plant PADs and Maps and Associated EAS Messages").**

2.3.2.2 <u>CodeRED System</u>

Levy County has an option to implement the **CodeRED System** to call and alert specific residences within the Crystal River Nuclear Plant 10-mile EPZ or Levy Nuclear Plants or anywhere in the County as desired. This system is an internet based Emergency Telephone calling system with the capability of making approximately 60,000 calls per hour. It also has the capability of using a mapping system. This is a replacement to the previous Reverse 911 System.

This system has the potential for many uses as follows:

2.3.2.2.1 If an emergency occurs after normal working hours, CodeRED may be **used to call all Emergency Management staff** when the EOC is activated.

2.3.2.2.2 It is programmed to make the **initial call to all key Emergency Response Management Staff and key ESF staff at the beginning of a declared "Alert Emergency" or greater** from the Crystal River or Levy Nuclear Plants. The message should include the following:

A) Inform them which Progress Energy Nuclear Plant the emergency event was initiated from.

B) Inform them of which of the four emergency classifications is being declare by Progress Energy.

C) Inform them of the type if emergency event is occurring at the plant if it is known (Hostile Action Base event, equipment failure or accident).

D) Inform them to review and implement their designated REP SOPs.

E) Request them to notify their key trained Emergency Response Personnel of the situation at the Nuclear Plant and to be readily available in the event the emergency at the Nuclear Plant escalates to a higher emergency classification.

2.3.2.2.3 This system can be used **in conjunction to the normal EAS System**. It has the capability to geographically determine the residents living within the Crystal River or Levy Nuclear Plant 10-mile EPZs and provide recorded messages of pre-determined EAS messages described in **Section VI, Appendix # 2**. The EAS message will be approved by the Emergency Management Director or designee.

2.3.2.2.4 This system can be used in **addition to the normal evacuation procedures**. This would include sounding the Emergency Sirens, broadcasting EAS messages and dispatching Fire Rescue vehicles for evacuation of the General Public within the Crystal River or Levy Nuclear Plant 10-mile EPZs.

2.3.2.2.5 As directed by the Emergency Management Director or designee, this system can be used in **addition to the Back-Up Route Alerting** procedure to the Emergency Siren System when a siren is inoperable. The CodeRED message can inform the residents that the siren near their residence is inoperable and an emergency is occurring at the Crystal River Nuclear Plant or Levy Nuclear Plants. A CodeRED message can be to either; tune to an EAS radio station for an EAS message being delivered or CodeRED could deliver the EAS message directly to the resident at the time of the call.

2.3.2.2.6 It is also programmed to **provide Call Lists of various groups** that can be called to deliver recorded messages. Some of the programmed Call List is as follows:

A) A list of all the schools and Day Care Centers within the Crystal River Nuclear Plant 10-mile EPZ or Levy Nuclear Plant 10-mile EPZ.

B) List of all citizens with Special Needs within the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plant 10-mile EPZ. We would not actually make these phone calls but REP SOP 5 would be implemented instead. This list was created for a back-up. **(See Appendix 6, "List of all registered Citizens with Special Needs residing within the Crystal**

River Nuclear Plant 10-miles EPZ and Levy Nuclear Plant 10-mile EPZ").

2.3.2.3 Rumor Control / Citizens Information Phone Lines

The rumor control effort will be coordinated with of the Emergency Management Director or designee, the Citrus County Sheriff's Office Pubic Information Officer (PIO) and the Citrus County Board of Commissioner PIO. It will be operated out of the Sheriff's Office EOC. **(Refer to REP SOP 7 "Citizens Information System")**. Television and radio broadcasts, as well as newspapers will be monitored and reviewed. Incorrect, inaccurate or questionable information in these media sources will be brought to the attention of the appropriate PIOs. That representative, in coordination will the Emergency Management Director or designee will then take corrective action by providing accurate information directly to the involved station or publication, or to all media present at the News Center via a news briefing or press release as deemed appropriate.

Citizens Information Operators with current information, over specially designated telephone lines, will respond to misinformation or rumors circulating through the public. The Citizens Information Phone Numbers will be announced at a news briefing. The rumor control function is to provide the public with clarification of the information that may be in conflict with the official announcements. Information provided will be from EAS messages and news releases.

2.3.2.4 Alert and Notification System

As per FEMA and the NRC "the Alert and Notification System provides the capability to promptly alert the population with in the Crystal River and Levy Nuclear Plant 10-mile EPZs of a nuclear power plant emergency event and to notify the public of protective actions that need to be taken. The alert function provides a warning signal to the population indicating the need to seek additional information regarding an emergency event or any protective actions that need to be taken. The notification function informs the public about the nature of the event and any protective actions".

These functions are performed separately where the sirens are used for alerting the public and the EAS broadcasts is used for notification providing instructional messages.

2.3.2.5 Emergency Alert System (EAS)

The Emergency Alert System (EAS) broadcast for notification is a network of radio and television stations designed to give information to the public in the event of an emergency. In the event of an emergency requiring a message to be sent out, a Blast Fax is sent to all stations listed in **Appendix 3 "EAS Stations"**. The Levy County Emergency Management Division has 18 different standard pre-scripted EAS messages to be sent depending on the emergency. They also have 9 different EAS Message associated with the 9 Protective Action Decisions (PADs) Public notification over this system will include notification that a potential emergency situation exist, initial information or instructions, continued instructions on Protective Actions and follow-up information. **(Refer to Appendix 2 "EAS Messages" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps and**

Associated EAS Messages" and Appendix 4B "Levy Nuclear Plant PADs and Maps and Associated EAS Messages").

2.3.3 Sounding the Siren System and EAS Stations

Progress Energy has installed 40 sirens for the purpose of alerting the public within the Crystal River Nuclear Plant 10-mile EPZ **(see Figure 13A for "Crystal River Nuclear Plant Siren Location Map")**. Progress has also installed 00 sirens within the Levy Nuclear Plant 10-mile EPZ **(see Figure 13B for "Levy Nuclear Plant Siren Location Map".)** The purpose of the Siren System is to provide initial alert to the general public within the Crystal River and Levy Nuclear Plant 10-Mile EPZs of an emergency at the Crystal River Nuclear Plant. Siren activation and Emergency Alert System (EAS) messages will be coordinated with Citrus County and Marion County Emergency Management Directors or their designees. **(Refer to Appendix 2 "EAS Messages"). Also (Refer to REP SOP 10 "Coordinate Sounding The Sirens With Citrus and Marion County Emergency Management"**.

The Chairperson of the Board of County Commissioners, through the Emergency Management Director or designee with coordination with Citrus and Marion County Emergency Management Director or designee, will implement the appropriate Protective Action Decisions (PADs), if required. **(Refer to Section III, Part 2.9 "Protective Action Response Options" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**. If Public action is required, then the sirens should be activated within **fifteen (15)** minutes of a decision made by the two county Emergency Management Directors or designees. The Citrus County Emergency Management Director or designee, under the direction of the Chairperson of the Board of County Commissioners, will direct the Fire Dispatch or designee at the Sheriff's Office EOC to activate the Siren System **(for the Crystal River Nuclear Plant only)** during a declared **Site Area Emergency** and **General Emergency**. The Emergency Management Director or designee **MAY**, depending on the emergency situation, sound the Siren System during a declared **Alert Emergency**. **(Refer to REP SOP 11 "Operation of the Emergency Sirens" and REP SOP 10 "Coordinating Sounding the Sirens with Citrus and Marion County")**.

The intention of activating the sirens is only to alert the public to turn to public media (radio and television) for more specific information. The population within the Crystal River Nuclear Plant 10-mile EPZ and Levy Nuclear Plant 10-mile EPZ **(See Figure 1A "Crystal River Nuclear Plant 10-mile EPZ" and Figure 1B "Levy Nuclear Plant 10-mile EPZ")** should receive primary alert and notification via all primary notification systems for the general population, including the Emergency Alert System (EAS). **(Refer to REP SOP 8 "Levy County Sheriff's Office PIO", REP SOP 9 "Sheriff's Office PIO in the EOC", Appendix 2 "EAS Messages")**.

Residents and transients within the Crystal River and Levy Nuclear Plant **10-mile EPZs (see Figure 1A "Crystal River Nuclear Plant 10-mile EPZ and Figure 1B "Levy Nuclear Plant 10-mile EPZ")** will be advised to tune to the following EAS stations for detailed information and instructions:

Television Station	Location

Brighthouse Cable	Lecanto
Com Cast Cable	Beverly Hills
WTSP/TV Channel 10	St. Petersburg
WUFT/TV Channel 5	Gainesville
WCJB/TV Channel 20	Gainesville
WFLA/TV Channel 8	St. Petersburg
WTVT/TV Channel 13	St. Petersburg
WFTS/TV Channel 28	Tampa
WTOG/TV Channel 44	Tampa
Baynews 9 Channel 9	Tampa

RADIO STATION	FREQUENCY	AM/FM	LOCATION
WXCV	95.3	FM	CRYSTAL RIVER
WXOF	96.3	FM	CRYSTAL RIVER
WSKY	97.3	FM	GAINESVILLE
WKTK	98.5	FM	CRYSTAL RIVER
WTRS	102.3	FM	OCALA
WRGO	102.7	FM	INGLIS/YANKEETOWN
WRUF	103.7	FM	GAINESVILLE
WRZN	720	AM	HERNANDO

An additional radio station which is not an EAS station but has been added to the list of radio stations is (88.3 FM). This station will provide live broadcasts from the Citrus Sheriff's Office EOC which will provide citizens with current emergency information.

2.3.3.1 Siren Control

The sirens in the Crystal River Nuclear Plant 10-mile EPZ are controlled from the Citrus County Emergency Management at the Fire Dispatch console. The sirens in the Levy Nuclear Plant 10-mile EPZ are controlled from Levy County Emergency Management. The Crystal River Nuclear Plant sirens are activated with a computer at the EOC Fire Dispatcher station. **(Refer to REP SOP 11 "Operation of the Emergency Sirens")**. The Citrus County Emergency Management also has a back-up Siren Control Computer System located at the Citrus County Jail that is tested once a month to activate the sirens in place of the Primary Siren Computer System.

2.3.3.1.1 Siren System Testing

The Crystal River sirens will be tested every Friday at 12:00 PM. This is performed by using the Siren Computer System. All the sirens in Citrus County, Marion County and Levy County are activated and sounded for approximately 3 to 10 seconds. The siren system also has the capability of using a PA option. The PA will not be utilized or tested unless directed by the Emergency Management Director or designee. A report of the Friday Siren System Test will be generated when completed. This report should be reviewed by the REP Coordinator or designee and checked for anomalies and/or failures. Any anomalies or failures will be investigated and corrected. The Backup Computer System should be used to test the sirens once a month to test operability of the Backup Computer System. **(Refer to REP SOP 11 "Operation of the Emergency Sirens")**.

2.3.3.1.2 False Activations

In the event of false siren activation, the REP Coordinator or designee will be contacted immediately. The REP Coordinator will make proper notification to the proper personnel at the Progress Energy Emergency Preparedness Staff at Venable Street, **(Refer to Appendix 5 "Progress Energy Call List").** The Communications Supervisor or his/her designee should coordinate with the REP Coordinator to contact the radio stations (Listed on Appendix 3 "EAS Stations") and advise them of the accidental activation. **(Refer to REP SOP 11 "Operation of the Emergency Sirens")**.

2.3.3.1.3 <u>Notification to Progress Energy's Nuclear Emergency Preparedness Staff When Siren Outage Thresholds Are Met.</u>

(Refer to appendix 5 "Progress Energy's Nuclear Emergency Preparedness Staff contact phone numbers").

The Citrus County Emergency Management Division has control of the 40 sirens in the Crystal River Nuclear Plant 10-mile EPZ located within the 10-Mile Radius of the Crystal River Nuclear Plant. **(See Figure 13A "Crystal River Nuclear Plant 10-mile EPZ Siren Location Map")**. Levy Nuclear Plant has <u>00</u> Sirens located within the Levy Nuclear Plant EPZ which are controlled by Levy County Emergency Management. <u>00</u> Levy Nuclear Plant siren area located in Citrus County **(see Figure 13B "Levy Nuclear Plant Siren Location Map")**.

A) Crystal River Nuclear Plant Sirens

In the event that the result of the Friday siren test or the Siren Control System indicates a loss of greater than four sirens **(4 out of 40)**, **during normal working hours**, notify Progress Energy's Nuclear Emergency Preparedness Staff at their office, **(Refer to Appendix 5 "Progress Energy Call List")**.

If there is a loss of four to eight **(4 to 8)** sirens **after normal working hours,** notify Progress Energy's Nuclear Emergency Preparedness Staff the next working day. A loss of four sirens is **not** a reportable incident to NRC, but warrants Progress Energy's attention.

If there is a loss of **greater than eight (8)** sirens at **any time**, **IMMEDIATELY** notify Progress Energy's Nuclear Emergency Preparedness Staff as per **Appendix 5 "Progress Energy's Nuclear Emergency Preparedness Staff Contact phone numbers"**.

If a significant portion of the Siren System is lost (10 sirens) for greater than two hours, notification of the Nuclear Regulatory Commission (NRC) by Progress Energy is required.

B) Levy Nuclear Plant Sirens

2.3.4 Back-up Route Alerting

This would be used as a back-up to a nonfunctioning Emergency Siren Site or in the unlikely circumstance that both the Primary and Back-up Siren Control Computers would become inoperable and for notification of isolated areas. LCSO and Fire Rescue vehicles will advise residents of the Protective Actions they should take based on the severity of the emergency and determined appropriate by the Emergency Management Director or designee and the Chairperson of the Board of County Commissioners, in accordance with established county procedures. **(Refer to REP SOP 28 "Back Up Route Alerting")**.

Boaters in the waters within the Crystal River and Levy Nuclear Plant 10-mile EPZs **(see Figure 1A and 1B)** will be notified of the emergency by loud speakers from boats and aircraft operated by the Citrus, Marion and Levy County Sheriff's Offices, State Emergency Support Function 16 assets, U.S. Coast Guard, Fire Rescue and Fish and Wild Life Commission (FWC).

2.4 Emergency Communication

The rate of response to any incident is predicated on reliable communications. The following explains the communications network to be employed in response to a radiological emergency. In the event of a radiological emergency at the Crystal River or Levy Nuclear Plants, the Hot Ring Down Telephone system enables the Crystal River and Levy Nuclear Plant to promptly notify State and County response organizations. **(Refer to REP SOP 23 "County Warning Point/Hot Ring Down Telephone System")**.

Levy County maintains 24-hour communications through the County's Warning Point in the Sheriff's Office dispatch center on the Hot Ring Down Telephone system, Commercial Telephones and Emergency Satellite Communications System (ESATCOM).

Upon activation of the Levy County EOC **(Refer to REP SOP 13 "Levy County EOC Activation")**, all emergency communications systems should be placed in service and tested. **(Refer to REP SOP 11 "Operation of the Emergency Sirens")**.

The Levy County EOC will provide a focus of all county communications for emergency operations. Direction and control of county communications facilities and personnel will emanate from the Emergency Management Director or designee.

Telephone contact between designated representatives and their organizations include the news media, Levy County School Board and other county response organizations as appropriate.

In addition, direct communications between the Emergency Management Director or designee and the following organizations will be maintained:

A. The Florida Division of Emergency Management regarding the local situation and requests for state and federal support and resources.

B. Florida DOH, Bureau of Radiation Control in Orlando (including the Mobile Emergency Radiological Laboratory) regarding accident assessment and protective actions.

C. The Progress Energy's Crystal River and Levy Nuclear Power Plant via the Hot Ring Down telephone system, commercial telephones, and ESATCOM.

D. Communications with Citrus and Marion County will be maintained via the Hot Ring Down telephone system, Commercial telephones, and ESATCOM.

Communications are available to medical facilities and ambulance services through the consolidated communications section.

E. Communications with Federal Emergency Response Agencies will be coordinated through the Florida Division of Emergency Management.

2.4.1 Hot Ring Down Telephone System

The Hot Ring Down Telephone System is available at all times on a 24-hour a day, 7 day a week basis, and is not used for any other purpose. The system consists of dedicated (not switched) transmission facilities providing multi-party communications in a conferencing mode. The terminal equipment at each location consists of a telephone station set and a loudspeaker. A recording device has been installed at the State Warning Point. This system is monitored 24hrs per day by the State Warning Point in Tallahassee, which has the responsibility for network control. The circuits include the State Warning Point, Citrus County EOC Fire Dispatch, Levy County Emergency Management, Levy County Sheriff's Office Dispatch, Marion County Emergency Management, Progress Energy Emergency Operations Facility and Crystal River and Levy Nuclear Plant Control Rooms and Florida Department of Health Bureau of Radiation Control in Orlando.

2.4.2 Commercial Telephone

Commercial Telephone service is available to be used as the primary back up system for the Hot Ring Down Circuit. This service is also available for communicating with federal emergency response organizations (i.e., the Federal Emergency Management Agency (FEMA), Region IV, the Nuclear Regulatory Commission (NRC), the United States Coast Guard, and the Federal Aviation Administration. In the eventuality there is a commercial telephone service disruption, the State has access to the Federal National Warning System that can be used to communicate with federal emergency response organizations.

2.4.3 Emergency Satellite Communications System (ESATCOM)

The ESATCOM System serves as the back-up communications system to the Hot Ring Down Circuit and Commercial Telephone. The ESATCOM System is maintained and operated on a 24-hour basis by the State Warning Point in Tallahassee. Crystal River and Levy Nuclear Plants located in their respective Control Rooms. The ESATCOM for Levy County is located at the Sheriff's Office Dispatch Center and Levy County EOC.

2.4.4 Amateur Radio (ARES)

Amateur Radio Emergency Services (ARES) are viable ancillary communications networks among county agencies and/or between county and State organizations. During an emergency, a pool of ARES volunteers may be utilized by the Emergency Management Director or designee and set up at a predetermined location at the EOC.

2.4.5 Test Schedule for Emergency Communications Equipment

Levy County testing of communications networks and communication equipment will be in accordance with procedures outlined in **Chapter 6 "Emergency Communications" of Annex A, Appendix I of the State of Florida Radiological**

Emergency Management Plan". Refer to Figure 29 "Communications Systems Testing Chart"

2.5 Reception Center, Radiological Personnel Monitoring Station and Wash Down Station

Personnel Monitoring Stations will be established at the Reception Center and Wash Down Stations to monitor personnel and evacuees for contamination. The Personnel Monitoring Station at the Reception Center will be set up and staffed by the Fire Rescue. The Fire Chief or designee will coordinate the setup time and location with the Emergency Management Director or designee and County Health Department Administrator.

Wash Down Stations will be established to inspect and decontaminate Emergency Vehicles and personnel leaving an evacuation area. Levy County has two Vehicle Wash Down Station apparatus that can be erected at any two locations determined to be appropriate by the Emergency Management Director or designee. The Wash Down locations will be determined during a declared Site Area Emergency and will depend upon information coming from Progress Energy, Florida Department of Health, traffic conditions, weather conditions and resources available.

The Wash Down Station will be set up and staffed by Fire Personnel with support by the Road Department. The Wash Down Station will be equipped with fire pumper trucks to assist in decontamination. Staff for the monitoring and wash down stations have been sufficiently trained and will receive refresher training annually. **Refer to the following parts 2.5.1, 2.5.2, and 2.5.3** below to determine when the Reception Center, Radiological Personnel Monitoring Stations and Wash Down Stations should be set up and staffed.

(Refer to Section III, Part 2.9.7.6 "Reception Center, Personnel Monitoring Centers and Vehicle Wash down Stations" for responsibility of set-up)

(Refer to Section III, Part 2.9.10 "Personnel and Vehicle Monitoring and Decontamination" for detailed response actions involving monitoring and decontamination). (Refer to Section III, Part 2.9.11 "Reception Center" for guidelines). (Also, Refer to REP SOP 16 "Levy County Health Department" for setting up Reception for mass care and KI distribution and REP SOP 21 "Fire Rescue" for setting up Wash Down Stations at determined locations and monitoring and decontamination facilities).

2.5.1 Alert Emergency

The Health Department is responsible for setting up the Reception Center for mass care and KI distribution for the public. Fire Rescue is responsible for setting up the Personnel Monitoring Station and decontamination facility at the Reception Center at Hilltop School and the Vehicle Wash Down Stations at determined location as per the Emergency Management Director or designee. When an **ALERT EMERGENCY** classification has been declared by Progress Energy's Crystal River and/or Levy Nuclear Plants, the Emergency Management Director or designee will notify the Levy County Health Department and Fire Rescue to give them pertinent information about the emergency. Both agencies, the Health Department and Fire Rescue will normally **only prepare** to set up at this time unless told differently by the Emergency Management Director or designee, they will then review their individual REP SOPs **(refer to REP SOP 16 "Levy County Health Department", REP SOP 21 "Fire Rescue"**), inform and prepare their staff and equipment for setting up the Reception Center/Personnel Monitoring Station and Wash Down Station as per the direction of the Emergency Management Director or designee.

2.5.2 Site Area Emergency

When a **SITE AREA EMERGENCY** classification has been declared by Progress Energy's Crystal River and/or Levy Nuclear Plants, the Emergency Management Director or designee will notify the Levy County Health Department and Fire Rescue to give them pertinent information about the emergency. It is at this emergency classification when the Health Department and Fire Rescue will normally **implement their setup procedures** for the Reception Center/Personnel Monitoring Station and Vehicle Wash Down Stations as per the discussion with the Emergency Management Director or designee. The Emergency Management Director has the option of not setting up the Reception Center or Wash Down Station at this time if the situation at the Nuclear Power Plant warrants. An example situation could be a Hostile Action Based event occurring at the Nuclear Power Plant and the potential threat of hostile forces to be present in the community.

2.5.3 General Emergency

When a **GENERAL EMERGENCY** classification has been declared by Progress Energy's Crystal River an/or Levy Nuclear Plants, the Emergency Management Director or designee will notify the Levy County Health Department and Fire Rescue to give them pertinent information about the emergency. The Reception Center/Personnel Monitoring Station and Wash Down Stations should have already been set up at this point. The Emergency Management Director has the option of not setting up the Reception Center or Wash Down Station if the situation at the Nuclear Power Plant warrants. An example situation could be a Hostile Action Based event occurring at the Nuclear Power Plant.

2.5.4 Instruments

Currently, Levy County has CDV-777 radiological emergency instrument response kits located in the Levy County EOC. Levy County REP Coordinator or designee will inventory and inspect the radiological monitoring equipment after each exercise and at least quarterly to assure that they are operational. Local operability checks will be performed on all monitoring equipment at least once each calendar quarter and after each use.

Defective radiological monitoring instruments will be exchanged by the State Department of Health Radiological Instruments Maintenance and Calibration Facility in Orlando. Calibration of the instruments will be in accordance with intervals recommended by the suppliers.

Dosimetry Kits and radiation instruments will be assigned to Fire Rescue assigned to staff the Wash Down and Personnel Monitoring Stations. The emergency workers will verify the dosimeters are set to zero and fill out the included dose cards. The emergency workers will also perform a pre-operational check on their assigned instruments and determine the background readings prior to use.

2.6 Local Resources to Support the Federal Emergency Responses

Federal emergency response agencies dispatched to the Crystal River and/or Levy Nuclear Plant emergency area will locate in close proximity. Federal government public information officers will be located with the utility, State and local PIOs at the Emergency News Center (ENC). State and local emergency personnel will assist the Federal response agencies in establishing joint operations.

2.7 Radiological Assessment and Evaluation of Protective Action Response Options.

2.7.1 Radiological Assessments

Levy County does not have the necessary monitoring equipment or trained radiological health personnel to assess the effects of a radiological emergency at the Progress Energy Crystal River or Levy Nuclear Power Plants.
The State Department of Health/Bureau of Radiation Control (BRC) will be responsible for off site radiological accident assessment (Refer to the "State of Florida Radiological Emergency Management Plan", Chapter 9).

Progress Energy has agreed to provide offsite monitoring and advice to Levy County Emergency Management Division of initial accident assessment until Department of Health State Emergency Response Team (DOH SERT) personnel arrive and are operational at their assigned locations in the field and at the Progress Energy Emergency Operations Facility (EOF). Levy County will utilize their limited monitoring resources in accordance with established procedures to support monitoring activities on an interim basis. **(Refer to REP SOP 21 "Levy County Fire Rescue")**. Monitoring of the affected areas and recommendations of Protective Actions by the Florida DOH and Progress Energy will continue until radiation levels have decreased to the point that recovery and re-entry is considered safe.

Levy County will provide monitoring teams for Personnel Monitoring Stations and Emergency Wash Down Stations, Reception Centers and public shelters according to the REP Plan and REP SOPs. **(Refer to REP SOP 16 "Levy County Health Department", REP SOP 21 "Levy County Fire Rescue", and REP SOP 27 "Personnel and Vehicle Monitoring")**.

2.7.1.1 Florida DOH/Bureau of Radiation Control (BRC) Assessment and Recommendations

Should it become necessary to dispatch Florida DOH survey teams to the affected off-site area, the Mobile Emergency Radiological Laboratory (MERL) will be dispatched to its berthing site in the Crystal River or Levy area in accordance with Florida DOH established procedures. When the DOH/BRC field monitoring teams are deployed and the Mobile Emergency Radiological Laboratory (MERL) is in its assigned location, the MERL will be the primary point for analysis and receipt of all off-site field monitoring data and sample media for accident assessment.

When the survey teams are deployed and the MERL is in its assigned location, accident assessment will be made based on field monitoring results, the current meteorological conditions, plant condition, plant prognosis and any utility release information. Data collected in the field will be transmitted to the EOF to be evaluated by the Operations Officer, DOH. These evaluations will be provided to the State Coordinating Officer or designee at the EOF for use in decision-making, and as a basis for recommendations for protective actions. Summaries and recommended protective actions will be forwarded to the State EOC and the Emergency Management Director or designee for appropriate Protective Action Decisions (PADs). **(Refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**.

Monitoring of the affected area(s) and recommendations of protective actions will continue until radiation levels have decreased to the point that recovery and re-entry is considered safe.

Levy County Emergency Management will provide monitoring teams for the Monitoring and Vehicle Wash Down Stations, Reception Centers and public shelters as per REP SOPs. **(Refer to REP SOP 16 "Health Department", REP SOP 21 "Fire Rescue".**

2.7.1.2 Dose Assessment Calculations

Dose assessment calculations (of actual or projected conditions) are performed by Progress Energy Dose Assessment Technical staff and Florida DOH/BRC. Upon review by the Dose Assessment Team Leader, the calculations and recommendations for Protective Actions are provided to the Emergency Management Director or designee. The Emergency Management Director or designee will utilize this information, along with other pertinent data, to make appropriate Protective Action Decisions. **(Refer to Section III, Part 2.9 "Protective Action Response Options" and Part 2.7.2 "Evaluation of INPUT PARAMETERS by the Emergency Management Director or designee"). (Also refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps").**

2.7.1.3 Population Data and Evacuation Time Estimates

In 2007 Progress Energy hired the company KLD Associates to develop a study to gather population data, traffic capacity, and evacuation time estimates for the Levy Nuclear Plant 10-mile EPZ and the also updated the information for the Crystal River Nuclear Plant 10-mile EPZ. This data will be used by the Chairperson of the Board of County Commissioners or designee and the Emergency Management Director or designee to determine the appropriate Protective Action Decision. **(Refer to REP Sop 3 "Site Area Emergency" and REP SOP 4 "General Emergency", also refer to Section III, Part 2.5 "Protective Response Actions" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**

For a detailed description of the report from KLD Associates "Crystal River Nuclear Plant Development of Evacuation Time Estimates", **refer to Section VI, Appendix 7A**. For Levy Nuclear Plant a detailed description of the report for "Levy Nuclear Plant Development for Evacuation Time Estimates", **refer to Section VI, Appendix 7B.**

A) Crystal River Nuclear Plant

Refer to Figure 15A "Crystal River Nuclear Plant 10-Mile EPZ Sector Map", Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones", Figure 18A "Crystal River Nuclear Plant 10-mile EPZ Evacuation Routes" and Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data").

B) Levy Nuclear Plant

Figure 15B "Levy Nuclear Plant 10-mile EPZ Sector Map", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17B "Levy nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones", Figure 18C "Levy Nuclear Plant 10-mile EPZ Evacuation Routes" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data"

2.7.1.4 Meteorological, Radiological and Plant Data

Meteorological data is available from monitors at and around the Progress Energy Complex and the National Weather Service. This data can be used to determine the actual and projected meteorological conditions for the County.

Radiological data is available for numerous fixed radiation monitors at and around the Progress Energy Complex and from mobile radiation monitoring teams deployed by the Progress Energy Nuclear Emergency Preparedness staff. The Florida DOH/Bureau of Radiation Control will also be dispatched to Levy County and take control of the Radiological Assessment Process when they arrive.

2.7.2 Evaluation of INPUT PARAMETERS by the Emergency Management Director or designee

The Emergency Management Director or designee and the Chairperson of the Board of County Commissioners will receive a constant flow of pertinent information from Progress Energy's EOF, the Florida Department of Health as to which Nuclear Plant, Crystal River or Levy, is having the emergence event, the event classification, escalation, radiation hazards and protective recommendations for appropriate protective response. He/she will also receive information about the County's resources, issues and the positions of the various agencies at the EOC,

The evaluation of the impact on Levy County in the event of a radiological release incident at the Crystal River or Levy Nuclear Plants will determine which Protective Action Decision (PAD) should be implemented. The PAD will also be affected if the situation involves a Hostile Action Based event and or release of radioactive material at the same time. **(Refer to Section III, Part 2.9 "Protective Action Response Options" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**.

In evaluating which Protective Action Decision to implement, the Emergency Management Director or designee and the Chairperson of the board of County Commissioners with coordination with Citrus and/or Marion Emergency management Director or designee will consider the following input data to establish a basis for his/her decision-making:

2.7.2.1 Plant Condition and Emergency Classification

Current plant conditions (equipment failure or accident) and emergency classification level can be obtained from the Progress Energy Nuclear

Emergency Preparedness representative at Progress Energy's EOF. Determine if this situation involves a Hostile Action Based event and or release of radioactive material.

2.7.2.2 EPA Protective Action Guidelines

The State Department of Health (DOH) personnel will use EPA Protective Action Guide Manual 400-R-92-001 as a guide for recommending Protective Actions based on their analysis. Florida DOH Operations Officer will provide these recommendations to the Governors Authorized Representative. The decision to implement Protective Action Recommendations will be made jointly by the Chairperson for the Board of Commissioners and the Governor or the State Coordinating Officer or designee. If time does not permit state involvement in the initial decision making, the decision to take Protective Actions may be made by the Chairperson for the Board of County Commissioners, or their designated alternates. The Levy County Emergency Management Director or designee will implement the Protective Actions. **(Refer to Figure 3A "Early Phase EPA Protective Action Guidelines – PAGs" and Section III, Part 2.9.1 "EPA Protective Action Guidelines")**.

2.7.2.3 Projected Dose

Progress Energy Dose Assessment Team and Florida DOH/BRC will determine the projected dose for potentially affected areas; these projected doses are compared to the Early Phase Protective Action Guidelines (PAGs) to determine which Protective Action Recommendation (PAR) should be recommended. **(Refer to Figure 3A "Early Phase Protective Action Guidelines – PAGs")**. Projected dose is the total of the accumulated dose received since the beginning of the incident and the projected dose rates over the critical time frames for the estimated duration of the incident.

2.7.2.4 Road and Weather Conditions

Current road and weather conditions are received from the Sheriff's Office Patrol Division, FLORIDA Highway Patrol, Progress Energy and the National Weather Service.

2.7.2.5 Critical Time Frames

The critical time frames to be identified for a particular incident are the implementation time frames for the various Protective Action Decisions (PADs) and the time frame until the safe termination of the incident.

Notification time is the time required to notify the population-at-risk and to deploy whatever emergency response personnel and equipment is necessitated by the particular Protective Action Decision (PAD). For example, the execution time to evacuate a certain area of the county when added to the notification time required to give the public instructions and deploy personnel and equipment will identify the critical time frame for that area.

2.7.2.6 Status of Certain Facilities and Areas, Availability and Operability of Resource

The status of the following is also to be determined prior to any decision making:

(A). Schools, Parks, Special Facilities if any
(B). Availability of Transportation Resources
(C). Operability of Reception Centers/Public Shelters
(D). Availability of Emergency Workers and Emergency Resources
(E). Operability of the Public Notification System
(F) Known impediments to evacuation routes. (Road closures, traffic accidents, etc.). **(Refer to Section III, Part 2.9.7.4 "Establish Traffic Control").**

2.7.2.7 Progress Energy's Recommendations

Progress Energy will make recommendations for Protective Actions (PARs) to the Emergency Management Director or designee. Progress Energy's Protective Action Recommendations (PARs) are based on which nuclear plant is having the emergency (Crystal River and/or Levy), the nuclear plant's conditions and actual or projected doses

2.7.3 Decision Process

Based on information from the previous steps, **2.7.2.1** through **2.7.2.7**, the Emergency Management Director or designee will be able to make a decision as to which Protective Action Decisions (PADs) should be implemented and/or how many. **(Refer to Section III, Part 2.9 "Protective Action Response Options" and Appendix 4A "Crystal River Nuclear Plan PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**. This decision may be discussed and coordinated with Florida Emergency Management and officials of the State and other counties.

2.8 Radiological Exposure Control

2.8.1 Emergency Worker Personnel

Emergency Personnel Radiological Exposure Control is necessary to monitor, minimize and record the radiological exposure of County Emergency Response Personnel. This includes individuals engaged in radiological monitoring, rescue of endangered or injured personnel, lifesaving activities, evacuation of affected populations and protection of property to prevent damage or loss. Emergency response personnel, including volunteers, may be exposed to radiation and/or be contaminated while performing their duties.

All emergency workers entering a Radiation Controlled Area should practice the **ALARA Principle (Time, Distance and Shielding).** This principle will keep your radiation exposure **A**s **L**ow **A**s **R**easonably **A**chievable (**ALARA**) The following is a brief description:

Time – Limiting the amount of time spent in radiation areas.
Limiting entry into radiation areas to the maximum extent possible.

Distance – Stay as far away as possible from the radiation source.

Shielding - Keep as much dense material as possible between you and the radiation source. Example is a wall or vehicle.

The Following will also be implemented to limit exposure to emergency workers:

A) Using protective closing, respirators or decontamination when necessary.
B) Using dosimetry and radiation monitors to track worker's exposures.
C) Issuing Potassium Iodide (KI) to the workers when recommended by the Bureau of Radiation Control as per the Florida DOH SOPs. **(Refer to Part 2.8.1.6 "Potassium Iodide, Part 2.9.2 "Potassium Iodide Thyroid Protection").**

Measures will be taken to limit the radiation exposure of emergency response organization workers to those values and conditions described in their associated agency REP SOPs. Each agency or organization sending emergency workers within the Crystal River or Levy Nuclear Plant 10-mile EPZ during a declared emergency at the Crystal River or Levy Nuclear Plant should assign someone within their agency or organization to be the "Exposure Control Person". The Exposure Control Person will be the acting liaison between the REP Coordinator or designee and the emergency workers or personnel in his/her agency or organization.

The emergency workers working in the Crystal River and/or Levy Nuclear Plant 10-mile EPZ should be assigned Dosimetry which keeps track of the workers accumulated radiation exposure. While the emergency workers are in the Crystal Rive or Levy Nuclear Plant 10-mile EPZ, they are required to look at their dosimeters every 30 minutes. The emergency workers should report the following situations described below to the Exposure Control Person. The Exposure Control Person is then required to relay the information to the REP Coordinator or designee in the EOC.

Emergency workers will be issued direct-reading dosimeters and permanent record Dosimeter–Badges (TLD) prior to entering any area suspected of radioactive contamination, and given instructions on assembly, body placement location and record keeping in accordance with their associated established REP SOPs. Personnel performing emergency service functions inside the Radiation Controlled Area will read their direct-reading dosimeters at 30-minute intervals and report accumulated exposure to their supervisor every six hours. The Exposure Control Person will be responsible for maintaining dose records that will be reported to the REP Coordinator at the EOC at least every 6 hours. It will be the joint responsibility of the emergency worker and his supervisor or Exposure Control Person to assess the projected dose and interpret or extrapolate the individual's potential or projected exposure.

Any person whose exposure has reached **500 mR** or more will be directed to leave the area and report to a personnel monitoring station for appropriate actions. The worker's supervisor or Exposure Control Person will report the exposure to the REP Coordinator or designee, who will then report the worker's name and exposure to Florida DOH and County Health Department

Should it become necessary to expose emergency workers to radiation doses in excess of EPA Protective Action Guides (>500mR), **(refer to Figure 3A "Early Phase EPA PAGs"),** the Chairperson of the Board of County Commissioners or designee, will make the decision to allow the exposure or not after consultation with the Florida DOH, Emergency Management Director or designee and County Health Department. Should the Chairperson be absent, the next Commissioner in line will make the decision. **(Refer to Section III, Part 2.9.1 "Protection Action Guidelines"**

The decision to administer potassium iodide (KI) to emergency workers will be made by the Governor or his designee, or the Emergency Management Director or designee in coordination with the Chairperson of the Board of County Commissioners or

designee in accordance with established Florida DOH and County Health Department procedures and Levy County REP Procedures. **(Refer to Part 2.8.1.6 "Potassium Iodide, Part 2.9.2 "Potassium Iodide Thyroid Protection", also Refer to REP SOP 16 "County Health Department" and SOP 17 "Storage and Distribution of Potassium Iodide")**. A projected dose of at least **5 Rem** to the Thyroid Gland from radioiodine released into the environment will generally serve as a basis for the Florida DOH/BRC (Bureau of Radiation Control) to recommend to the Governor or the Chairperson of the Board of County Commissioners or designee, that potassium iodide should be authorized for use. The County Health Department Administrator is responsible for procurement, proper storage, periodic inspection and distribution of KI to the General Public in accordance with REP **SOP 17 "Storage and Distribution of Potassium Iodide".** The REP Coordinator has the responsibility for procurement, proper storage, periodic inspection and distribution of KI to the emergency workers. The KI for the emergency worker will be included with the emergency workers assigned Dosimetry Kit or provided by the REP Coordinator or designee**. (Refer to Part 2.8.1.6 "Potassium Iodide" and Part 2.8.1.8 "Return Dosimeters, KI and Exposure Control Cards."**

Personnel who are injured in the Radiation Controlled Area will be treated as a possible contaminated victim until the victim can be survey and proven to be clean. Emergency Medical Services personnel will follow **REP SOP 25 "EMS",** to prevent the spread of contamination from an injured person to medical support personnel and medical equipment until the injured person can be transported to Seven Rivers Hospital for treatment of the contaminated victim.

At the termination of the emergency, the emergency worker's TLD Badges will be collected by the REP Coordinator or designee and returned to the Florida DOH/BRC (Bureau of Radiation Control) when the emergency is over or conditions have returned to normal. The TLD Badges will be returned by the Bureau of Radiation Control will deliver the TLDs to a vender for reading. The Bureau of Radiation Control will receive all emergency worker TLD exposure records from the vendor. The records will be sent to the REP Coordinator for distribution to the workers. A copy of the worker's exposure records will be retained by the Bureau of Radiation Control. **(Refer to Section III, Part 2.8.1 "Radiological Exposure Control/Emergency Personnel").**

The Following guidelines will be implemented to limit radiation exposure to emergency workers:

2.8.1.1 <u>100 mR</u>

When the emergency worker observes his/her accumulated exposure has reached 100 mR on his/her Low Range Dosimeter. The emergency worker is to report this to their Exposure Control Person and the information should be relayed to the REP Coordinator or designee.

2.8.1.2 <u>Greater Than Expected Exposure</u>

The REP Coordinator or designee will be told by Progress Energy and/or the Florida Department of Health/Bureau of Radiation Control what the approximate dose rates are in areas within the Crystal River and/or Levy Nuclear Plant 10-mile EPZ. This data will allow the REP Coordinator or designee to calculate the approximate total exposure the emergency worker should be receiving per hour. The REP Coordinator or designee should then

be able to tell the Exposure Control Person the approximate radiation exposure the emergency worker should receive for every hour he/she is in the area. The Exposure Control Person should relay this information to the emergency worker.

If the worker is receiving more exposure per hour than what he was told he would be receiving, he is to report this information to the Exposure Control Person and he/she is to relay this information to the REP Coordinator or designee. The Emergency Management Director or designee and the REP Coordinator or designee will review the radiation data and recommendations from the Florida Department of Health/Bureau of Radiation Control and Progress Energy to make a determination if the emergency worker should stay and continue his/her work or replace him/her with an emergency worker with less exposure.

2.8.1.3 500 mR Turn Back Dose

The emergency worker total exposure limit is **500 mR**. This is also considered the **Turn Back Dose**. The emergency worker is **not to exceed this exposure limit** without authorization from the Emergency Management Director or designee. The emergency worker is to leave the Crystal River and/or Levy Nuclear Plant 10-mile EPZ/Controlled Area prior to reaching this limit and notify the Exposure Control Person. This information should be relayed to the emergency workers supervisor, Emergency Management Director and REP Coordinator or their designees. The Florida Department of Health should be notified of the situation.

2.8.1.4 Life Saving Mission/Greater than 500 mR

If the emergency worker is involved in a lifesaving situation in which he/she might exceed the 500 mR Turn Back Dose Limit, the emergency worker must first notify his/her agency/organization supervisor or designee and the Emergency Management Director or designee. Paperwork will be generated to allow an increase in the emergency worker's allowable dose limit. The emergency worker should request radio priority and report his/her exposure readings frequently as directed by the Emergency Management Director or designee. If the emergency worker is unable to communicate his/her exposure readings to the EOC and his/her exposure has reached **3 Rem** (on the high range dosimeter), the emergency worker should leave the area, unless the emergency worker is directly involved in a lifesaving situation. The emergency worker must not exceed **5 Rem** total exposure.

2.8.1.5 Report Exposure After 6 Hours Working In The Crystal River or Levy Nuclear Plant 10-Mile EPZ/Controlled Area

The emergency worker should report his/her total exposure received after six (6) hours working in the 10-mile EPZ/Controlled Area to the Exposure

Control Person. The Exposure Control Person should relay this information to the REP Coordinator or designee.

2.8.1.6 Potassium Iodide (KI)

2.8.1.6.1 KI Administration

KI will be administered only after receipt of a recommendation from the Florida Department of Health/Bureau of Radiological Control and such authority through the Emergency Management Director or designee and the Chairperson of the Board of County Commissioners or designee. One dose of KI (130mg pills or 2 ml liquid) daily for two (2) days, for a total of two doses will be issued or administered to the individuals determined to be a risk. Individuals over the age of one year should take one adult dose (130mg pills or 2 ml liquid) immediately when recommended and the next dose in 24 hours. Individuals under the age of one year should be given ½ an adult dose (65mg pill or 1 ml liquid) immediately when recommended and ½ an adult dose (65mg mill or 1 ml liquid) in 24 hours. Doses will be issued by personnel of the Health Department at the Reception Center KI Distribution Point at Hilltop School for the general public. KI for the Emergency Workers will be issued by the REP Coordinator or designee and self administered by the Emergency Worker.

The emergency worker must record the date, time and his/her initials at the bottom of the Exposure Control Card in the Dosimeter Kit. If the emergency worker feels he/she is encountering side effects, this should be reported to the Emergency Management Director, REP Coordinator or their designees **immediately**. **(Refer to Part 2.9.2 "Potassium Iodide Thyroid Protection").**

2.8.1.6.2 Two Forms of KI

KI will be available in two forms; tablet form and liquid form.

A) Tablet Form

Each tablet form contains 130 milligrams of KI. One tablet is equal to one adult dose.

B) Liquid Form

The liquid KI will be in a bottle that will contain 30 milliliters of KI at 65 milligrams of KI per milliliter. Each bottle will contain 15 adult doses. This liquid KI will be administered to personnel by using a measured oral dropper that is attached to the cap of the bottle or separate oral syringe. Two milliliters (130 milligrams) of liquid KI is equal to one adult dose and will be deposited on the tongue of the individual by the use of the provided oral dropper or separate oral syringe.

2.8.1.7 Leaving The Crystal Rive and/or Levy Nuclear Plant 10-Mile EPZ / Controlled Area

Upon leaving the 10-EPZ, the emergency worker is to report to the vehicle decontamination location **(Wash Down Station)** to have the vehicle and him/herself surveyed for contamination. (Inquire which Wash Down Station to use.)

2.8.1.8 Return Dosimetry, unused KI and Exposure Control Cards

After processing at the decontamination location **(Wash Down Station)**, the emergency worker should return his/her dosimeters, KI (if not used) and Exposure Control Cards to the REP Coordinator or designee at the EOC.

2.8.2 General Public

Depending on the information received from part 2.7.2 "Evaluation of INPUT PARAMETERS by the Emergency Management Director or designee", at the direction of the Emergency Management Director or designee, the Reception Center at Hilltop School should be set up during a declared **Site Area Emergency** for the Crystal River or Levy Nuclear Plant. **(Refer to REP SOP 16 "Levy County Health Department")**. Evacuation of the **General Public** is normally recommended by the Florida DOH/BRC and Progress Energy when there is a potential for the General Public to receive 1000 mR whole body exposure and/or 500 mR exposure of Iodine-131 to the thyroid. This should be implemented during a declared **General Emergency** from the Crystal River or Levy Nuclear Plant. **(Refer to REP SOP 4 "General Emergency")**. During a Hostile Action Based incident where a radioactive release is not anticipated, the Emergency Director or designee will have the option of **NOT** setting up the Reception Center due to the potential threat of hostile forces in the community.

The Levy County Health Department has the responsibility of setting up the Reception Center for the distribution of KI to the public

Personnel/Vehicle Monitoring Stations and decontamination facilities will be set up by Fire Rescue for monitoring radioactive contamination on citizens and transients. Additional support personnel for personnel decontamination, vehicle monitoring and impound should be available. **(Refer to REP SOP 16 "Levy County Health Dept" for KI distribution for the Public), SOP 21 "Fire Rescue")**. The Personnel Monitoring Station at the Reception Center should be staffed by Fire Rescue personnel. The Wash Down Stations will also be set up by Fire Rescue. **(Refer to REP SOP 21 "Fire Rescue" for Reception Center set up procedures")**. **Refer to Step 2.5 "Reception Center, Radiological Personnel Monitoring Station and Wash Down Station" and Step 2.9.11 "Reception Centers".**

Evacuees arriving at the Reception Center may be monitored and decontaminated, if necessary. All vehicles may be monitored. Decontamination of vehicles may be performed when time and manpower permits and if directed by the Emergency Management Director or designee. Usually contaminated vehicles should be parked in a designated vehicle impound area to await decontamination at a later time. No vehicle will be released from the vehicle impound area until proven to be not contaminated.

Monitoring and decontamination of the general pubic will be performed in accordance with **REP SOP 21 "Fire Rescue"**. Contaminated Waste disposal will be coordinated with Florida DOH/BRC and Progress Energy.

2.8.3 School Children

School Children should not have to be monitored due to the school children being evacuated during the **Site Area Emergency**. **(Refer to REP SOP 20 "Levy County School Board" and REP SOP 3 "Site Area Emergency")**. They should be evacuated before a problem exists with contamination. If a situation occurs to which a problem exist with contamination prior to the evacuation of the School Children **(Fast Breaker)**, the school children will be directed to the Reception Center to be monitored. **(Refer to REP SOP 20 "Levy County School Board")**. They would then be taken to their pre-designated public shelters. **(Refer to Section III, Part 2.9.9.2 "Evacuation of Schools and Early Learning Center (Day Care Centers)).**
There is one Public School (Yankeetown School) within the Crystal River Nuclear Plant 10-mile EPZ. There is one Public School (Yankeetown School) within the Levy Nuclear Plant 10-mile EPZ.

2.8.4 Contaminated / Injured Individuals

Transport for contaminated/injured and/or overexposed individuals to Seven Rivers Hospital will be provided by EMS. **(Refer to REP SOP 25 "EMS")**.

Both medical facilities; Seven Rivers Regional Medical Center and Citrus Memorial Health System are trained and capable of treating contaminated/injured and/or over exposed individuals. Due to the Seven Rivers Regional Medical Center being located within both the Crystal River and Levy Nuclear Plant 10-mile EPZ, an evacuation of either 10-mile EPZs will require all such injured to be transported to Citrus Memorial Health System.

2.9 Protective Action Response Options

The Chair Person for the Board of County Commissioners should sign a Local State of Emergency prior to initiating an evacuation of the general public.

Protective Actions which may be initiated to provide for the safety of the public will depend on which nuclear Plant is having and emergency event, (Crystal River or Levy). This may include any or all of the following:

A. Notification of affected citizens and transients to seek immediate In Home Shelter or evacuation depending on the type of Radioactive Release from the Crystal River or Levy Nuclear Plant and environmental situation.

B. Transients and citizens within the designated zones that were exposed to the plume of radioactive materials will be evacuated to public shelter areas outside the Crystal River and/or Levy 10-mile EPZ.

C. Control of entrance into affected areas.

D. Implementation of procedures to prevent the consumption and distribution of contaminated food and water supplies.

E. Implementation of procedures to decontaminate persons exposed to radiation.

2.9.1 EPA Protective Action Guidelines (PAG)

PAGs are defined in terms of projected dose, the dose that would be received by the population if no Protective Actions were taken. They do not include dose received prior to the time of projection or the taking of any Protective Actions. To be most effective, PAGs should be implemented before any released radioactive material (RAM) arrives to the general Public.

PAGs are expected to be used for planning purposes and to provide guidance for response decisions. They are not to be used for dose limits. Professional judgment will be required in their application. For example, during an emergency, local conditions may make evacuation impracticable. In other cases, evacuation may be useful at projected doses well below the PAGs.

The Florida DOH personnel will use the "EPA Protective Action Guide Manual 400-R-92-001" as a guide for recommending protective actions based on their analysis. The Florida DOH, Operations Officer will provide these recommendations to the Governors Authorized Representative and the Citrus County Chairperson for the Board of County Commissioners. The decision to implement Protective Action Recommendations will be made jointly by the Chairperson of the Board of County Commissioners, Emergency Management Director or designee and the Governor or the State Coordinating Officer or designee. If time does not permit state involvement in initial decision making, the decision to take protective actions may be made by the Chairperson of the Board of County Commissioners and the Emergency Management Director or designee. The Emergency Management Director or designee will implement the Protective Action Decisions (PADs). **(Refer to Section III, Part 2.9.8 "Evacuation Areas and Route Descriptions/Protective Action Decisions") and (Refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps")**.

There are 3 main PAGs that the Emergency Management Director or designee should be aware of:

2.9.1.1 Early Phase PAG

Early Phase PAGs, (Plume or Evacuation PAGs), have been designed to protect the public from the actual passage of radioactive material by atmospheric release (Plume). Early Protective Actions which may be required are those which protect the population from the inhalation of Radioactive Material in the plume, exposure to gamma radiation from the plume, and exposure to Radioactive Material deposited on the ground. **(Refer to Figure 3A for the plume, evacuation or "Early Phase Protection Action Guidelines")**.

2.9.1.2 Intermediate Phase PAG

Intermediate Phase PAGs have been designed to protect the public from **long term health effects** due to the presence of radioactive material deposited on the ground in effected areas. **(Refer to Figure 3B Relocation or "Intermediate Phase Protection Action Guidelines")**.

The principal pathways for exposure of the public in areas contaminated by deposited radioactivity are exposure to the whole body from external radiation and internal exposure due to the inhalation of re-suspended

materials initially deposited on the ground. The whole body dose from the ground shine will dominate the protective action concerns.

Intermediate Phase activities are restricted to determining the need to temporarily relocate the public from areas where extensive deposition of Radioactive Material has occurred until decontamination has taken place. **(Refer to Section IV, Part 1 "Relocation and Re-entry")**.

2.9.1.3 Ingestion PAGs

To prevent the ingestion of radioactive materials in harmful quantities, the Food and Drug Administration (FDA) has established PAGs. **(Refer to Figure 3C "Ingestion PAGs"**.

The State Emergency Management, ESF 8 and its support agencies will advise the agricultural community of protective actions necessary to reduce the risk of contamination of farm livestock and farm products. Monitoring and laboratory analysis will be performed to determine the degree of contamination to human foods and livestock foods. If necessary, control of the food chain will be initiated and continued until cessation of undesirable conditions. **(Refer to Section III, Part 2.9.12 "Control of Food Stuffs"**.

2.9.2 Potassium Iodide (KI)/Thyroid Protection

Potassium iodide (KI) can be given to emergency workers in doses to saturate the human thyroid gland with stable iodide and thus prevent the uptake of inhaled or ingested radioactive iodide. Potassium Iodide does not protect other parts of the body to radiation exposure and does not protect the thyroid from external radiation. The greatest percentage of thyroid protection occurs when potassium iodide is administered at or about the time of exposure.

During an incident where the thyroid exposure due to radioiodine is projected to be **5 Rem** or greater**,** actions to administer **KI** should be taken. Ideally, for maximum protection, this decision will be made prior to the exposure. **KI** will still offer some protection if taken within a few hours of exposure. Workers should continue to take recommended doses of potassium iodide daily until risk of significant exposure to radioiodine by either inhalation or ingestion no longer exists. Potassium iodide can be taken by emergency workers upon the recommendation of the Florida DOH/BRC Operations Officer. Because of the short time frame in which maximum blocking of the thyroid occurs, in cases where releases of radioactive iodine can be expected to occur within 1/2 hour to one hour, the Health Department Administrator or designee may recommend to the Chairperson of the Board of County Commissioners and the Emergency Management Director or designee that **KI** may be taken. Consultation with the Bureau of Radiation Control Operations Officer will occur rapidly thereafter.

Potassium iodide will be furnished for emergency workers by the EOC and is the responsibility of the REP Coordinator. **(Refer to Section III, Part 2.8.1.6 "Potassium Iodide (KI)" and also REP SOP 14 "REP Coordinator")**.

To provide for issuance of Potassium Iodide to members of the public, doses have been procured and will be issued to members of the general public by the Levy County Health Department in accordance with the Levy County Health Department Standard Operating Procedures. **(Refer to REP SOP 16 "Levy County Health Department" and REP SOP 17 "Storage and Distribution of KI")**. The issuance of potassium iodide will be recommended by the State Department of Health's Bureau of

Radiation Control Operations Officer or designee and authorized by the Emergency Management Director and Chairman for the Board of County Commissioners.

2.9.3 Selective In-Home Sheltering

In Home Sheltering is the Protective Action advising the public to seek shelter in a permanent, reasonably air tight structure until further notice. Additional instructions could include closing doors and windows, reducing outside air intake from heating and cooling systems, extinguishing fires and closing flues in fireplaces and continuing to listen to their EAS TV and/or radio stations.

This option is an effective protective action for individuals who could not be safely evacuated if it were necessary from the Crystal River and Levy Nuclear Plant 10-mile EPZs. **(See Figure 15A "Crystal River Nuclear Plant 10-mile EPZ", Figure 15B "Levy Nuclear Plant 10-mile Nuclear Plant 10-mile EPZ", Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones", Figure 17B Levy Nuclear Plant Population Distribution by Zones and Summary of Vehicles by Zones" Figure 18A "Crystal River Nuclear Plant 10-mile EPZ Evacuation Routes", Figure 18B "Crystal Rive Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data")**. **Figure 18C "Levy Nuclear Plant 10-mile EPZ Evacuation Routes" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Evacuation Routes".** These individuals include those who have been designated medically unable to evacuate as well as those individuals who require constant, sophisticated medical attention or are incarcerated. **(Refer to Section 2.9.8 "Protective Action Decisions (PADs) / Evacuation Areas and Route Descriptions").**

2.9.4 General In-Home Sheltering

This option is effective protective action for the general public in the event of a Puff-Type radiological release. In addition, where evacuation might be the preferable response option but local constraints, such as evacuation time or highway impediments, dictate that directing the public to seek In Home Shelter is a more feasible and effective protective measure. **(See Figure 15A "Crystal River Nuclear Plant 10-mile EPZ", Figure 15B "Levy Nuclear Plant 10-mile Nuclear Plant 10-mile EPZ", Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones", Figure 17B Levy Nuclear Plant Population Distribution by Zones and Summary of Vehicles by Zones" Figure 18A "Crystal River Nuclear Plant 10-mile EPZ Evacuation Routes", Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data")**. **Figure 18C "Levy Nuclear Plant 10-mile EPZ Evacuation Routes" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Evacuation Routes".**

A Puff-Type radiological release is defined as a concentrated release of radioisotopes for a short, limited duration. For an incident of this type, the most effective protective response action is immediate, temporary In Home Sheltering of the general public in the 10-mile EPZs.

The implementation of this protective action requires that the Public Information Officer advise the public regarding the action to be taken. **(Refer to Section 2.9.8 "Protective Action Decisions (PADs) / Evacuation Areas and Route Descriptions").**

2.9.5 General Evacuation

Evacuation is the protective action advising the public to leave an area until further notice and restricting access to that area.

This option provides for the capability to evacuate the general public from any or all affected or potentially affected areas within the Crystal River or Levy Nuclear Plant 10-mile EPZs. **(See Figure 1A "Crystal River Nuclear Plant 10-mile EPZ" and Figure 1B "Levy Nuclear Plant 10-mile EPZ)**.

Based on the Florida DOH and Progress Energy's recommendations and after review of available resources, the Emergency Management Director or designee will formulate the County's position regarding the Protective Action Decisions (PADs) required.

The Chairperson for the Board of County Commissioners should sign a Local State of Emergency prior to implementing the Evacuation Plan.

The Evacuation Plan is based on the identification of both the population to be evacuated and the transportation resources required to accomplish this evacuation. The population in the areas to be evacuated can vary with the time of day, the day of the week and the seasons of the year. **(Refer to Section III, Part 2.9.8 "Protective Action Decisions (PADs) / Evacuation Areas and Route Descriptions" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs and Maps").**

Evacuation of any area within the Crystal River and Levy Nuclear Plant 10-mile EPZs will be a decision made by the Policy Group and the Emergency Management Director or designee with the Emergency Management Director having the final authority. If the area has been declared a disaster area under provisions of Chapter 252, Florida Statutes, the Governor or the State Coordinating Officer or designee will direct the evacuation jointly with the Chairperson of the Board of County Commissioners based on consultation with the Florida DOH.

The order to evacuate the General Public in any portion of the Crystal River an/or Levy Nuclear Plant 10-mile EPZs will be implemented during a declaration of a **General Emergency** from the Crystal River and/or Levy Nuclear Plant. The order may be given sooner if deemed necessary by the Chairperson of the Board of County Commissioners and the Emergency Management Director or designee. If the emergency event involves a Hostile Action Based event an evacuation order may not be given due to the potential of hostile forces present in the community.

If the order to evacuate is given, evacuation may be required for all or part of the Crystal River and/or Levy Nuclear Plant 10-mile EPZs designated by zones and utilizing geographic boundaries. Citizens residing in a zone which is ordered to evacuate will be instructed to proceed according to the evacuation plan for that zone. (**Refer to Figure 15A "Crystal River Nuclear Plant 10-mile EPZ", Figure 15B "Levy Nuclear Plant 10-mile EPZ", Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution by Zones**

and Summary of Vehicles by Zones", Figure 17B "Levy Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones", Figure 18A "Crystal River Nuclear Plant 10-Mile EPZ and Evacuation Routes", Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data", Figure 18C "Levy Nuclear Plant 10-mile EPZ and Evacuation Routs" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data").

Law enforcement officers from Levy County Sheriff's Office, assisted by Citrus County and Marion County law enforcement officers and State ESF 16 (Law Enforcement) will establish traffic control points along evacuation routes to expedite the flow of traffic during the evacuation process. Barricades will be utilized at those points not manned by law enforcement personnel. Entrances to the affected area will be blocked to all traffic except for school buses, ambulances, fire-rescue vehicles or other emergency vehicles being used in the evacuation. **(Refer to and REP SOP 22 "Levy County Sheriff's Office")**.

2.9.6 Control of Entrance Into Affected Areas

No re-entry will be authorized without concurrence of the State Coordinating Officer or designee and the Chairperson of the Board of Commissioners in coordination with the Emergency Management Director or designee. This decision will be based upon the advice of the Florida DOH and the Citrus County Health Department. Cleared areas will be opened only when clearly definable boundaries are available. Levy County Sheriff's Office will provide support to control entrance into the affected area.

2.9.7 Implementation and Execution Of General Public Evacuation

The Evacuation of the General Public with in the Crystal River and Levy Nuclear Plant 10-mile EPZs should be implemented during a declared General Emergency. If the Emergency Management Director or designee with coordination of the Chairperson of the Board of County Commissioners deems it necessary, the School Children should be evacuated during a declared Site Area Emergency. If the emergency event involves a Hostile Action Based event an evacuation order may not be given due to the potential of hostile forces present in the community.
(Refer to Section III, Part 2.9.5 "General Evacuation").

2.9.7.1 Areas to be Evacuated (Zones)

The designation of the "**Population Distribution By Zones and Summary of Vehicles by Zones", (see Figure 17A for Crystal River and 17B for Levy)** and the **"Estimated Evacuation Times"** data **(see Figure 16A for Crystal River and Figure 16B for Levy)** provides the Emergency Management Director or designee with the flexibility to evacuate portions of the 10-mile EPZs.

A) Crystal River Nuclear Plant 10-mile EPZ

The area within 10-miles of the Crystal River Nuclear Plant has been divided into 3 Emergency Response Planning Areas **(ERPAs),** Zone 1, Zone 2 and Zone 3. **(See Figure 18A "Crystal River Nuclear Plant 10-mile EPZ Zone Map And Evacuation Routes" and Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data")**. The Crystal River Nuclear Plant 10-mile EPZ is also divided into 3 zones separated between 2 miles, 5 miles and 10 miles radius around the plant. **(See Figure 15A "Crystal River Nuclear Plant 10-mile EPZ Sector Map", Figure 16A "Crystal River Nuclear Plant 10-mile EPZ Traffic Capacity**

and Evacuation Time Estimates"). The population for each planning area along with totals for the Crystal River Nuclear Plant 10-mile EPZ are shown on **Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones"**.

B) Levy Nuclear Plant 10-mile APZ

The area with in 10-miles of the Levy Nuclear Plant has been divided onto 8 Emergency Response Planning Areas **(ERPAs)**, the Zones are as follows:

C1 – Citrus County
C3 – Citrus County
C4 – Citrus County

L5 – Levy County
L6 – Levy County
L7 – Levy County
L8 – Levy County

M9 – Marion County

(See Figure 18C "Levy Nuclear Plant 10-mile EPZ Zone Map and Evacuation Routes" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data"). The Levy Nuclear Plant 10-mile EPZ is also divided into 8 zones separated between 2 miles, 5 miles and 10 miles radius around the plant. **(See Figure 15B "Levy Nuclear Plant 10-mile EPZ Sector Map", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity and Evacuation Time Estimates")**. The population for each planning area along with totals for the Levy Nuclear Plant 10-mile EPZ are shown on **Figure 17B "Levy Nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones"**.

2.9.7.2 Evacuation Travel Time Estimates

After the Emergency Management Director or designee orders an evacuation, some members of the public will have been able to leave the Crystal River or Levy Nuclear Plant 10-mile EPZs within 1 hour.. On the other hand, due to traffic congestion, weather conditions, etc., it could take a significantly longer period of time (about 5 hours) before the last person is outside the 10-mile EPZ. **(See Figure 15A "Crystal River Nuclear Plant 10-mile EPZ Sector Map", Figure 15B "Levy Nuclear Plant 10-mile EPZ Sector Map", Figure 16A "Crystal River Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 16B "Levy Nuclear Plant 10-mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones", Figure 17B "Levy Nuclear Plant 10-mile EPZ Population Distribution By Zones and Summary of Vehicles by Zones", Figure 18A "Crystal River Nuclear Plant 10-Mile EPZ and Evacuation Routes", Figure 18B "Crystal River Nuclear Plant 10-mile EPZ Population and Protective Action Maps Data", Figure 18C "Levy Nuclear Plant 10-mile EPZ and Evacuation Routes" and Figure 18D "Levy Nuclear Plant 10-mile EPZ Population**

and Protective Action Maps Data"). The evacuation travel time estimates (after mobilization) represents the time for the last vehicle in each Zone to clear the 10-mile EPZ boundary. It should be noted that a substantial portion of the evacuating population will have left the 10-mile EPZ well before the last vehicle leaves.

2.9.7.3 Designation of Evacuation Routes

General public evacuation routes have be broken down to areas depending on which appropriate Protective Action Decision (PAD) has been chosen by the Emergency Management Director or designee. **(Refer to Section III, Part 2.9.8 "Evacuation Areas and Route Descriptions". Refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps" and Appendix 4B "Levy Nuclear Plant PADs AND Maps")**.

2.9.7.4 Establish Traffic Control

Traffic control has two basic objectives: To expedite the flow of traffic from the evacuating areas and to prevent entry of unauthorized individuals into the evacuated area. **(Refer to REP SOP 22 "Levy County Sheriff's Office")**.

Some of the methods that can be used to accomplish this objective, but are not limited to, are described below.

A. The Sheriff or designee, and State Highway Patrol will establish traffic control points, within the limits of available manpower, along the evacuation routes and incoming traffic routes at intersections in their jurisdictions they decide need such control.

B. Normal public transportation (buses, etc.) will be suspended into the 10-mile EPZ if one is operating.

C. Temporary signs (such as directional arrows) may be placed at locations where the traffic control personnel or permanent signs need additional reinforcement. **(Refer to REP SOP 19 "Public Works")**.

D. Weather permitting, a helicopter (Citrus County)may monitor traffic flow and provide updated information to the Emergency Management Director or designee and other agencies in the EOC.

E. Specific routes will be cleared and necessary measures to remove impediments to evacuation will be implemented, if necessary. County highway department trucks, fire trucks, etc., may be deployed, if necessary.

F. Planned roadway construction or maintenance along evacuation routes will be reported to the Emergency Management Director or designee on an ongoing basis so that traffic may be redirected in the event of an evacuation.

G. Traffic flow outside the 10-mile EPZ will be redirected to reduce the likelihood of severe congestion problems along the evacuation routes. **(Refer to Figure 18A "Crystal River Nuclear Plant Evacuation**

Routes" and Figure 18B "Crystal River Nuclear Plant Population and Protective Action Maps Data". Also refer to Figure 18C "Levy Nuclear Plant Evacuation Routes" and Figure 18 D "Levy Nuclear Plant Population and Protective Action Maps Data").

H. Traffic control will be instituted in those areas to facilitate egress or vehicular flow, at the Reception Center, public shelters and school children shelter areas.

I. Suspension of water traffic in and out of the 10-mile EPZ will be performed by the US Coast Guard and FWC. (This includes Sectors G, H, I, K, L, M, N, P, Q AND R. **(Refer to Figure 15A "Crystal River Nuclear Plant Sector Map" and Figure 15B "Levy Nuclear Plant Sector Map")**.

J. Establish checkpoints at the perimeter of the affected areas to close ingress on the main routes.

K. Backup evacuation routes will be activated, if necessary and traffic directed by local law enforcement agencies. **(Refer to REP SOP 28 "Backup Route Alerting")**.

2.9.7.5 Public Notification

The general public will be notified of an evacuation order by the Emergency Alert System (EAS) announcements immediately following the activation of the sirens. **(Refer to REP SOP 8 "Levy County Sheriff's Office PIO" and REP SOP 9 "Sheriff's Office PIO In The EOC"). (Also refer to Appendix 2 "EAS Messages" and Appendix 4A "Crystal River Nuclear Plant PADs and Maps and Associated EAS Messages" and Appendix 4B "Levy Nuclear Plant PADs and Maps and Associated EAS Messages")**. Prior to sounding the sirens, coordination with Citrus and Marion County Emergency Management shall be performed. **(Refer to REP SOP 10 "Coordinate Sounding Sirens With Citrus and Marion County")**. Additional EAS announcements over the radio and television may be preceded by the sounding the sirens. Route Alerting can also be used to notify the public of an emergency in selected areas or in areas affected by siren failures. **(Refer to REP SOP 28 "Backup Route Alerting")**.

The general public will be advised of areas to be evacuated, evacuation routes to follow, Reception Center location and referred to one or more of the following for additional information and assistance:

A. EAS announcements and news releases

B. Informational booklets that are mailed bi-annually to every household in the 10-mile EPZ.

C. Information booklets that have been placed for transients in motels and hotels. Signs have been placed in parks, public boat ramps, and other recreational areas.

D. Information and guidance on protective actions that are placed in telephone directories.

E. Citizens Information Phone numbers will be established for clarification of information.

2.9.7.6 Reception Center, Personnel Monitoring and Vehicle Wash Down Station (Responsibility for set-up)

Prior to the recommendation for evacuation, the Emergency Management Director or designee will order opening of the Reception Center at Hilltop School. The Reception Center will register evacuees and provide them with temporary public shelter, assistance and information, and provide a location for reunification with family members. If the emergency event involves a Hostile Action Based event the Emergency Management Director or designee may not order the opening of the Reception Center due to the potential for hostile forces present in the community.

A. Set up of the KI Distribution process at the Reception Center will be the responsibility of the Levy County Health Department **(Refer to REP SOP 16 "Levy County Health Department")**. Staffing will be provided by the Health Department and supplemented by the staff of other agencies and volunteers. **(Refer to Step 2.9.11 "Reception Center".** Mass Care and shelter set up and staffing at Hilltop School should be the responsibility of Red Cross. **(Refer to REP SOP 6 "Red Cross / Salvation Army".**

B. The Personnel and Vehicle Monitoring Stations and the Decon Shower System at the Reception Center will be the responsibility of Inglis Fire Rescue. Monitoring and decontamination for radiological contamination will be provided at the Personnel and Vehicle Monitoring Stations and will be staffed by Fire Rescue personnel. A Personal Monitoring Station should be set up at the Wash Down Station and Reception Centers, **(Refer to REP SOP 21 "Fire Rescue")**. **(Refer to Step 2.5 "Reception Center, Radiological Personnel Monitoring Station and Wash Down Station")**

C. Wash Down Stations will be set up and staffed by Fire Rescue and coordinated with the Fire Chief or designee. **(Refer REP SOP 21 "Fire Rescue")**.

D. Existing commercial phone lines to the various facilities are the primary communication link to the EOC. Communications with these facilities can also be provided by ARES.

2.9.7.7 Security of Evacuated Areas

As areas are evacuated, it will be necessary to provide for their security. This responsibility will be that of the Levy County Sheriff's Office and State Highway Patrol as they are available and required. **(Refer to REP SOP 22 "Levy County Sheriff's Office")**.

A. Personnel assigned to this task will be provided with appropriate Dosimetry, KI and equipment. **(Refer to REP SOP 22 "Levy County Sheriff's Office")**.

B. Security will normally be maintained by patrolling the evacuated area. However, if radiation levels should make such patrols hazardous, or if they cannot be undertaken because of manpower and equipment availability, security will be maintained by establishing checkpoints and patrols around the perimeter of the area.

C. Personnel manning the checkpoints will verify an individual's authorization to enter an area. Verify they have proper Dosimetry and/or radiation equipment to monitor their exposure to radiation. Authorization and information can be verified with the Emergency Management Director or designee at the EOC if necessary.

2.9.8 Protective Action Decisions (PADs) / Evacuation Areas and Route Descriptions

2.9.8.1 Crystal River Nuclear Plant

The Crystal River 10-mile EPZ has been sectioned off by geographical boundaries. These boundaries are divided into three areas represented by the term "Zones." **(Refer to Figure 15A "Crystal River Nuclear Plant Sector Map, used to gauge wind direction", Figure 16A "Crystal River Nuclear Plant 10-Mile EPZ Traffic Capacity Data and Evacuation Time Estimates", Figure 17A "Crystal River Nuclear Plant Population Distribution by Zones and Summary of Vehicles by Zones", Figure 18A "Crystal River Nuclear Plant 10-Mile EPZ and Evacuation Routes" and Figure 18B "Crystal River Nuclear Plant EPZ Population and Protective Action Maps Data").** The decision to which PAD and/or how many to implement within the 10-mile EPZ during a radiological incident at the Crystal River Nuclear Power Plant will be the responsibility of the coordination between Chairperson of the Board of County Commissioners and Emergency Management Director or designee. Associated with these PADs are pre-written EAS messages that should be broadcast to the public.

The Emergency Management Director or designee and the Chairperson of the Board of County Commissioners will receive a constant flow of pertinent information from Progress Energy, the Florida Department of Health and the Sheriff's Office EOC Staff. Refer to **Section III, Part 2.7.2 "Evaluation of Input Parameters"** to review the various types of information and data that would have to be evaluated to determine the appropriate PAD to implement and/or how many.
Also **(Refer to Appendix 4A "Crystal River Nuclear Plant PADs and Maps and Associated EAS messages")**.

The following list defines the nine (9) sets of Protective Action Decisions (PADs) that would be recommended by the Florida DOH and Progress Energy and implemented by the Chairperson of the Board of County Commissioner and Emergency Management Director or designee:

PROTECTIVE ACTION - 1

Citrus County

Evacuate Zone 1: Out to 5 miles from the Crystal River Energy Complex as described by the following: area south of the Withlacoochee River in the River Road Area; Crystal Manor area to the intersection of U.S. Hwy. 19 and West State Park Street; and

from Museum Drive to the Marine Science Center west to the Gulf of Mexico; all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

Evacuate: All recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in ___. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. 19/98 and east on State Road 44, to public shelters in _____.

PROTECTIVE ACTION - 2

Citrus County

Evacuate Zone 1: Out to 5 miles from the Crystal River Energy Complex as described by the following: area south of the Withlacoochee River in the River Road Area; Crystal Manor area to the intersection of U.S. Hwy 19 and West State Park Street; and from Museum Drive to the Marine Science Center west to the Gulf of Mexico; and all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

In Home Shelter Zone 2: East and south 5-10 miles from the Crystal River Energy Complex as described by the following: south of State Park Drive including Crystal River; west of Dunkenfield Avenue; north of, and including Ozello Trail (Route. 494); east of U.S. 19 and west of, but not including, Citrus Springs and Pine Ridge; south of the Withlacoochee River and Lake Rousseau.

Levy County

Evacuate: All recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

In Home Shelter Zone 3: Out of 10 miles from the Crystal River Energy Complex as described by the following: areas north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in ___. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. 19/98 and east on State Road 44, to public shelters in ___.

PROTECTIVE ACTION - 3

Citrus County

Evacuate Zones 1, 2: Out to 10 miles in all directions from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River and Lake Rousseau; west of, but not including Citrus Springs and Pine Ridge; west of the intersection of Rt. 44 and Rt. 486; and all residents north of the intersection of Ozello Trail (Rt. 494) and U.S. 19; all recreational commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

Evacuate Zone 3: Out to 10 miles from the Crystal River Energy Complex as described by the following: north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in ____; northeast on State Hwy. 488 to U.S. Hwy. 41 south, to public shelters in ____. Evacuees south of the Progress Energy railroad tracks should precede south on County Hwy. 495, Hwy. 19/98 and east on State Road 44 and State Hwy. 480, to public shelters in _____.

PROTECTIVE ACTION - 4

Citrus County

Evacuate Zones 1, 2: Out to 10 miles in all directions from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River and Lake Rousseau; west of but not including Citrus Springs and Pine Ridge; west of the intersection of Rt. 44 and Rt. 486; and all residents north of the intersection of Ozello Trail (Rt. 494) and U.S. 19; and all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

Evacuate: All recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Evacuation Routes:

Evacuees north of the Progress Energy Corporation railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in _____. Evacuees south of the Progress Energy Corporation railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44, to public shelters in _____.

PROTECTIVE ACTION - 5

Citrus County

Evacuate Zone 1: Out to 5 miles from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River in the River Road area; Crystal Manor area to the intersection of U.S. Hwy. 19 and West State Park Street; and from Museum Drive to the Marine Science Center west to the Gulf of Mexico; and all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

Evacuate Zone 3: Out to 10 miles from the Crystal River Energy Complex as described by the following: areas north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in _____. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44 to public shelters in _____.

PROTECTIVE ACTION – 6

Citrus County

Evacuate Zone 1: Out to 5 miles from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River in the River Road area; Crystal Manor area to the intersection of U.S. Hwy. 19 and West State Park Street; and from Museum Drive to the Marine Science Center west to the Gulf of Mexico; all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

In Home Shelter Zone 2: south of	East/south 5-10 miles from the Crystal River Energy Complex as described by the following: State Park Drive including Crystal River; west of Dunkenfield Avenue; north of and including Ozello Trail (Rt. 490; east of U.S. 19 and west of, but not including, Citrus Springs and Pine Ridge; and south of the Withlacoochee River and Lake Rousseau.

Levy County

Evacuate: All recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on Hwy. 19/98 to public shelters in _____. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44 to public shelters in _____.

PROTECTIVE ACTION - 7

Citrus County

Evacuate Zone 1:	Out to 5 miles from the Crystal River Energy Complex as described by the following: Withlacoochee River in the River Road area; Crystal Manor area to the intersection of U.S. Hwy. 19 and West State Park Street; and from Museum Drive to the Marine Science Center west to the Gulf of Mexico; all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

Evacuate:	All recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.
In Home Shelter Zone 3:	Out to 10 miles from the Crystal River Energy Complex as described by the following: areas north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in _____; northeast on Hwy.

488 to U.S. Hwy. 41 south to public shelters in ____. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44 to public shelters in ____.

PROTECTIVE ACTION - 8

Citrus County

Evacuate Zones 1, 2: Out to 10 miles in all directions from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River and Lake Rousseau; west of but not including Citrus Springs and Pine Ridge; west of the intersection of Rt. 44 and Rt. 486; and all residents north of the intersection of Ozello Trail (Rt. 494) and U.S. 19; and all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

Levy County

In Home Shelter Zone 3: Out to 10 miles from the Crystal River Energy Complex as described by the following: areas north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy 19/98 to public shelters in ____. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44, to public shelters in ____.

PROTECTIVE ACTION - 9

Citrus County

Evacuate Zone 1: Out to 5 miles from the Crystal River Energy Complex as described by the following: areas south of the Withlacoochee River in the River Road area; Crystal Manor area to the intersection of U.S. hwy. 19 and West State Park Street; and from Museum Drive to the Marine Science Center west to the Gulf of Mexico; and all recreational and commercial boaters in the Gulf of Mexico out to 10 miles from the Crystal River Energy Complex.

In Home Shelter Zone 2: East and south 5-10 miles from the Crystal River Energy Complex as described by the following: south of State Park Drive including Crystal River; west of Dunkenfield Avenue; north of, and including Ozello Trail (Rt. 494); East of U.S. 19 and west of, but not including, Citrus Springs and Pine Ridge; south of the Withlacoochee River and Lake Rousseau.

Levy County

Evacuate Zone 3: Out to 10 miles from the Crystal River Energy complex as described by the following: areas north of the Withlacoochee River and Lake Rousseau and south of the Highway Patrol Station on U.S. 19.

Evacuation Routes:

Evacuees north of the Progress Energy railroad tracks should proceed north on U.S. Hwy. 19/98 to public shelters in _____. Evacuees south of the Progress Energy railroad tracks should precede south on U.S. Hwy. 19/98 and east on State Road 44 to public shelters in _____.

2.9.8.2 Levy Nuclear Plant

Refer to Figure 18-C and 18-D.

2.9.9 Special Population Evacuation

2.9.9.1 Evacuation of Mobility Impaired Residents/Special Needs

Mobility impaired residents who require special evacuation assistance should be registered with the Levy County Emergency Management Division. The Levy County Health Department has primary responsibility for safe movement of those people on the Special Needs list during an evacuation. When a decision to evacuate an area is made during an emergency, the Director of Emergency Management or designee will coordinate notification to the Health Department, Nature Coast Transit, Public School Board, and the Emergency Medical Services. **(Refer to REP SOP 5 "Special Needs")**.

A. Evacuation procedure, **REP SOP 5 "Special Needs"** should be implemented during a **"Site Area Emergency"** declaration by the Crystal River or Levy Nuclear Plants. It may be implemented earlier by the Emergency Management Director or designee, depending on the emergency situation. If the emergency involves a Hostile Action Based event the Emergency Management Director or designee may not implement the Special Need procedure due to the potential for hostile forces present in the community.

B. An Emergency Alert System (EAS) announcement will be made describing the geographical area affected and containing instructions for special contacts to the people with Special Needs.

C. The Levy County Health Department should implement their procedure for calling each individual residing within the Crystal River and/or Levy Nuclear Plant 10-mile EPZ on the Special Needs Call List. **(Refer Appendix 6, "Citizens with Special Needs Residing Within the Crystal River or Levy Nuclear Plant 10-mile WPZ").** They should inform the Citizens on the Special Needs Call List residing within the Crystal River and/or Levy Nuclear Plant 10-mile EPZ of the Emergency at the Crystal River or Levy Nuclear Plant and request them to evacuate

to the Special Needs Shelter **See 2.9.9.1 D**. **(Refer to Figure 14A "Public Shelter Location Map" and Figure 14B "Public Shelter List").**Citizens that need transportation services should be informed to prepare to be transported to the Special Needs Shelter by the on of the following:

EMS
Levy County School Board
Nature Coast Transit

D. All people with Special Needs will be evacuated to the Bronson Elementary School.

E. Those requiring hospitalization will be transported to Citrus Memorial Health System.

F. Those who have not registered for special evacuation assistance will be instructed to call the EOC.

G. The Levy County School Board has the responsibility of providing supplemental transportation for those who **CANNOT** evacuate on their own.

H. Levy County Emergency Medical Services is responsible for assisting in evacuation of those people who have medical or life support equipment. Levy County Transit will assist with evacuation of those people who are immobile, bedridden or too debilitated to be moved without special skilled assistance.

I. Once every two years an emergency planning brochure will be mailed to everyone in the Crystal River and Levy Nuclear Plant 10-mile Emergency Planning Zone (EPZ). This document will contain a tear out postage paid card for people with Special Needs to complete and mail to the Levy County Emergency Management Office. Forms and more information on the Special Needs Program will be mailed out to the Special Needs Citizens when needed. The Special Needs citizen's information will be secured in a computer database at the EOC. The Special Needs list will be updated on a yearly basis. (Required by **NUREG 0654**).

J. At least once each year, each local utility company that sells electrical service to residents of Levy County will include in their monthly billing, information on the Special Needs Program. **(Ref: Florida Statute 252.355 (2)).**

2.9.9.2 Evacuation of Schools and Early Learning Centers (Day Care Centers)

The Evacuation of all Schools and Early Learning Centers within the Crystal River and/or Levy Nuclear Plant 10-mile EPZs will be implemented during a declared **Site Area Emergency** at the Crystal River and/or Levy Nuclear Plants. If the Emergency Management Director or designee with coordination of the Chairperson of the Board of County Commissioners deems it necessary, the children may be evacuated during a declared Alert Emergency. **(Refer to Section III, Part 2.8.3 "Radiological Exposure Control/School Children".**

There is one Public School (Yankeetown School) within the Crystal River Nuclear Plant 10-mile EPZ. There is one Public School (Yankeetown School)

within the Levy Nuclear Plant 10-mile EPZ.

If the emergency involves a Hostile Action Based event the Emergency Management Director or designee may not implement the evacuation procedure due to the potential for hostile forces present in the community.

The Levy County School Board has the responsibility for the safe movement of the School children to their pre-designate public shelter locations. When a decision to evacuate the School in Yankeetown is made during an emergency, the Emergency Management Director or designee will coordinate with the School Board's Executive Director of Management Services on the following: **(Refer to REP SOP 20 "Levy County School Board")**. **(Also refer to Figure 19A "Day Care Centers in the Crystal River Nuclear Plant 10-mile EPZ", Figure 19B "Day Car Centers in the Levy Nuclear Plant 10-mile EPZ", Figure 20A "Day Care in the Crystal River Nuclear Plant 10-mile EPZ Location Map" Figure 20B "Day Care in the Levy Nuclear Plant 10-mile EPZ Location Map")**.

- The relocation of the School Children.

- Providing information to the parents on the relocation of the students and when/where the parents could pick up their children.

A. Early Learning Centers (Day Care Centers)

Children in Early Learning Centers within the Crystal River and Levy Nuclear Plant 10-mile EPZ will establish their own individual disaster plans which will include an evacuation procedure in the event of an incident at the Crystal River and/or Levy Nuclear Plant that will require evacuation of their facility. The plans should also include information to be provided to the parents of the children, informing them of the evacuation plan, how they will be contacted and for pickup arrangements by the children's parents. There are currently **NO** Early Learning Centers (Day Care Centers) within the Crystal River and Levy Nuclear Plant 10-mile EPZ for the Levy county zones

If an evacuation has been determined to be necessary within the Crystal River and/or Levy Nuclear Plant 10-mile EPZ by the Emergency Management Director or designee and the Chairperson for the Board of County Commissioners, the Emergency Management Director or designee will implement the procedure to call all the Early Learning Centers in or near the Crystal River or Levy 10-Mile EPZ. **(See Figure 19A "Early Learning Centers (Day Care) Within and Near the Crystal River Nuclear Plant 10-mile EPZ", Figure 19B "Day Center in the Levy Nuclear Plant 10-mile EPZ". Also see Figure 20A "Map of Early Learning Center (Day Care) in the Crystal River Nuclear Plant 10-mile EPZ Locations")**. The Day Care Centers will be informed of the emergency and be given pertinent information. They will be told to implement their Disaster/Evacuation Plan.

Transport of the children from Early Learning Centers will take approximately one hour in good weather and up to two and three-fourth

hours in adverse weather conditions as per the Florida DOH/Bureau of Radiation Control procedures.

B. Public Schools

Children in Levy County public schools within the affected area will be evacuated by school buses to pre-determined locations as follows:

YANKEETOWN SCHOOL – to Hilltop School Located at 1 Eagle Drive Bronson, FL.32621

C. Parents will be advised via the broadcast media where to pick up their children. Additional information on evacuation procedures is published and distributed annually through the county school system.

2.9.9.3 Evacuation of Seven Rivers Medical Center

Seven Rivers Regional Medical Center is the only hospital located within the Crystal River and Levy Nuclear Plant 10-mile EPZs. The hospital Administrator has the responsibility to develop there own disaster plan. According to the hospital's plan, the patients and staff will exercise In Place Sheltering due to the hospital possessing a ventilation/filtration system. The hospital will not evacuate unless patient and staff safety is compromised for any reason. If the Hospital Administrator deems it necessary to evacuate, the hospital patients and staff would relocate to Brooksville Regional Hospital and Spring Hill Regional Hospital. Nature Coast EMS and will assist with transportation. If necessary the Citrus County Department of Community Services will also assist.

Evacuation time estimates:

In good weather, with light to medium loads and readily available ambulances, evacuation of the facility would require three hours.

In adverse weather conditions, evacuation time would be approximately five hours and forty-five minutes.

2.9.9.4 Assisted Living and Nursing Homes

All Assisted Living and Nursing Homes within the Crystal River and Levy Nuclear Plant 10-mile EPZs will establish their own individual disaster plans including evacuation of there facilities in the event of an incident at the Crystal River and/or Levy Nuclear Plants. It should include the Host facility the residents would be relocated to.

If an evacuation has been determined to be necessary within the Crystal River and/or Levy Nuclear Plant 10-mile EPZs by the Emergency Management Director or designee and the Chairperson for the Board of County Commissioners, the Emergency Management Director or designee will make arrangements to call all the Assisted Living and Nursing Homes in or near the 10-Mile EPZs. **(See Figure 21A List of all "Assisted Living and Nursing Homes within and Near the Crystal River Nuclear Plant 10-**

mile EPZ", Figure 21B List of all "Assisted Living and Nursing Homes within and near the Levy Nuclear Plant 10-mile EPZ. Also see Figure 22A "Map of Assisted Living and Nursing Home locations in the Crystal River Nuclear Plant 10-mile EPZ", and Figure 22B "Map of Assisted Living and Nursing Home Locations in the Levy Nuclear Plant 10-mile EPZ"). The Assisted Living and Nursing Home managers will be informed of the emergency and be given pertinent information. They will be told to implement their Disaster/Evacuation Plan. All the residents in the Assisted Living and Nursing Homes will be relocate to Host Facilities outside both 10-mile EPZs.
Currently there are **NO** Assisted Living Facilities or Nursing Homes inside the Levy County Zones within the Crystal River and/or Levy Nuclear Plant 10-mile EPZs

2.9.9.5 Offshore Areas and Waterways

The Florida Fish and Wildlife Commission (FWC) are responsible for evacuation of the offshore areas within the Crystal River and Levy Nuclear Plant 10-mile EPZs. **(Refer to REP SOP 32 "Florida Fish and Wildlife Commission". Also see Figure 15A "Crystal River Nuclear Plant 10-mile EPZ Sector Map and Figure 15B "Levy Nuclear Plant 10-mile EPZ")**. Offshore areas include the Gulf of Mexico, Crystal River, Withlacoochee River and Ozello waterways.

The Coast Guard out of Yankeetown will assist in the evacuation process of boaters in the Gulf of Mexico.

The Florida Wildlife commission (FWC) has estimated that it will take about six hours to evacuate all boaters from the area in clear weather; adverse conditions would require an additional two hours

A. Boat traffic evacuated from the off shore areas within both 10-mile EPZs, (Gulf of Mexico and the Crystal River), will be directed to remove their boats at one of three boat ramps, depending on which ramp they are closest to. Boaters will be directed to either the Fort Island Trail, County boat landing at the Gulf Beach, Fort Island Trail Park, County boat landing on the Crystal River , boat landing below the east side of the Cross Florida Barge Canal bridge and Yankeetown boat ramp. Transportation to public shelters for those without vehicles should be provided as necessary by school buses or County Transit.

B. Boaters in the Withlacoochee River will be directed to a boat ramp as coordinated with the Emergency Management Director or designee and FWC.

C. Boaters in the Ozello waterways will be directed to a boat ramp as coordinated with the Emergency Management Director or designee and FWC.

2.9.10 Personnel and Vehicle Monitoring and Decontamination

The Personnel Monitoring and Wash Down Stations should be set up during a declared Site Area Emergency at the Crystal River and/or Levy Nuclear Plant. During a Hostile Action Base event at the Crystal River or Levy Nuclear Plants, the Emergency Management Director or designee has the option of not setting up the Wash Down Station or the Reception Center due to the potential threat of hostile force

present in the community. **(Refer to Step 2.5 "Reception Center, Radiological Personnel Monitoring Station and Wash Down Station"**

Vehicle Monitoring and Wash Down Stations should be set up for emergency worker vehicles in the location determined to be appropriate by the Emergency Management Director or designee to inspect the evacuation traffic for radioactive contamination and to decontaminate vehicles as appropriate. Emergency traffic control personnel will divert traffic when necessary to insure the inspection of the emergency vehicles.

Personnel Monitoring Stations **should** be established at the Reception Center and at the Wash Down Stations to monitor personnel and evacuees for contamination. The Personnel Monitoring Station at the Reception will be set up and staffed by the Fire Rescue.

All radiation monitoring will be performed by trained Fire Rescue personnel utilizing kit CD V-777 (or equivalent) Emergency Response Kits in accordance with **REP SOP 21 "Fire Rescue"**.

Arrangements between the Fire Chief or designee and the REP Coordinator or designee should be made to distribute Instrument and Dosimeter Kits to the Fire Rescue Monitoring Personnel at the Personnel Monitoring Stations and Vehicle Wash Down Stations. The "Radiological Equipment Issue Form" should be filled out as the dosimeters and radiation instruments are being distributed. **(Refer to Figure 26 "Radiological Equipment Issue Form").** The limits of contamination that determine the need for decontamination of personnel and vehicles is, any instrument response greater than two times background. **(Refer to REP Sop 21 "Fire Rescue")**.

(Refer to Section III, Part 2.5 "Requirements for Reception Center, Personnel Monitoring and Wash Down Stations" for set up requirement during an Alert Emergency, Site Area Emergency and General Emergency).

(Refer to Section III, Part 2.9.7.6 "Reception Center, Personnel Monitoring Centers and Vehicle Wash Down Station - Responsibility of set-up").

(Refer to Section III, Part 2.9.11 "Reception Center" for guidelines).

2.9.10.1 Wash Down Station (Emergency Vehicle Decontamination)

The Wash Down locations should be determined during a declared Site Area Emergency and will depend upon information coming from Progress Energy, Florida Department of Health, traffic conditions weather conditions and resources available. During a Hostile Action Base event at the Crystal River and/or Levy Nuclear Plants, the Emergency Management Director or designee has the option to not set up the Wash Down Station due to the potential threat of Hostile forces in the community. **(Refer to REP SOP 21 "Fire Rescue" for Wash Down Station set procedures).**

Wash Down Station Flow Path

Step 1- Vehicles will be directed into the vehicle monitoring area to be monitored by radiation monitoring personnel.

Step 2 Vehicles determined to be non-contaminated will be directed out of the Wash Down Area. Contaminated vehicles will have the "Vehicle

Contamination Form" filled out as identified in **Figure 24**. The contaminated vehicle will then be directed from the monitoring area to the Brush and bucket area.

Step 3 The vehicle will then be with scrub brushes and rinsed off with high pressure fire lines.

Step 4 Once through the Wash Down area, the vehicle will be re-monitored paying special attention to the area on the vehicle first found during the step 1. If the vehicle is found to be still contaminated, the vehicle will be directed to back up and repeat step 2 and 3.

Step 5 After the vehicle is found to be clean of contamination in step 4, the driver will be asked to open the driver door in preparation for personnel monitoring. The driver will have his/her body monitored as follows, head, face neck, hands feet. The interior of the vehicle will be monitored as follows; steering wheel, ignition, gear shifter, radio, door handle, window/lock switch control, brake/gas peddle, and floor. Ask driver if he had passengers. If the answer is yes monitor the passenger side area. If no contamination is found, the vehicle will be directed out of the Wash Down Area. If any contamination is found, the vehicle will be directed to the impound area and the driver will be provided gloves and booties and escorted to the Personal Monitoring and Decontamination Area.

Step 6 At the Personnel Monitoring Area, the driver will have a whole body survey performed from head to toe to confirm the contamination and find additional contamination locations. After all the contamination locations have been identified the "Personnel Contamination Form" as identified in **Figure 23** will be filled out. The driver will then proceed through the Personnel Shower Tent. After the individual has been decontaminated he will be provided a disposable suit with gloves and boots and be directed out of the Wash Down Area.

2.9.10.2 Personnel Decontamination

Personnel will be monitored while going through the Vehicle monitoring and Wash Down process. Those personnel who are suspected of being contaminated will be directed to the Vehicle Impound Area, given booties and gloves, then directed to the Decon Shower Tent. Radiation monitoring personnel will thoroughly check the personnel for contamination levels in excess of the established limits. Contaminated personnel will shower and exchange contaminated clothing for uncontaminated clothing or paper coveralls.

The names, addresses and contamination information of personnel requiring decontamination should be recorded on the **"Personnel Contamination Form"**, and submitted to the REP Coordinator or designee. **(See Figure 24)**.

Personnel that cannot be decontaminated to acceptable levels will be transported to Citrus Memorial Health System by EMS.

(Refer to REP Sop 21 "Fire Rescue")

2.9.10.3 Radioactive Waste Disposal and tools and equipment disposition

All tools and equipment will be monitored for Radioactive Contamination. Any contaminated tools, clothing, equipment and other material that are found to be contaminated will be placed in plastic bags, tagged, placed in suitable containers for later disposition, under the direction of the Emergency Management Director or designee, Progress Energy, County Health Department and the Florida Department of Health. Coordination with Progress Energy will be made to retrieve all Radioactive Contaminated Waste.

Water used for tool and vehicle decontamination will be allowed to run into suitable collection ditches, holding ponds, and other secure areas. These collection areas used for decontamination will be monitored for residual contamination. Any site found to retain Radioactive Contamination will be appropriately posted as a "Contaminated Area" and be under the control of the Emergency Management Director or designee, Levy County Health Department, Fire Rescue and secured by the Sheriff's Office and State Law Enforcement agencies. The Areas will be decontaminated with the assistance from the Florida DOH personnel and other appropriate federal and state agencies.

2.9.10.4 Radiation Detection Instruments

Currently, Levy County has CDV-777 radiological emergency instrument response kits located in the EOC. Levy County REP Coordinator or designee will inventory and inspect the radiological monitoring equipment after each exercise and at least quarterly to assure that they are operational. Local operability checks will be performed on all monitoring equipment at least once each calendar quarter and after each use.

Defective radiological monitoring instruments will be exchanged by the State Department of Health Radiological Instruments Maintenance and Calibration Facility in Orlando. Calibration of the instruments will be in accordance with intervals recommended by the suppliers.

Dosimetry Kits and radiation instruments will be assigned to Fire Rescue team assigned to staff the Wash Down and Personnel Monitoring Stations. The emergency workers will verify the dosimeters are set to zero and fill out the included dose cards. The emergency workers will also perform a pre-operational check on their assigned instruments and determine the background readings prior to use.

2.9.11 Reception Center

The County Health Department is responsible for setting up the Reception Center for the distribution of KI and with American Red Cross for Mass Care, support decontamination operations, health and disease prevention measures, personal hygiene, and coordinating procurement of medical service support at the Reception Center/ Public Shelter(s). **(Refer to Section III, Part 2.8.1.6 "Potassium Iodide, Part 2.5 "Reception Center, Radiological Personnel Monitoring Station and Wash**

Down Stations", and Refer to Section III, Part 2.9.7.6 "Reception Center, Personnel Monitoring Centers and Vehicle Wash Down Station - Responsibility of set-up").

(Also Refer to REP SOP 16 "Levy County Health Department" and REP SOP 21 "Fire Rescue" for Reception Center set up procedures).

During the **Alert Emergency** classification level, the Levy County Health Department Director will be notified by the Emergency Management Director or designee to give notification of an Alert Emergency at the Crystal River and/or Levy Nuclear Plants. The Levy County Health Department Director or designee should begin to review **REP SOP 16 "Levy County Health Department"**. He/she should also prepare to begin the process for setting up the Hilltop School Reception Center and to deal with a potential radioactive material release. One of the possible isotopes that could be released is Iodine 131. This radioactive agent has an affinity for the thyroid gland. Although the total whole body exposure would be expected to be very light, any Iodide 131 ingested in any manner will ultimately be absorbed in the thyroid gland. The concentration of radioactivity in the gland could have serious consequences. As protection against such a phenomena, potassium iodide **(KI)** can be administered prior to or during an exposure from Iodine 131. This form of iodide from **KI** is not radioactive and will saturate the thyroid with stable Iodine. In doing so, the harmful Iodine 131 is blocked from entry to the gland and will be eliminated from the body with relatively little damage or effect.

During a Hostile Action Base event at the Crystal River or Levy Nuclear Plants, the Emergency Management Director or designee has the option to not set up the Reception Center due to the potential threat of Hostile forces in the community.

During the **General Emergency** classification level, a situation may be occurring at the Crystal River or Levy Nuclear Plants that may cause an event that could produce a projected or actual thyroid radiation exposure from Iodine-131 to the public. Residents in the Crystal River and/or Levy Nuclear Plant 10-Mile EPZ will be advised to report to the Reception Center at WTI. The Emergency Management Director or designee will notify the Health Department Director or designee that public shelters will be opening. The public will receive notification of **KI** availability at the Reception Center (Hilltop School) via emergency broadcast announcements using **EAS MESSAGE # 18**. **(See Appendix 2 "EAS MESSAGE" # 18 "General KI Distribution). CodeRED may also be utilized to provide this information.**

2.9.11.1 Registration

Registration of evacuees will be conducted at the Reception Center located at Hilltop School. Registration personnel will use public shelter registration forms in accordance with **REP SOP 16 "Levy County Health Department"**. Registration data will be tabulated and submitted to the Levy County EOC and the State EOC.

2.9.11.2 Reception

Reception centers/registration and Mass Care will be established to provide food, medical and health care services, and temporary public shelter to evacuees. Levy County's Reception Center will be located at the Hilltop School at 1 Eagle Drive in Bronson. After a previously agreed upon length of stay at a Reception Center, evacuees may be relocated to other public shelter facilities.

2.9.12 Control of Foodstuffs

A radiological emergency at the Crystal River and/or Levy Nuclear Power Plants can adversely affect the safety of the food supply for humans and livestock. Human and animal foods may become contaminated. The health and productivity of farm livestock may be adversely affected through exposure to Radioactive Contamination. The physical boundary of these adverse situations cannot be defined in advance of an emergency; however, for the purpose of this plan, a geographical area within a circle having a 50-mile radius from the Crystal River and Levy Nuclear Power Plants will be defined as the Ingestion Pathway Zone (IPZ). **(See Figure 2A "Crystal River Nuclear Plant 50-mile IPZ" and Figure 2B "Levy Nuclear Plant 50-mile IPZ")**.

To prevent the ingestion of radioactive material in harmful quantities, the Food and Drug Administration (FDA) and Environmental Protection Agency (EPA) has established **PAGs** which are shown in **Figure 3C "Ingestion PAGs"**. **(Refer to Section 2.9.1 "EPA Protective Action Guidelines (PAG)"**.

The Extension Services Director / County Agent's Office representing the Agricultural Agent will be responsible for the safety of the food supply for humans and livestock. **(Refer to REP SOP 29 "Extension Services Director/County Agent's Office" and REP SOP 31 "Control of Food Stuffs".**

In the event of a radiological emergency at the Crystal River and/or Levy Nuclear Power Plants, the State Emergency Management ESF 8 and its support agencies will continuously monitor the area within the **50-mile IPZs**. The State Emergency Management ESF 8 and its support agencies will advise the agricultural community of protective actions necessary to reduce the risk of contamination of farm livestock and farm products. Monitoring and laboratory analysis will be performed by Progress Energy and/or Florida DOH/BRC to determine the degree of contamination to human foods and livestock foods. If necessary, control of the food chain will be initiated and continued until termination of undesirable conditions.

During a declared **Site Area Emergency** the Emergency Management Director or designee should recommend farmers to place milk producing animals within 2-miles of the plant on stored feed and assess the need to extend the distance. If the situation at the nuclear plant progressively gets worst and a **General Emergency** is declared, the Emergency Management Director or designee should recommend farmers to place milk producing animals within 10-miles of the nuclear plant to shelter the animals and place them on stored feed. If the emergency involves a Hostile Action Based event the Emergency Management Director or designee may not recommend to put the milk producing animals on stored feed due to the potential for hostile forces to be present in the surrounding community.

Florida DOH/BRC will advise the agricultural community through the Levy County's EOC, Extension Services Office, U.S.D.A., and State Emergency Boards, of protective and precautionary actions required to reduce the risk of radiological contamination to livestock and farm products.

Florida DOH/BRC and its support agencies will monitor and conduct laboratory tests of human and animal foods. Recommendations will be made to the State Coordinating Officer or designee, Citrus County Emergency Management and other affected Counties of protective actions to be taken and will also perform the following:

2.9.12.1 Steps to prevent the spread of contamination

Take steps to prevent the spread of contaminated farm livestock feeds and human foods in the Crystal River and/or Levy Nuclear Plant 50-mile **IPZ**, advise the public on acceptability of foodstuffs for consumption, and determine the degree of protective control needed until unacceptable conditions have ceased.

Some Protective Actions that can be taken for Contaminated Foods are as follows:

A. Temporary embargoes to prevent contaminated food from being introduced into commerce.

B. Normal food production and processing action that reduce contamination in or on food to below Derived Intervention levels (DILs). A DIL corresponds to the concentration in food that could lead to an individual receiving a radiation dose equal to the Ingestion PAG. **(Refer to Figure 3C "Ingestion PAG")**.

C. Withhold contaminated milk from the market to allow radioactive decay of short-lived radionuclides. This may be achieved by storage of frozen fresh milk or frozen concentrated milk products. Storing for prolonged times at reduced temperatures, also is feasible provided that ultra-high temperature pasteurization techniques are employed for processing. Finally, the diversion of fluid milk for production of dry whole milk, nonfat dry milk, cheese, butter or evaporated milk which can be held for decay.

D. Wash, brush, scrub or peel fruits and vegetables to remove surface contamination or preservation by canning, freezing or dehydration to allow for decay.

E. Milling or polishing grains to remove the contaminated portion.

F. Use a process to remove surface contamination for other food products.

G. For meat and meat products, intake of Cs-134 and Cs-137 by an adult through the meat pathway may exceed that of the milk pathway; therefore, levels of Cesium in milk approaching the "response level" should cause surveillance and protection actions for meat as appropriate.

H. Blending of contaminated food with uncontaminated food is not permitted because this is a violation of the Federal Food, Drug and Cosmetic Act (FDA 1991).

Some Protective Actions that can be taken for Contaminated Animal Feed are as follows:

I. Remove lactating dairy cows and consumable meat animals from contaminated pastures and substitute with uncontaminated stored feed and water.

J. Corralling livestock in an uncontaminated area could be effective.

K. For animal feeds other than pasturage, action should be on a case-by-case basis taking into consideration the relationship between the radionuclide concentration in animal feed and the resulting concentration of the radionuclides in human food. For hay and silage fed to lactating

cows, the concentration should not exceed the equivalent of that recommended for pasture.

2.9.12.2 Continue to evaluate the Radiological Contamination

During recovery, continue to evaluate radiological contamination of livestock feeds and human foods in the Ingestion Pathway Zone, advise the public on acceptability of foodstuffs for consumption, and determine the degree of protective control needed until unacceptable conditions have ceased.

2.9.12.3 Test open sources of potable water

The Florida DOH/BRC will test open sources of potable water and provide recommendations of Protective Actions to the State Coordinating Officer or designee so the public can be fully informed.

2.9.13 Medical and Public Health Support

Citrus Memorial Health System and Seven Rivers Regional Medical Center are the local hospitals where medical services for radiological injuries can be received. Both hospitals are equipped and staffed to care for individuals with major radiation contamination. Both hospitals have developed and written their own individual procedures pertaining to the care of radiologically injured patients.

The Florida Department of Health and Progress Energy has obtained a "Letter of Agreement" with both, Citrus Memorial Health System and Seven Rivers Regional Medical Center to ensure proper medical services for persons who are injured or become sick during a radiological emergency in the Crystal River Nuclear Plant. **(See Figure 25A "Letter of Agreement-Citrus Memorial Health System" and Figure 25B "Letter of Agreement-Seven Rivers Regional Medical Center").** The Florida Department of Health and Progress Energy have also obtained a "Letter of Agreement" with Levy County Emergency Medical Services to provide ambulance services. **(See Figure 25C "Letter of Agreement-Nature Coast EMS")**.

2.9.13.1 Medical Support

A radiological emergency at the Crystal River or Levy Nuclear Plants can present actual or potential radiological health hazards to individuals within the radiologically effected areas. It is imperative that capabilities exist for treating contaminated or acutely irradiated individuals. An on going capability for emergency care and transportation of victims of accidents and sudden illness and special needs populations during evacuation must also exist.

Coordination of the delivery of medical and health services for victims of radiological emergencies is the responsibility of the Levy County Emergency Management Director or designee and Florida Department of Health as the lead agency. The Florida Department of Health Emergency Coordinating Officer is designated by the Governor or Secretary of State or designee for the response and recovery efforts associated with a disaster. The Florida Department of Health will coordinate with Citrus Memorial Health System, Seven Rivers Regional Medical Center and EMS in Citrus County. Communications between the hospitals and EMS will be performed via local EMS medical services communication systems.

LEVY COUNTY
RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
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SECTION IV RECOVERY

SECTION IV RECOVERY

MISSION

The mission of this section is to describe details of those short term recovery/re-entry and long term recovery operations which are unique to radiological emergencies and to provide the Emergency Management Director or designee with the capability of implementing the safe re-entry to their places of residence and/or employment of the members of the general public who have been relocated under one of the "**Protective Action Response Options" described in Section III, Part 2.9.**

The Recovery Phase is the final stage of the Radiological Emergency Preparedness (REP) Program. During recovery, a planned effort is made to restore the normal quality of life to the community. Operationally, recovery begins during the Response Phase and continues until the restoration of community life has been completed.

Recovery operations for radiological emergencies consist of two operational parts:

Short Term Re-entry Operations:

Re-entry from a radiological emergency shall commence only after all emergency initiating conditions have ended and the threat to public health and safety from a release of radiation no longer exists. The following shall be confirmed before initiating re-entry operations:

A. Safe shutdown of the Crystal River and/or Levy Nuclear Plants.
B. Radiological materials are under controlled confinement.

Long Term Recovery Operation:

Aside from long term radiation and medical monitoring programs, long term recovery operations are generic to all emergencies. For details and guidelines for the implementation of long term recovery operations, refer to the "State Comprehensive Emergency Management Plan" and the "State of Florida Radiological Emergency Management Plan".

Levy County Re-entry Program

Levy County is currently working on a County Wide Re-Entry Plan.

1. Relocation and Re-entry

The Bureau of Radiation Control will make recommendations to the State EOC and Levy County EOC to take action under reasonable circumstances to relocate persons living in contaminated areas; to allow re-entry of persons needing to re-enter contaminated areas to work, gather possessions, take care of livestock and so on; and to allow the return of persons who have been evacuated and who live in areas which turn out to be uncontaminated or slightly contaminated.

1.1 Relocation

The term relocation refers to the removal or continued exclusion of people from contaminated areas to avoid **Chronic (long term)** radiation exposure.

1.2 Re-entry

Re-entry means the temporary admittance into a restricted zone under controlled conditions.

The State Coordinating Officer, the Emergency Management Director or designee, Chairperson of the Board of County Commissioners, State ESF 8, federal agencies (including the Department of Energy and the Environmental Protection Agency), and Progress Energy will coordinate regarding the suitability and feasibility of allowing re-entry into the impact area. Prior to allowing public access to potentially contaminated areas, the Florida Department of Health field teams will evaluate the environmental conditions in the affected areas by conducting direct radiation measurements and collecting environmental samples for laboratory analysis. Land and aerial sampling will proceed from the perimeter of the affected areas to the interior.

1.3 Tasks to Accomplish to Provide Public Protection

Following the passage of an airborne plume of Radioactive Material, several tasks must be accomplished to provide public protection. Relocation of persons must be based on field exposure measurements and subsequent dose projections. Monitoring and dose assessment by the Florida Dept. of Health/Bureau of Radiation Control will continue during clean-up with priority given to highly contaminated areas. **(Refer to Florida Dept. of Health/Bureau of Radiation Control SOP 16, "Protective Action Guides").**

A generalized sequence of events is given below, but the time frames of the events will overlap:

1.3.1 Determination of the First Year Dose

Based on field data, the Bureau of Radiation Control technicians will determine the areas where projected first year doses will exceed the 2 Rem Intermediate Phase PAG and relocate these persons, starting with those in the highest exposure areas. **(Refer to Figure 3B "PAG for Intermediate Phase of a Nuclear Plant Accident)**.

1.3.2 Allow Some Persons to Return

Allow persons to return in areas where evacuation has taken place but field measurements show that radiation levels are equal to or less than twice background. Buffer zones may need to be established near highly contaminated areas to prevent exposure.

1.3.3 Establishment of Restricted Zones

The Bureau of Radiation Control technicians will determine the Isotope dose Line corresponding to the **Intermediate Phase PAG (see Figure 3B)**, establish the Restricted Zone and relocate persons still inside the zone. The Restricted Zone may include areas which do not currently meet the Intermediate Phase PAG but may do so in the future due to the movement of contamination or areas that due to geographical, access control, or other reasons were necessary to include in the Restricted Zone in order to control the Relocation Zones. "Evacuees" from areas now established as a part of the Restriction Zone will be classified as relocated persons. Evacuated persons living between the Relocation Zone and the Plume Zone may gradually return as field measurements and dose projections warrant.

1.3.4 Evaluation of Decontamination Techniques and Sheltering

The Bureau of Radiation Control technicians will evaluate simple decontamination techniques and sheltering for their possible dose reduction capabilities. Results of these methods could influence future recommendations for persons in the Plume Zone but outside the Restricted Zone.

1.3.5 Control Access Into and Out of Effected Area(s)

The State EOC will coordinate with the Emergency Management Director or designee and the Chairperson of the Board of County Commissioner to establish a mechanism for controlling access to and egress from the Restricted Zone. Typically this is accomplished at the Control Points on streets and roads leading into the Restricted Zone. The coordination will also include the establishment of monitoring and decontamination points to support the control of the Restricted Zone.

1.3.6 Implementation of Decontamination Techniques

The State EOC with the County Emergency Management Director or designee will coordinate the implementation of decontamination techniques in contaminated areas outside the Restricted Zone. The areas decontaminated should start with those of the highest activity or where pregnant women are in residence.

1.3.7 Establish a Long Term Operations Plan

The Florida Division of Emergency Management in coordination with the County Emergency Management Director or designee and Chairperson of the Board of County Commissioners will establish a long term operations plan based on field measurement, laboratory analysis, dose projection and evaluations of various decontamination and recovery techniques.

1.3.8 Recover Contaminated Property

Begin to recover contaminated property in the Restricted Zone

2. Recovery And Return

Recovery and Return operations will begin and **SOP 26 "Recovery and Return"** shall be implemented when the radiological emergency has been brought under control and no further significant releases are anticipated. Decisions to relax protective measures which have been implemented during the declared Crystal River and/or Levy Nuclear Plant emergency, will be based on both, the evaluation of radioactive exposure levels which exist at the time of consideration and the projected long-term exposure which may result in dose commitments to residents and transients in the affected area(s).

2.1 Recovery

It is during this phase that decontaminated land, buildings and other materials will be returned to unrestricted use by the public.

All recovery operations should be coordinated and directed from the Progress Energy's Emergency Operation Facility by the State Coordinating Officer or designee and coordinated with the Emergency Management Director or designee and the Chairperson of the Board of County Commissioners at the EOC.

In-state laboratory analysis of collected samples may be performed at the Department of Health's Health Physics Lab (Orlando), and the Mobile Emergency Radiological Lab. Additional laboratory assistance may be requested from the United States Department of Energy (Savannah River Operations).

In the event the Crystal River or Levy Nuclear Plant must release limited amounts of radioactive gases to proceed with their recovery efforts, the releases should be coordinated with the State Coordinating Officer or designee and the Levy County Emergency Management Director or designee.

2.2 Return

The term Return in this part means persons may go back to their homes, with no restrictions. There may be restrictions placed on agricultural use of soil or bodies of open water, (i.e. ponds), for watering livestock. Persons who have been evacuated, but live in areas later determined to be outside the criteria where Intermediate Phase PAGs apply should be allowed to return. **(See Figure 3B "Intermediate Phase PAG)**. Additionally, as decisions are made concerning the effect of decontamination and clean-up efforts, those affected persons can be allowed to return when appropriate.

Return operations will be coordinated by the State Coordinating Officer or designee and the Levy County, Citrus County and Marion County Emergency Management Directors or their designees.

Upon the determination by the Bureau of Radiation Control Operations Officer that the environmental conditions in the affected areas are safe for public access, a recommendation to relax protective actions and begin return operations will be made to the State Coordinating Officer or designee, Levy, Citrus and Marion County Emergency Management Directors or designees. No return will be authorized without the concurrence of the State Coordinating Officer or designee. Levy County Emergency Management Director or designee will coordinate local return activities from the Emergency Operation Center and will keep the State Emergency Operation Center and Levy County Emergency Operation Center informed. Cleared areas will be opened when clearly definable geographic boundaries are available (i.e., highways, streets, canals).

2.3 Estimates of Population Exposure

Estimates of population exposure will be made following the return operations of the public based on methods developed in the United States Environment Protection Agency's "Manual of Protective Action Guides and Protective Actions for Nuclear Power Plants". (EPA 400-R-92-001, May 1992").

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RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
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SECTION V FIGURES

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RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN
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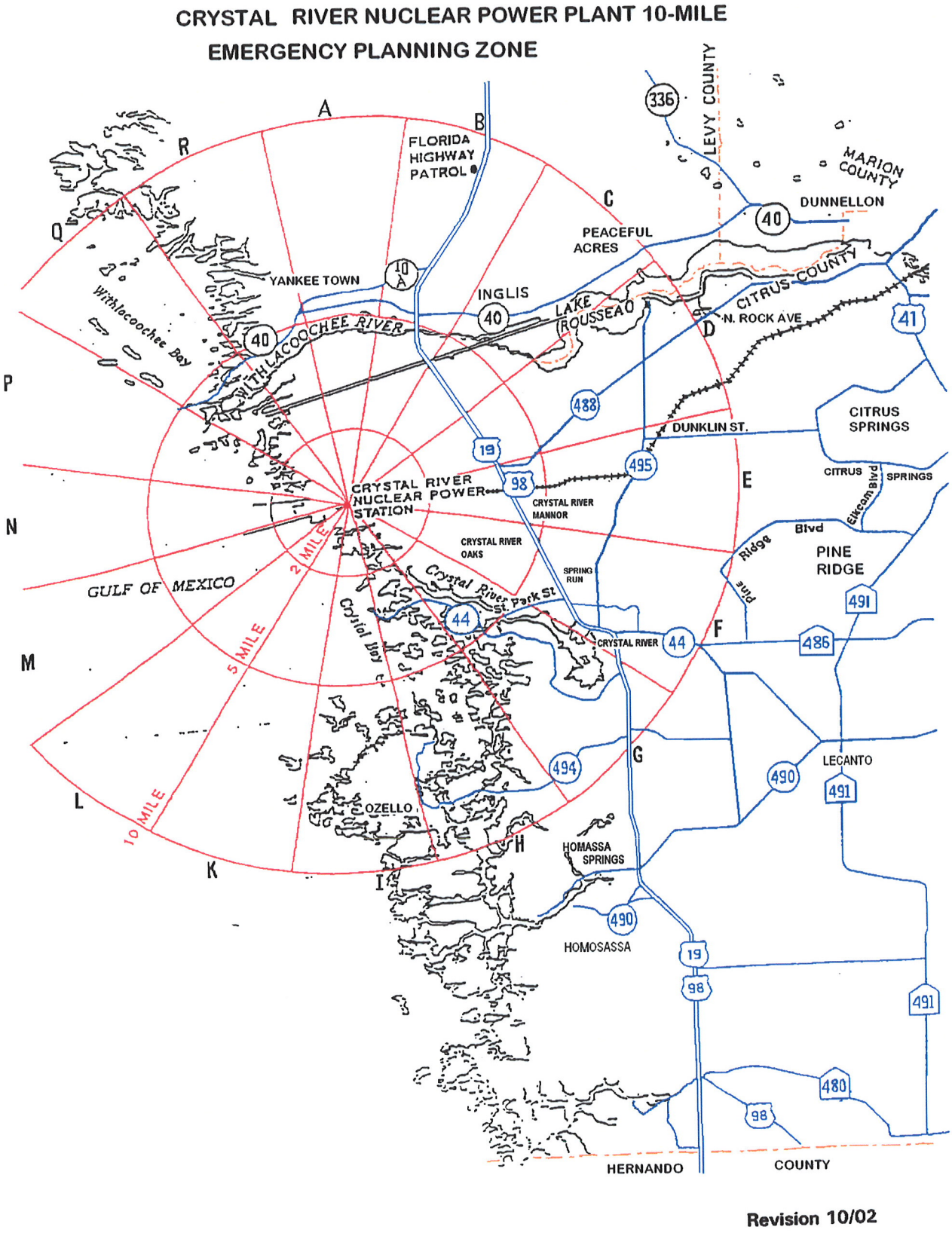
SECTION V FIGURES

Figure 1A



Revision 10/02

Figure 1B

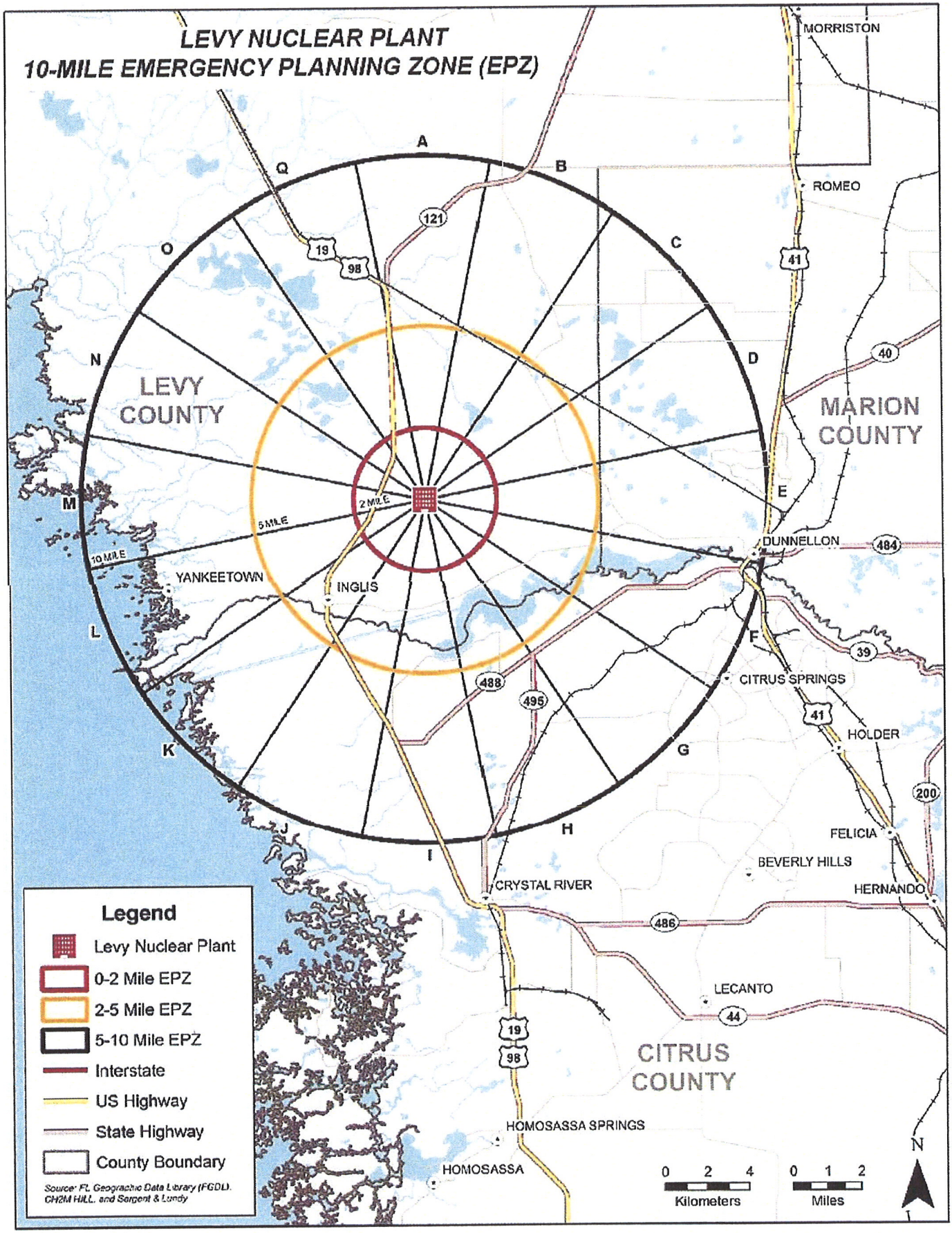

LEVY NUCLEAR PLANT
10-MILE EMERGENCY PLANNING ZONE (EPZ)
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
Q
2 MILE
5 MILE
10 MILE
LEVY COUNTY
MARION COUNTY
CITRUS COUNTY
MORRISTON
ROMEO
DUNNELLON
YANKEETOWN
INGLIS
CITRUS SPRINGS
HOLDER
FELICIA
BEVERLY HILLS
CRYSTAL RIVER
HERNANDO
LECANTO
HOMOSASSA SPRINGS
HOMOSASSA
121
19
98
41
40
484
39
488
495
200
486
44
Legend
Levy Nuclear Plant
0-2 Mile EPZ
2-5 Mile EPZ
5-10 Mile EPZ
Interstate
US Highway
State Highway
County Boundary
Source: FL Geographic Data Library (FGDL), CH2M HILL, and Sargent & Lundy
0 2 4
Kilometers
0 1 2
Miles
N

Figure 2A

Crystal River Nuclear Plant 50-mile IPZ

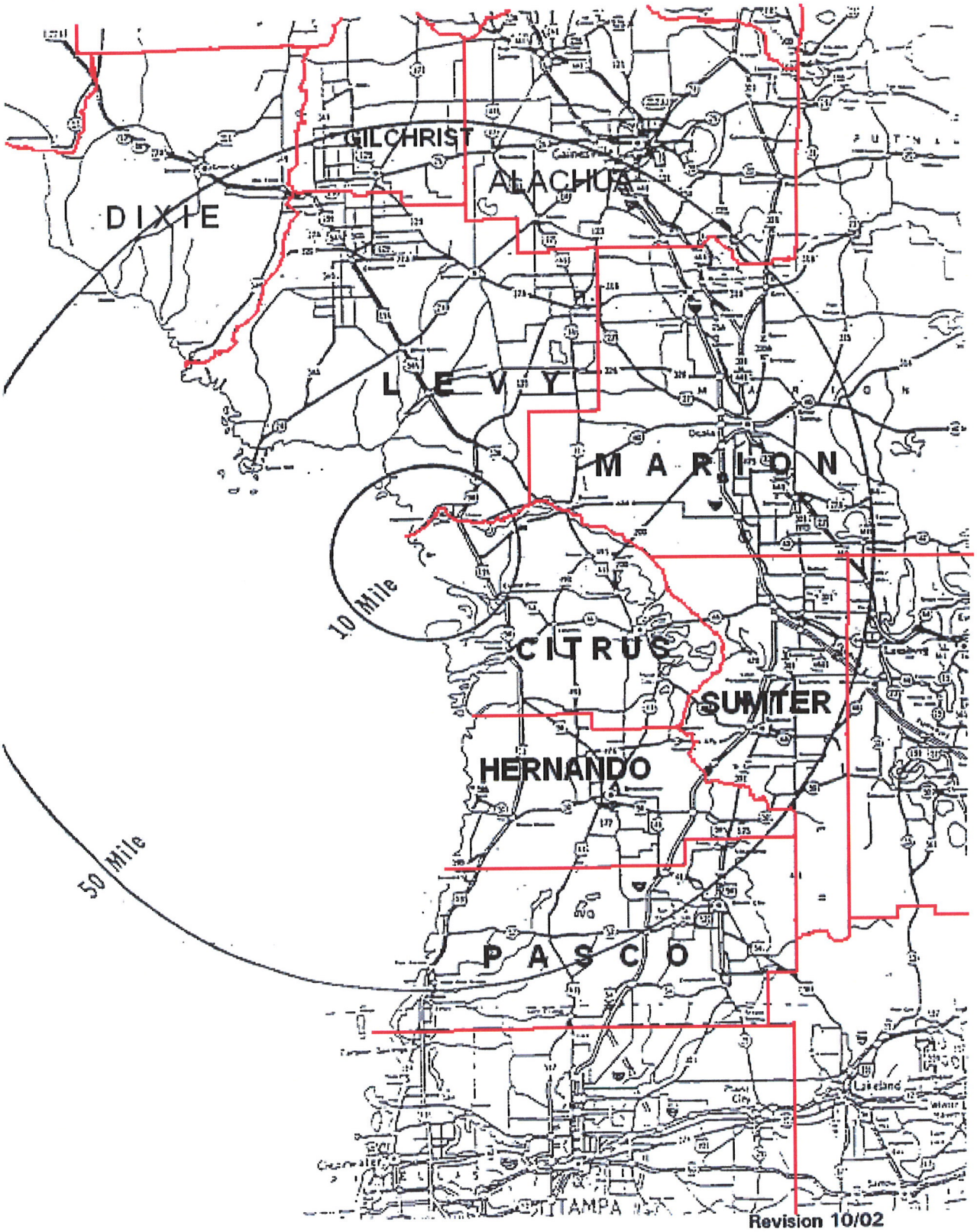


Figure 2B

Levy Nuclear Plant 50-mile IPZ

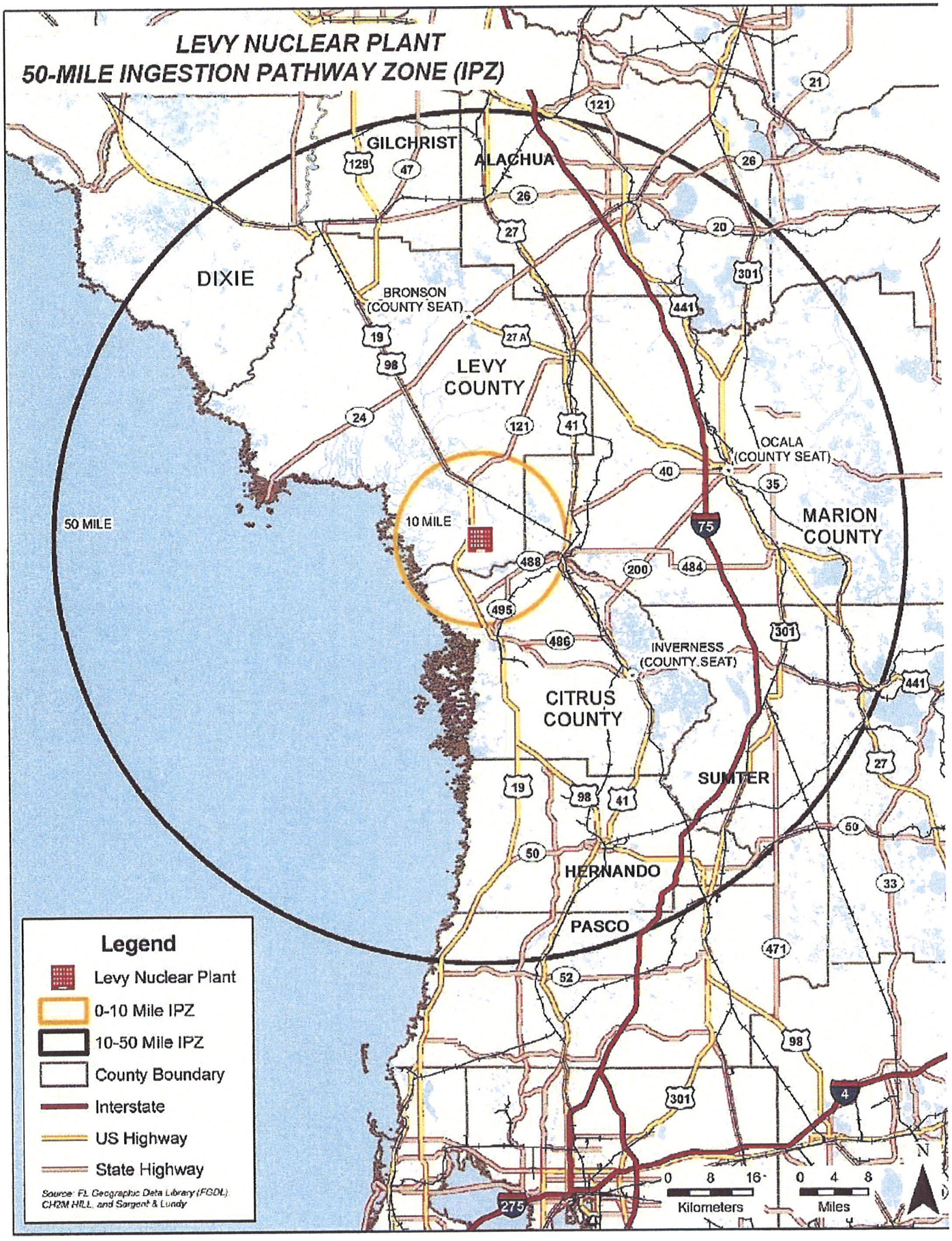


FIGURE 3A

ENVIRONMENTAL PROTECTION AGENCY
PROTECTION ACTION GUIDELINES
FOR THE EARLY PHASE OF A NUCLEAR INCIDENT (a)

(EVACUATION OR SHELTER PAG)

Protective Action	PAG (projected dose)	Comments
Evacuation (or sheltering) (see note b)	1 – 5 rem (see note c)	Evacuation **(**or, for some situations, sheltering (b)**)** should normally be initiated at 1 rem.
Administration of Stable iodine	5 - 25 rem (see note d)	Requires approval of State medical officials.
Skin SDE	50 to 250 rem	

Notes:

a. EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992 page 2-6.

b Sheltering may be the preferred protective action when it will provide protection equal to or greater than evacuation, based on consideration of factors such as source term characteristics, and temporal or other site-specific conditions.

c The sum of the Effective Dose Equivalent resulting from exposure to external sources and the Committed Effective Dose Equivalent incurred from all significant inhalation pathways during the early phase. Committed Dose Equivalents to the thyroid and the skin may be 5 and 50 times larger, respectively.

d Committed Dose Equivalent to the thyroid from radioiodine.

Figure 3B

ENVIRONMENTAL PROTECTION AGENCY
PROTECTION ACTION GUIDELINES
FOR EXPOSURE TO DEPOSITED RADIOACTIVITY
DURING INTERMEDIATE PHASE OF A NUCLEAR PLANT ACCIDENT (a)

(RELOCATION PAG)

Protective Action	PAG (b) (projected dose)	Comments
Relocate the general Population (or sheltering) (see note c)	≥ 2 rem	Beta dose to skin may be up to 50 times higher.
Apply simple dose Reduction techniques (see note d)	< 2 rem	These protective actions should be taken to reduce doses to as low as practicable levels.

Notes:

a EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992, page 4-4.

b The projected sum of effective dose equivalent from external gamma radiation and committed effective dose equivalent from inhalation of re-suspended materials, from exposure or intake during the first year. Projected dose refers to the dose that would be received in the absence of shielding from structures or the application of dose reduction techniques. These PAGs may not provide adequate protection from some long lived radionuclides, therefore, doses in any single year after the first can not exceed 0.5 rem, and the cumulative dose over 50 years including the first and second years can not exceed 5 rem.

c Persons previously evacuated from areas outside the relocation zone defined by this PAG may return to occupy their residences. Relocation or persons at high risk from such action (e.g. hospital patients under intensive care) should be evaluated individually.

d. Simple dose reduction techniques include scrubbing and/or flushing hard surfaces, soaking or plowing soil, minor removal of soil from spots where radioactive materials may have concentrated, and spending more time than usual indoors or in other low exposure rate areas.

FIGURE 3C

ENVIRONMENTAL PROTECTION AGENCY
PROTECTION ACTION GUIDELINES
FOR INGESTION OF CONTAMINATED FOODS (a)

(EVACUATION OR SHELTER PAG)

Type of Dose (b)	Organ of Interest	Projected Dose
Committed Effective Dose Equivalent	Whole Body	0.5 rem
Committed Dose Equivalent	Individual Tissue or Organ	5 rem

Notes:

a. FDA document “Accidental Contamination of Human Food and Feeds; Recommendation for State and Local Agencies” dated Aug. 13 1998.

b Whichever is more limiting.

FIGURE 4A

LEVY COUNTY AGENCY PRIMARY/SUPPORT RESPONSIBILITIES

Direction and Control	Primary: Board of County Commissioners and Division of Emergency Management Support: Florida Emergency Management
Emergency Alert and Notification	Primary: Sheriff's Office, Division of Emergency Management Support: Florida Emergency Management
Communications (ESF 2)	Primary: Sheriff's Office, Division of Emergency Management Support: - 911 Communications - Data Processing - ARES/RACES
Accident Assessment	Primary: State of Florida Emergency Management and Progress Energy Support: Division of Emergency Management, Inglis and Yankeetown Fire Departments
Protective Response	Primary: Board of County Commissioners and Division of Emergency Management Support: Levy County Health Dept., Florida Emergency Management, and Progress Energy
Public Alert and Notification	Primary: Board of County Commissioners and Division of Emergency Management Support: Inglis and Yankeetown Fire Departments, Sheriff's Office Patrol Division, Inglis Police Dept. and Department of Public Works
Public Information (ESF 14)	Primary: Board of County Commissioners and Emergency Management Support: Sheriff's Office Public Information Officer, and Progress Energy.
Radiological Exposure Control	Primary: Emergency Management Support: Board of County Commissioners and Florida Emergency Management
Decontamination	Primary: Emergency Management, Levy County Volunteer Fire Departments Support: Levy County Health Dept, and Department of Public Works
Control of Access to the Evacuated area	Primary: Emergency Management, Sheriff's Office Patrol Division Support: Municipal Police Department and State of Florida

FIGURE 4A (continued)

Field Monitoring and Sampling	Primary: Florida Emergency Management Support: Progress Energy
Fire and Rescue (ESF 4 and ESF 9)	Primary: Inglis and Yankeetown Fire Department
Emergency Medical Services (ESF 8)	Primary: 7 Rivers Regional Medical Center, Citrus Memorial Hospital Nature Coast Emergency Medical Services Support: Florida Emergency Management, LevyCounty Health Dept.
Law Enforcement (ESF 16)	Primary: Sheriff's Office Patrol Division Support: Inglis Police Department,
Transportation (ESF 1)	Primary: Levy County School Board Support: Nature Coast Transportation Services Levy County Emergency Medical Services
Food Quality (ESF 11)	Primary: State of Florida and Division of Emergency Management Support: American Red Cross, Levy County Volunteers
Potable Water Quality (ESF 11)	Primary: State of Florida and Division of Emergency Management Support: American Red Cross, Levy County Volunteer
Shelter and Sanitation	Primary: Levy County School Board, and Levy County Health Dept. Support: Levy County Volunteers and American Red Cross
Social Services	Primary: Department of Health Support: State of Florida
Road Passage and Maintenance	Primary: Levy County Department of Public Works Support: Department of Transportation (DOT) and State of Florida
Security	Primary: Sheriff's Office Patrol Division Support: Municipal Police Department and State of Florida
Traffic Control	Primary: Sheriff's Office Patrol Division Support: Municipal Police Department and State of Florida
Recovery and Reentry	Primary: State of Florida Support: Board of County Commissioners and Division of Emergency Management

Figure 4B

Emergency Support Function List (ESF)

ESF 1 – TRANSPORTATION

FEDERAL SUPPORT AGENCIES	-	Dept. of Agriculture
	-	Dept of Defense
	-	Dept. of Energy
	-	Dept. of State
	-	General Services Admin.
	-	Tennessee Valley Authority
	-	U.S. Postal Service
STATE SUPPORT AGENCIES	-	Florida Dept. of Transportation
COUNTY AGENCIES	-	Levy County School Board
	-	Levy County Public Works
	-	Nature Coast Transportation

To perform disaster assistance missions before and after a disaster.

ESF 2 – COMMUNICATIONS

FEDERAL SUPPORT AGENCIES	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Interior
	-	Dept. of Transportation
	-	Federal Communications
	-	FEMA
	-	General Services
STATE AGENCIES	-	Dept. of Management Services
COUNTY AGENCIES	-	911 Communications
	-	United Telephone of Florida
	-	ARES/RACES

Provide communications support.

Figure 4B (continued)

ESF 3 – PUBLIC WORKS AND ENGINEERING

FEDERAL AGENCIES	-	Dept. of Defense U.S. Army
	-	Corps of Engineers
	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Energy
	-	Dept. of Health & Human Services
	-	Dept. of Interior
	-	Dept. of Labor
	-	Dept. of Transportation
	-	Dept. of Veterans Affairs
	-	Environment Protection
	-	General Services Admin.
	-	Tennessee Valley Authority
STATE AGENCIES	-	Florida Dept. of Transportation
	-	Water Management District
COUNTY AGENCIES	-	Levy County Public Works
	-	Town of Inglis Public Works
	-	Town of Yankeetown Public Works
	-	County and City Engineering
	-	County and City Utilities

To restore critical public services and utilities.

ESF 4 – FIRE FIGHTING

FEDERAL AGENCIES	-	Dept. of Agriculture
	-	Forest Service
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Interior
	-	Environmental Protection Agency
-		
STATE AGENCIES	-	Dept. of Transportation
COUNTY AGENCIES	-	Volunteer Fire Departments
	-	Forestry

Detect and suppress rural and urban fires.

Figure 4B (continued)

ESF 5 – INFORMATION AND PLANNING

FEDERAL AGENCIES	-	FEMA
	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Education
	-	Dept. of Energy
	-	Dept. of Health & Human Services
	-	Dept. of Interior
	-	Dept. of Justice
	-	Dept. of Transportation
	-	Dept. of Treasury
	-	American Red Cross
	-	EPA
	-	General Services Admin.
	-	National Aeronautics
	-	National Communications
	-	Nuclear Regulatory Commission
STATE AGENCIES	-	Dept. of Community Affairs
COUNTY AGENCIES	-	Emergency Management
		All Agencies

Collect, analyze, disseminate critical information as well as tracking of resources and mission assignments.

ESF 6 – MASS CARE

FEDERAL AGENCIES	-	American Red Cross
	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Health & Human Services
	-	Dept. of Housing & Urban
	-	Dept. of Transportation
	-	Dept. of Veterans Affairs
	-	FEMA
	-	General Services Admin.
	-	U.S. Postal Service
STATE AGENCIES	-	American Red Cross
	-	Dept. of HRS
COUNTY AGENCIES		
	-	County Health Dept.
	-	County School Board

Manage and coordinate shelter, food and first aid for disaster victims.

Figure 4B (continued)

ESF 7 – RESOURCE

FEDERAL AGENCIES	-	General Services Admin.
	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Energy
	-	Dept. of Health & Human Services
	-	Dept. of Labor
	-	Dept. of Transportation
	-	Dept. of Veterans Affairs
	-	FEMA
	-	National Communications
	-	Office of Personnel Management
STATE AGENCIES	-	Dept. of Management Services
COUNTY AGENCIES	-	Emergency Management
	-	Sheriff's Office
	-	Town of Inglis
	-	Town of Yankeetown
	-	Yankeetown Coast Guard

Provide equipment, materials, supplies and personnel as needed.

ESF 8 – HEALTH AND MEDICAL SERVICES

FEDERAL AGENCIES	-	Dept. of Health and Human Services
	-	U.S. Public Health Services
STATE AGENCIES	-	Health Rehabilitative Services
	-	Agency of Health Care
COUNTY AGENCIES	-	Levy County Health Dept.
	-	Emergency Medical Services
	-	Hospitals

Provide health and medical care needs.

Figure 4B (continued)

ESF 9 – URBAN SEARCH AND RESCUE

FEDERAL AGENCIES	-	Dept. of Defense
	-	Dept. of Agriculture
	-	Dept. of Health & Human Services
	-	Dept. of Labor
	-	Federal Emergency Management Admin.
	-	General Services
STATE AGENCIES	-	Dept. of Insurance
COUNTY AGENCIES	-	Fire Departments
	-	Sheriff's Office
	-	Public Works
	-	Emergency Medical Services
	-	Utilities

Locate and provide medical treatment to victims trapped.

ESF 10 – HAZARDOUS MATERIAL

FEDERAL AGENCIES	-	Environmental Protection
	-	Dept. of Agriculture
	-	Dept. of Commerce
	-	Dept. of Defense
	-	Dept. of Energy
	-	Dept. of Health & Human Services
	-	FEMA
	-	Nuclear Regulatory Commission
STATE AGENCIES	-	Dept. of Environmental Protection
COUNTY AGENCIES	-	Volunteer Fire Departments
	-	County Environmental Health Dept.

Response to actual or potential hazardous material spills.

Figure 4B (continued)

ESF 11 – FOOD

FEDERAL AGENCIES	-	Dept. of Agriculture
	-	Dept. of Health & Human Services
	-	Dept. of Transportation
	-	American Red Cross
	-	Environmental Protection
	-	FEMA
STATE AGENCIES	-	Dept. of Agriculture
	-	Consumer Services
COUNTY AGENCIES		
	-	Emergency Management
	-	Other Volunteer Organizations

Identify food and water needs of disaster victims and ensure that food and water reach the disaster area(s).

ESF 12 – ENERGY

FEDERAL AGENCIES	-	Dept. of Energy
	-	Dept. of Agriculture
	-	Dept. of Defense
	-	Dept. of State
	-	Dept. of Transportation
	-	General Services Admin.
	-	National Communications
	-	Nuclear Regulatory Commission
	-	Tennessee Valley Authority
STATE AGENCY	-	Public Service Commission
COUNTY AGENCIES	-	County/City Utilities
	-	Progress Energy of Florida Inc.
	-	Central Florida Electric

Restoration and supply of power, fuel and water.

ESF 13 – MILITARY SUPPORT

STATE AGENCY	-	Florida Dept. of Military Affairs
COUNTY AGENCY	-	Coast Guard

Rapid impact, assessment and deployment of National Guard Resources.

Figure 4B (continued)

ESF 14 – PUBLIC INFORMATION

STATE AGENCY	-	Dept. of Community Affairs
COUNTY AGENCIES	-	Sheriff's Public Information Officer
	-	Board of County Commissioners PIO
	-	Emergency Management

Will coordinate and disseminate all disaster related information to the public.

ESF 15 – VOLUNTEER AND DONATIONS

STATE AGENCY	-	Dept. of Community Affairs
COUNTY AGENCIES	-	CERT

Coordinate the influx of donated goods and services in the aftermath of a disaster.

ESF 16 – ENFORCEMENT AND SECURITY

STATE AGENCY	-	Dept. of Law Enforcement
	-	Florida Fish and Wildlife Conservation Commission
	-	Florida Highway Patrol
COUNTY AGENCIES	-	Levy County Sheriff's Office
	-	Inglis Police Dept.
	-	Williston Police Dept.
	-	Chiefland Police Dept.
	-	Cedar Key Police Dept.

Coordinate in the tracking and deployment of law enforcement resources.

ESF 17 – ANIMALS/RESCUE/SHELTERING

STATE AGENCY	-	State Veterinary Association
	-	Florida Dept. of Agriculture
	-	Florida Fish and Wildlife Conservation Commission
	-	HSUS/SERO
	-	Florida Animal Control Association
COUNTY AGENCIES	-	Levy County Animal Services

Provide coordination and deployment of personnel to rescue, shelter and care for animals.

Figure 5A

Levy County Organizational Chart

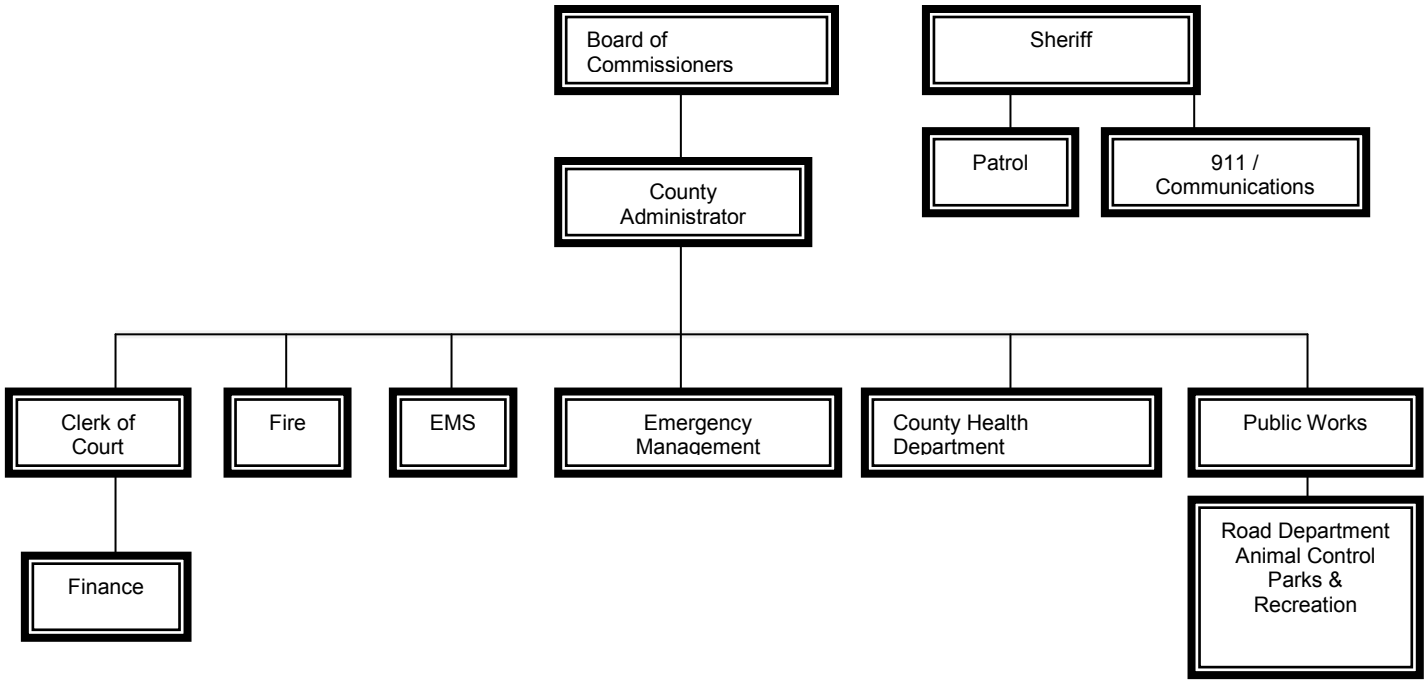
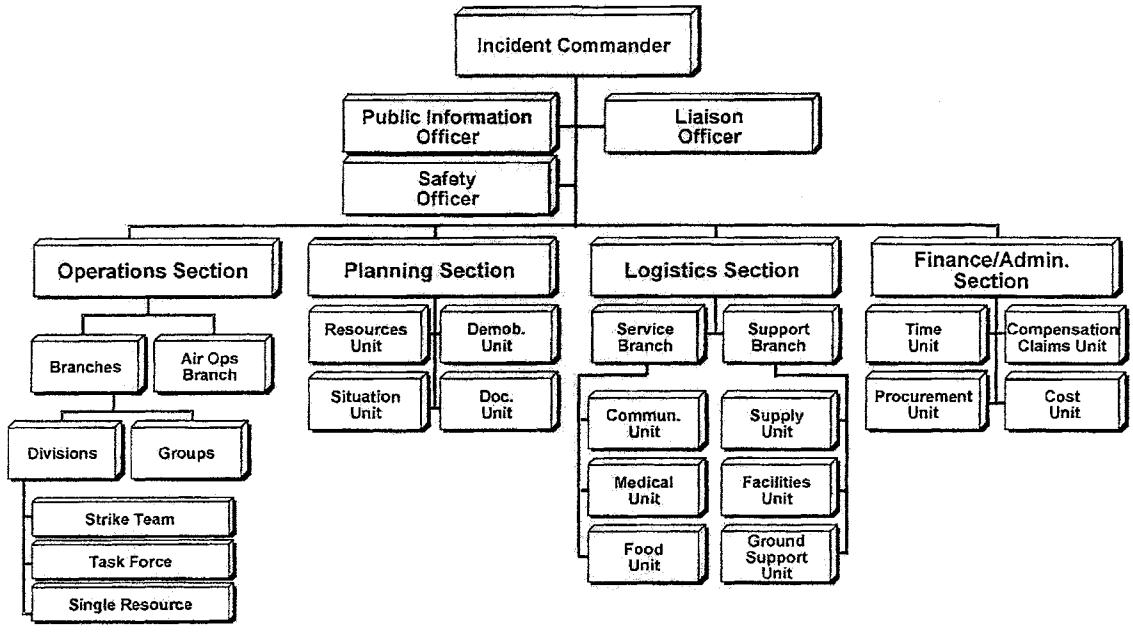


Figure 5B

ICS ORGANIZATIONAL CHART



- **Command Staff:** The Command Staff consists of the Public Information Officer, Safety Officer, and Liaison Officer. They report directly to the Incident Commander.

- **General Staff:** The organization level having functional responsibility for primary segments of incident management (Operations, Planning, Logistics, Finance/Administration). The Section level is organizationally between Branch and Incident Commander.

- **Branch:** That organizational level having functional, geographical, or jurisdictional responsibility for major parts of the incident operations. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section. Branches are identified by the use of Roman Numerals, by function, or by jurisdictional name.

- **Division:** That organizational level having responsibility for operations within a defined geographic area. The Division level is organizationally between the Strike Team and the Branch.

- **Group:** Groups are established to divide the incident into functional areas of operation. Groups are located between Branches (when activated) and Resources in the Operations Section.

- **Unit:** That organization element having functional responsibility for a specific incident planning, logistics, or finance/administration activity.

- **Task Force:** A group of resources with common communications and a leader that may be pre-established and sent to an incident, or formed at an incident.

- **Strike Team:** Specified combinations of the same kind and type of resources, with common communications and a leader.

- **Single Resource:** An individual piece of equipment and its personnel complement, or an established crew or team of individuals with an identified work supervisor that can be used on an incident.

FIGURE 6 WORKER DOSE LIMITS GUIDANCE

Guidance on Dose Limit for Workers Performing Emergency Services

Dose limit[a] rem	Activity	Condition
5	all	lower dose not practicable
10	protecting valuable property	lower dose not practicable
25	life saving or protection of large populations	lower dose not practicable
>25	life saving or protection of large populations	on a voluntary basis to persons fully aware of the risks involved (see Fig. 10-5 & 10-6)

a Total effective dose equivalent during an emergency situation.

Revised 06/04

FIGURE 7 HEALTH AFFECTS ASSOCIATED WITH WHOLE BODY DOSES

Health Effects Associated with Whole-Body Doses Received within a Few Hours[a]

Whole Body Dose (rad)	Early Fatalities[b] (percent)	Whole Body Dose (rad)	Prodromal Effect[c] (percent affect)
140	5	50	2
200	15	100	15
300	50	150	50
400	85	200	85
460	95	250	98

a Risks will be lower for protracted exposure periods.

b Supportive medical treatment may increase the dose at which these frequencies occur by approximately 50 percent.

c Forewarning symptoms of more serious

Revised 06/04

FIGURE 8 CANCER RISK

Approximate Cancer Risk to Average Individuals from 25 rem Effective Dose Equivalent Delivered Promptly

Age at exposure	Appropriate risk of premature death (deaths per 1,000 persons exposed)	Average years of life lost if premature death occurs
20 to 30	9.1	24
30 to 40	7.2	19
40 to 50	5.3	15
50 to 60	3.5	11

FIGURE 9

Emergency Operations Centers and Facilities

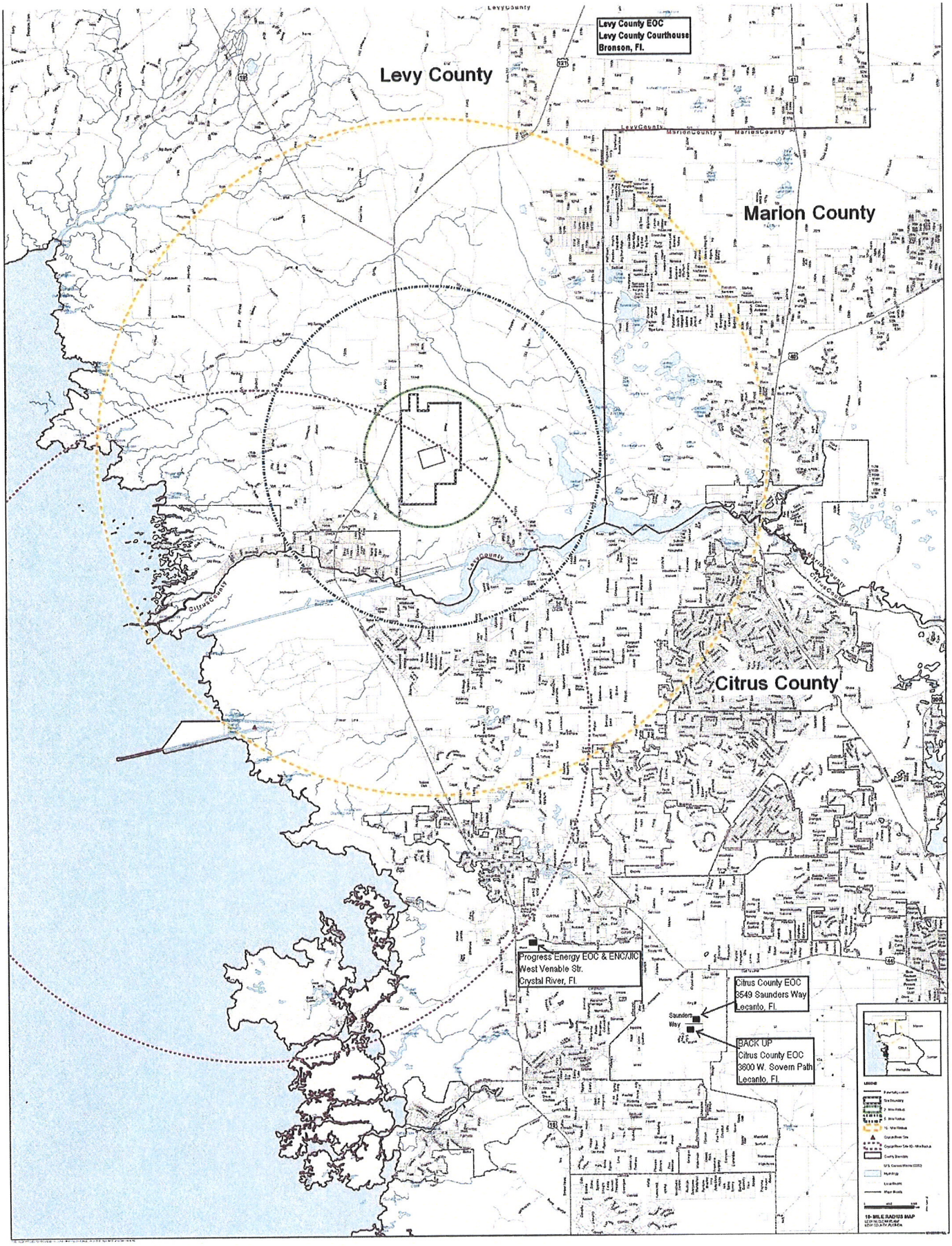


FIGURE 10: FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM

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
   F. ☐ Initial/New Classification OR ☐ Updated Notification

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 B. ☐ Alert
   C. ☐ Site Area Emergency 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: A. ☐ None OR B. ☐ Description

_____

_____

_____

8. WEATHER DATA: A. Wind direction from _____ degrees B. Downwind Sectors Affected: _____

9. RELEASE STATUS: A. ☐ None (Go to Item 11) B. ☐ In Progress C. ☐ Has occurred, but stopped

10. RELEASE SIGNIFICANCE CATEGORY AT SITE BOUNDARY:
    A. ☐ Under evaluation B. ☐ Release is within normal operating limits
    C. ☐ Non-Significant (fraction of protective action guide range) D. ☐ Protective action guide range
    E. ☐ Liquid release (no actions required)

11. UTILITY PROTECTIVE ACTION RECOMMENDATIONS FOR THE PUBLIC:
    A. ☐ No recommended actions at this time.
    B. ☐ Utility recommends the following protective actions:

		Evacuate Sectors	Shelter Sectors	No Action Sectors
EVACUATE ZONES: _____	OR 0-2 Miles	_____	_____	_____
SHELTER ZONES: _____	2-5 Miles	_____	_____	_____
	5-10 Miles	_____	_____	_____

AND consider issuance of potassium iodide (KI)

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: A. ☐ Not Applicable (Go to Item 15)

Distance	*Projected Thyroid Dose (CDE) for ____ hour(s)*	*Projected Total Dose (TEDE) for ____ hour(s)*
1 Mile (Site Boundary)	B. _____ mrem	C. _____ mrem
2 Miles	D. _____ mrem	E. _____ mrem
5 Miles	F. _____ mrem	G. _____ mrem
10 Miles	H. _____ mrem	L. _____ mrem

15. MESSAGE RECEIVED BY: (Name) _____ Date _____/_____/_____ Time _____

2007 STATE NOTIFICATION FORM REVISION 10

Figure 11 **CRYSTAL RIVER NUCLEAR PLANT (CR3)**

3/22/05

EAL DESCRIPTIONS FOR FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM			
ABNORMAL RADIATION LEVEL / RADIOLOGICAL EFFLUENTS	UE	1.1	Release of *gaseous* radioactivity exceeds the **Unusual Event** threshold
	A	1.2	Release of *gaseous* radioactivity exceeds the **Alert** threshold
	SAE	1.3	Site boundary dose from airborne radioactivity > 100 mREM total dose or 5000 mREM thyroid dose.
	GE	1.4	Site boundary dose from airborne radioactivity > 1000 mREM total dose or 5000 mREM thyroid dose.
	UE	1.5	Release of *liquid* radioactivity exceeds the Unusual Event threshold
	A	1.6	Release of *liquid* radioactivity exceeds the Alert threshold
	UE	1.7	Unexpected increase in radiation levels within the plant **NOT** impeding necessary access to plant systems.
	A	1.8	Unexpected increase in radiation levels within the plant impeding necessary access to plant systems.
	UE	1.9	An uncontrolled water level decrease in spent fuel pool **or** fuel transfer canal with fuel remaining covered.
	A	1.10	Damage to irradiated fuel **or** loss of water level resulting in uncovering irradiated fuel outside the reactor vessel.
NATURAL / MAN-MADE HAZARDS AND EC JUDGMENT	UE	2.1	Earthquake detected by seismic instrumentation and sensed by Control Room personnel.
	A	2.2	Earthquake at a magnitude greater than the limit for continued plant operation.
	UE	2.3	Flooding due to natural phenomena **NOT** affecting plant vital equipment.
	A	2.4	Flooding due to natural phenomena affecting plant vital equipment.
	UE	2.5	The plant is within a Hurricane Warning area.
	UE	2.6	Tornado within the Protected Area.
	A	2.7	Tornado **or** High Winds **or** windborne object(s) strike within Protected Area and results in significant damage to structures or equipment.
	UE	2.8	Aircraft **or** vehicle crash within the **Protected Area** damaging vital structures or equipment.
	A	2.9	Aircraft **or** vehicle strikes plant and results in significant damage to structures or equipment.
	UE	2.10	Toxic **or** flammable gases within **or** potentially affecting the **Protected Area**.
	A	2.11	Toxic **or** flammable gases within the plant affecting the safe operation of the plant **or** the ability to shutdown the plant.
	UE	2.12	Explosion **or** catastrophic failure of pressurized equipment within the **Protected Area**.
	A	2.13	Explosion **or** catastrophic failure of pressurized equipment resulting in damage to vital structures or equipment.
	UE	2.14	Fire within the **Protected Area** that could affect plant vital equipment.
	A	2.15	Fire affecting the operability of plant vital equipment.
	A	2.16	Evacuation of Control Room is required and plant control is established.
	SAE	2.17	Evacuation of Control Room is required and plant control **CANNOT** be established.
	UE	2.18	Security Event which indicates a potential degradation in the level of safety of the plant.
	A	2.19	Security Event in the ***Protected Area***. [Bomb or intruder in the Protected Area].
	SAE	2.20	Security Event a ***Vital Area***. [Bomb or intruder in the Vital Area].
	GE	2.21	Security Event resulting in loss of physical control of the facility to intruders.
	UE	2.22	Internal flooding affecting areas containing plant vital equipment.
	A	2.23	Internal flooding affecting plant vital equipment.
	UE	2.24	Conditions exist indicating a potential degradation of the level of safety of the plant.
	A	2.25	Conditions exist indicating potential or actual substantial degradation of the level of safety of the plant.
	SAE	2.26	Conditions exist indicating actual or likely major failures of plant functions needed for the protection of the public.
	GE	2.7	Actual **or** imminent substantial core degradation with potential loss of containment integrity.

Figure 11
(continued)

Crystal River Emergency Actions Levels (EAL) (continued)

SYSTEM MALFUNCTION	UE	3.1	Unplanned loss of all in-plant **or** all offsite communication capability.
	A	3.2	Failure of instrumentation to complete an automatic reactor shutdown when required **and** manual reactor shutdown was successful.
	SAE	3.3	Failure of instrumentation to complete an automatic Reactor shutdown when required **and** manual reactor shutdown was **NOT** successful.
	GE	3.4	Failure to complete an automatic Reactor shutdown **and** manual Reactor shutdown was **NOT** successful with indications of an extreme challenge of the ability to cool the Reactor core.
	UE	3.5	Inability to shutdown the plant to comply with Technical Specification limits.
	UE	3.6	Unplanned loss of Control Room alarms.
	A	3.7	Unplanned loss of Control Room alarms with significant plant status change in progress.
	SAE	3.8	Inability to monitor a significant plant status change in progress.
	UE	3.9	Chemistry sample indicates fuel clad degradation.
	UE	3.10	Turbine failure results in casing penetration **or** damage to main generator seals.
	A	3.11	Turbine failure generated projectiles cause significant damage to plant structures or vital equipment.
	UE	3.12	Reactor Coolant System leakage.
	SAE	3.13	Complete loss of core heat removal capability.
	UE	3.14	Inadvertent plant startup.
	A	3.15	Complete loss of core cooling functions during refueling and cold shutdown conditions.
	SAE	3.16	Loss of water level in the Reactor Vessel resulting in uncovering fuel.
LOSS OF POWER	UE	4.1	Loss of plant electrical power from all offsite sources.
	A	4.2	AC power capability reduced to a single source
	SAE	4.3	Loss of all AC power.
	GE	4.4	Loss of all AC power for greater than 4 hours.
	A	4.5	Loss of all AC power during Cold Shutdown or Refueling conditions.
	SAE	4.6	Loss of all vital plant batteries during ***operational*** conditions.
	UE	4.7	Loss of all vital plant batteries during ***shutdown*** conditions.

The following EALs will cause a classification range from a UE to a GE declaration base on combinations of the 3 Fission Product Barriers.

FISSION PRODUCT BARRIERS	5.1	Loss of Fuel Clad
	5.2	Potential Loss of Fuel Clad
	6.1	Loss of Reactor Coolant System
	6.2	Potential Loss of Reactor Coolant System
	7.1	Loss of Containment
	7.2	Potential Loss of Containment

UE Unusual Event
A Alert
SAD Site Area Emergency
GE General Emergency

FIGURE 12: PROTECTIVE ACTION DECISION FLOW CHART AT THE PROGRESS ENERGY's EMERGENCY OPERATION FACILITY

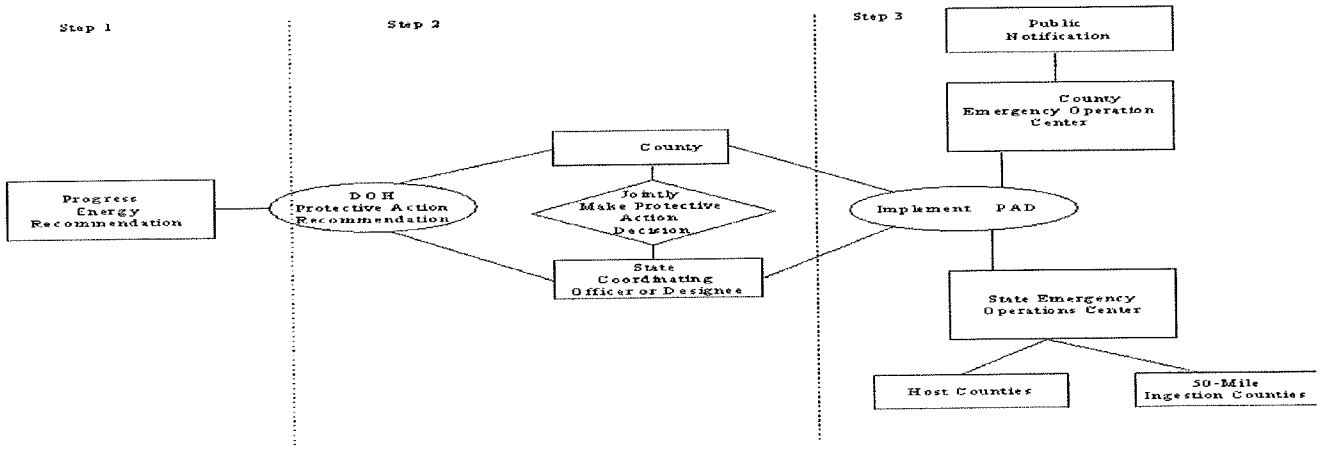


Figure 13A
Crystal River Nuclear Plant Siren Location Map

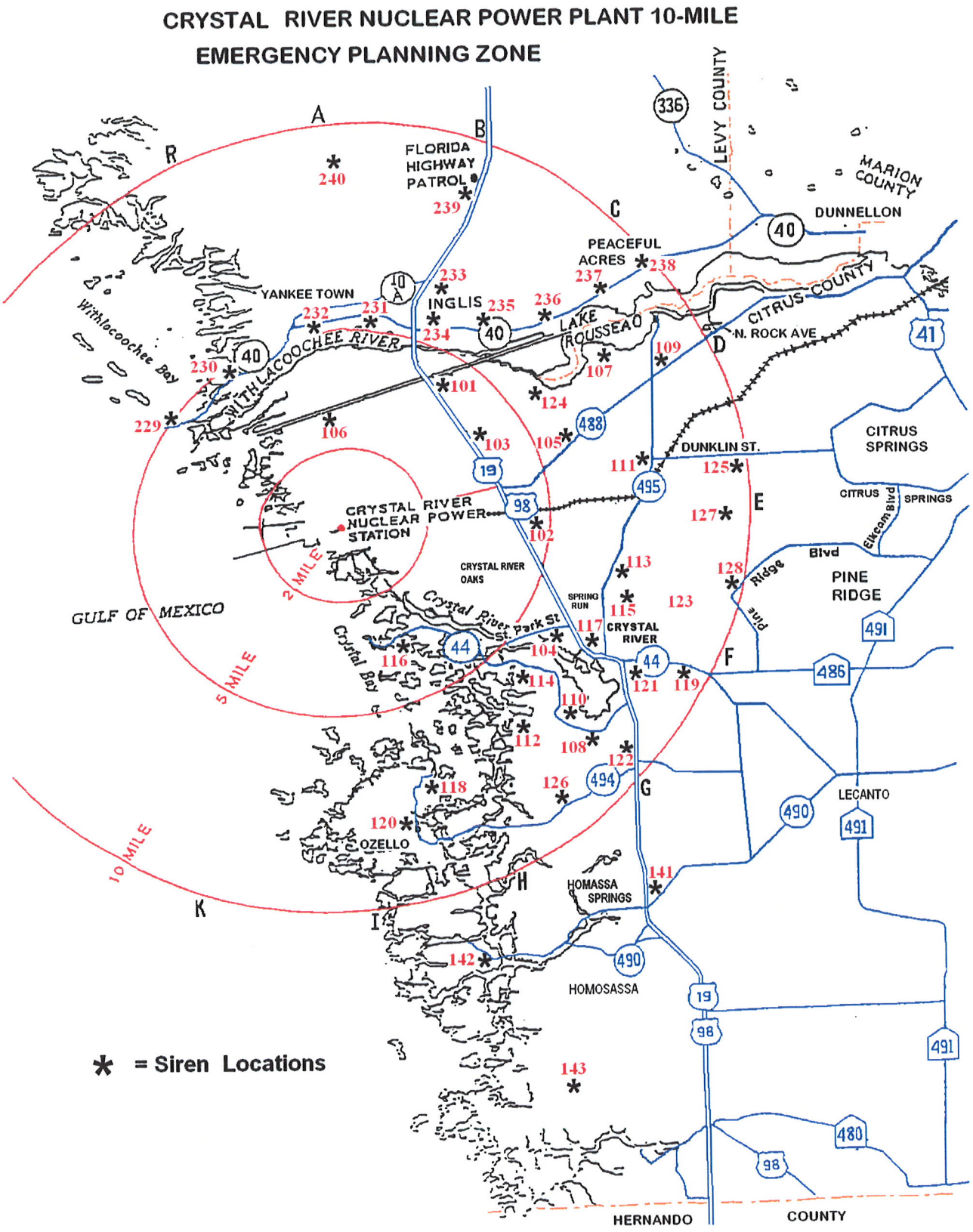


Figure 14A
Shelter Locations

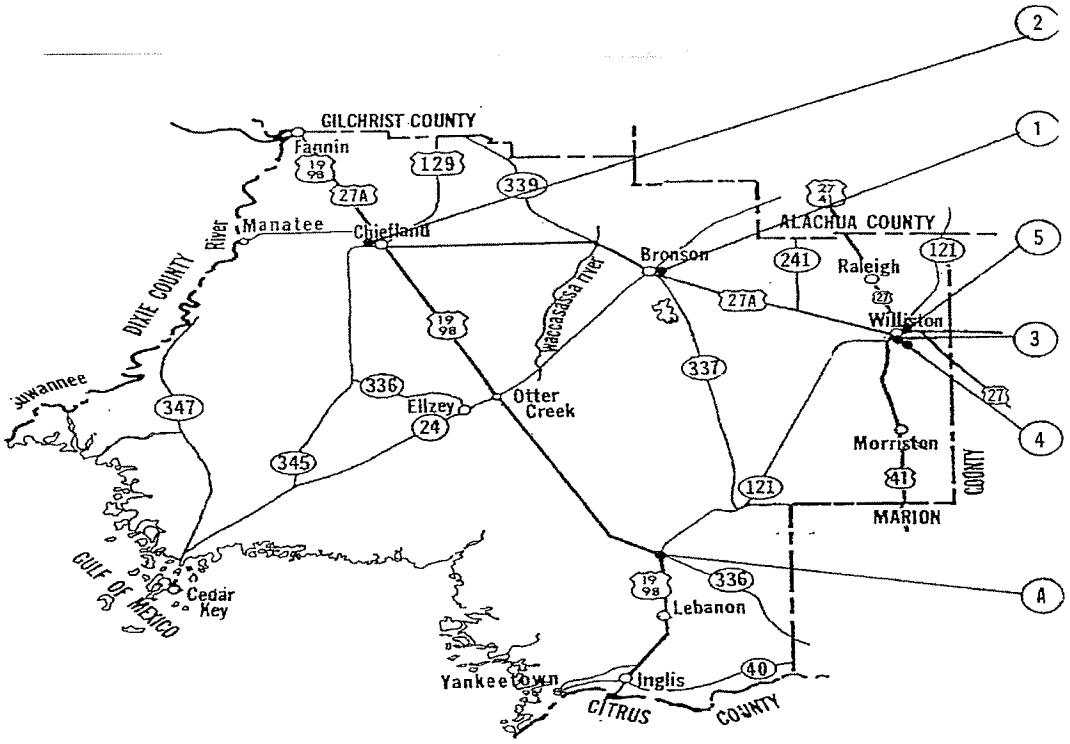


Figure 14B

Levy County Shelters

LEVY COUNTY		CAPACITY
	Bronson High School School Street Bronson, Florida	600 * **
2.	Chiefland Elementary School 1205 NW 4th Avenue Chiefland, Florida	795
3.	Williston Elementary 801 S. Main Street Williston, Florida	600
4.	Williston High School 427 W. Noble Avenue Williston, Florida	703
5.	Williston Intermediate NE 3rd Avenue Williston, Florida	412
6.	Chiefland High School (Gym) 816 N. Main Street Chiefland, Florida	725

MONITORING/WASHDOWN STATION

A. Lebanon Station: Intersection of routes SR 121, CR 336, and U.S. 19/98.

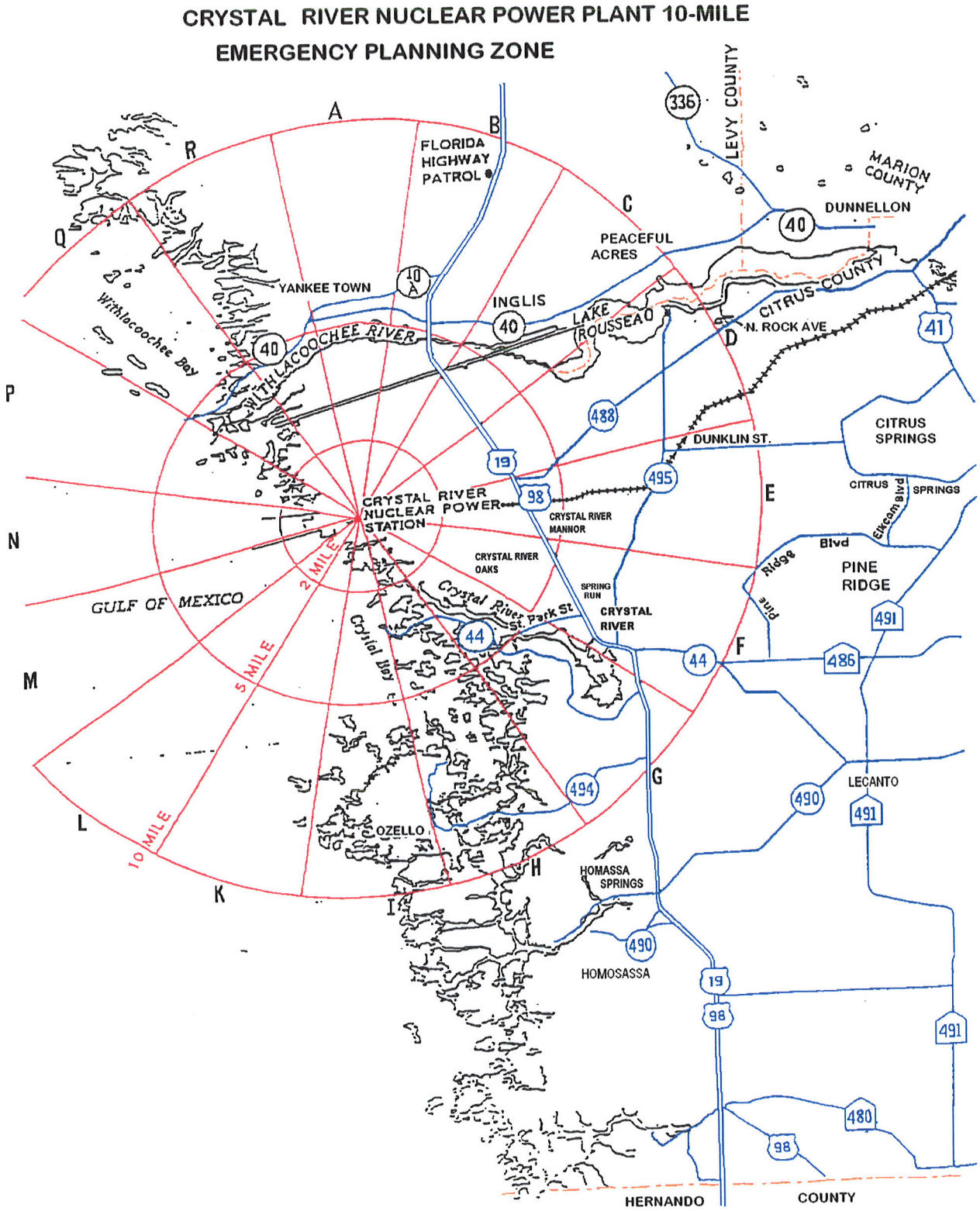
* Also serves as a Reception Center
** Shelter for mobility impaired residents who require special evacuation

CAPACITY - Capacity so as not to interfere with normal operations

Figure 15A

Crystal River Energy Complex / EPZ SECTOR MAP

(Used to gauge wind direction)



Revision 10/02

Figure 15B

Levy Energy Complex / EPZ SECTOR MAP

(Used to gauge wind direction)

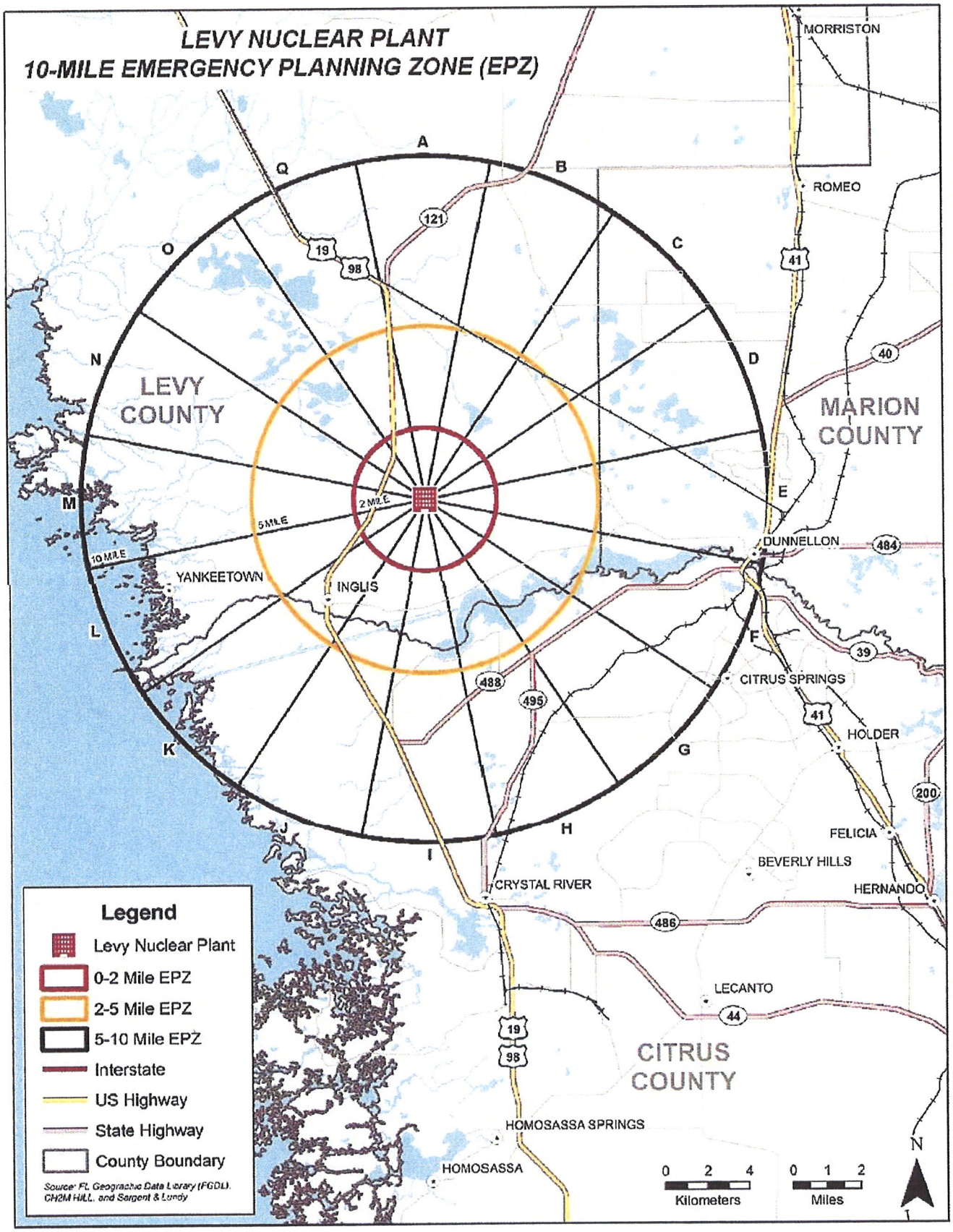


Figure 16A

CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Summary of Vehicles by Zone			
Zone	Permanent Resident Vehicles	Transient Vehicles	Non-EPZ Employee Vehicles
1	895	467	583
2	10,311	1,613	191
3	2,109	60	0
TOTAL:	13,315	2,140	774

Time To Clear The Indicated Area of 50 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midday		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario	(6)	(7)	(8)	(9)	(10)	Scenario	(11)
Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday New Plant Construction
R01 Zone 1	1:05	1:05	0:55	1:00	1:00	R01 Zone 1	1:00	1:05	0:55	0:55	0:55	R01 Zone 1	0:55
R02 Zones 1 & 3	1:10	1:15	1:00	1:05	1:00	R02 Zones 1 & 3	1:10	1:10	1:00	1:05	1:00	R02 Zones 1 & 3	1:20
R03 Zones 1 & 2	1:25	1:25	1:15	1:15	1:15	R03 Zones 1 & 2	1:25	1:30	1:15	1:20	1:15	R03 Zones 1 & 2	1:25
R04 Zones 1,2,&3	1:20	1:25	1:10	1:15	1:10	R04 Zones 1,2,&3	1:25	1:25	1:15	1:15	1:15	R04 Zones 1,2,&3	1:30

Time To Clear The Indicated Area of 90 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midday		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario	(6)	(7)	(8)	(9)	(10)	Scenario	(11)
Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday New Plant Construction
R01 Zone 1	1:55	2:00	1:50	1:50	1:55	R01 Zone 1	1:55	1:55	1:45	1:50	1:50	R01 Zone 1	1:50
R02 Zones 1 & 3	2:20	2:20	1:55	2:00	2:00	R02 Zones 1 & 3	2:10	2:10	1:55	1:55	2:00	R02 Zones 1 & 3	4:00
R03 Zones 1 & 2	2:55	3:00	2:45	2:55	2:40	R03 Zones 1 & 2	3:05	3:15	3:00	3:10	2:50	R03 Zones 1 & 2	3:40
R04 Zones 1,2,&3	2:50	3:00	2:40	2:50	2:40	R04 Zones 1,2,&3	3:00	3:10	2:50	3:00	2:50	R04 Zones 1,2,&3	3:50

Time To Clear The Indicated Area of 95 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midday		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario	(6)	(7)	(8)	(9)	(10)	Scenario	(11)
Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday Good Weather	Midday Rain	Midday Good Weather	Midday Rain	Evening Good Weather	Region Zone(s) Evacuating	Midday New Plant Construction
R01 Zone 1	2:40	2:40	2:10	2:10	2:40	R01 Zone 1	2:30	2:30	2:00	2:00	2:30	R01 Zone 1	2:20
R02 Zones 1 & 3	3:00	3:00	2:40	2:40	2:50	R02 Zones 1 & 3	3:00	3:00	2:30	2:30	2:50	R02 Zones 1 & 3	4:30
R03 Zones 1 & 2	3:40	3:40	3:00	3:10	3:00	R03 Zones 1 & 2	3:40	3:50	3:30	3:40	3:10	R03 Zones 1 & 2	4:10
R04 Zones 1,2,&3	3:40	3:40	3:00	3:10	3:00	R04 Zones 1,2,&3	3:30	3:40	3:20	3:40	3:10	R04 Zones 1,2,&3	4:20

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Figure 16A (continued-1)

CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Time To Clear The Indicated Area of 100 Percent of the Affected Population													
	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midday		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario	(6)	(7)	(8)	(9)	(10)	Scenario	(11)
Region	Midday		Midday		Evening	Region	Midday		Midday		Evening	Region	Midday
Zone(s) Evacuating	Good Weather	Rain	Good Weather	Rain	Good Weather	Zone(s) Evacuating	Good Weather	Rain	Good Weather	Rain	Good Weather	Zone(s) Evacuating	New Plant Construction
R01 Zone 1	5:00	5:00	5:00	5:00	5:00	R01 Zone 1	5:00	5:00	5:00	5:00	5:00	R01 Zone 1	5:00
R02 Zones 1 & 3	5:00	5:00	5:00	5:00	5:00	R02 Zones 1 & 3	5:00	5:00	5:00	5:00	5:00	R02 Zones 1 & 3	5:20
R03 Zones 1 & 2	5:00	5:00	5:00	5:00	5:00	R03 Zones 1 & 2	5:00	5:00	5:00	5:00	5:00	R03 Zones 1 & 2	5:00
R04 Zones 1,2,&3	5:00	5:00	5:00	5:00	5:00	R04 Zones 1,2,&3	5:00	5:00	5:00	5:00	5:00	R04 Zones 1,2,&3	5:20

Table 3. Evacuation Scenario Definitions					
Scenarios	Season	of Day Week	Time of Day	**Weather**	**Special**
1	**Summer**	**Midweek**	**Midday**	Good	None
2	**Summer**	**Midweek**	**Midday**	Rain	None
3	**Summer**	**Weekend**	**Midday**	Good	None
4	**Summer**	**Weekend**	**Midday**	Rain	None
5	**Summer**	**Midweek, Weekend**	**Evening**	Good	None
6	**Winter**	**Midweek**	**Midday**	Good	None
7	**Winter**	**Midweek**	**Midday**	Rain	None
8	**Winter**	**Weekend**	**Midday**	Good	None
9	**Winter**	**Weekend**	**Midday**	Rain	None
10	**Winter**	**Midweek, Weekend**	**Evening**	Good	None
11	**Winter**	**Weekend**	**Midday**	Good	New Plant Construction at Proposed Levy site

Discription of Regions			
REGION	**ZONE**		
	1	2	3
Evacuate 5 mile ring			
R01			
Evacuate 5 mile rine + downwind to 10 miles			
R02			
R03			
Evacuate Entire EPZ			
R04			
Evacuating Zones are shaded orange			

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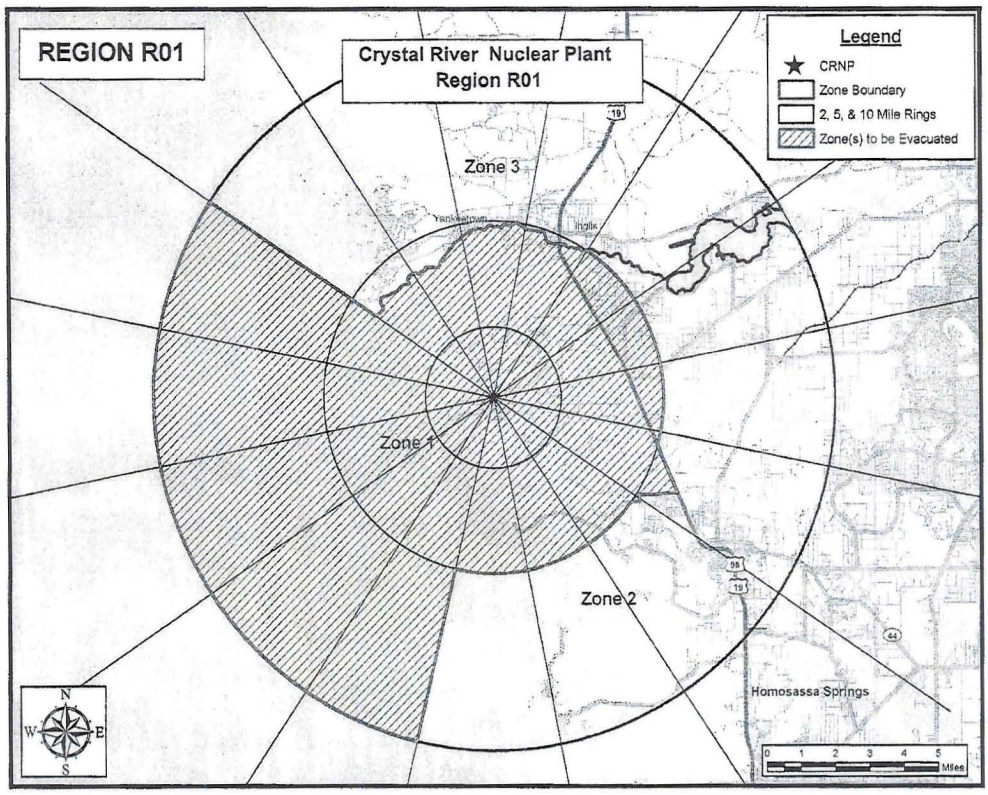
Figure 16A (continued-2)

CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



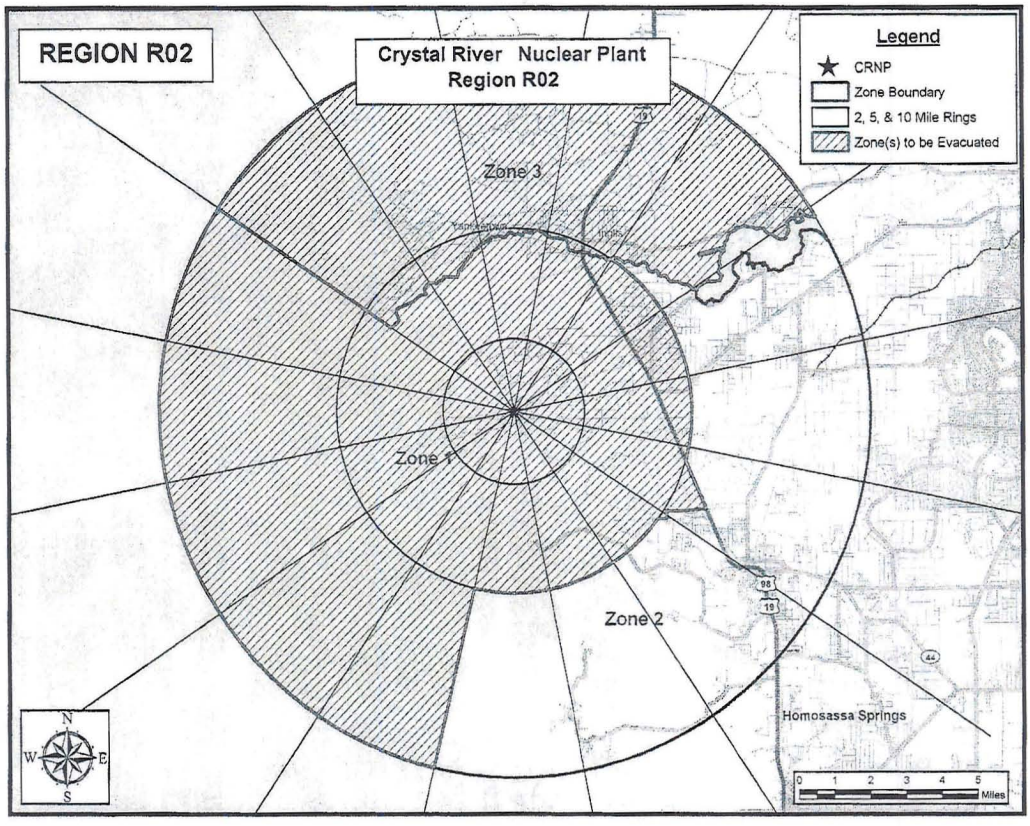


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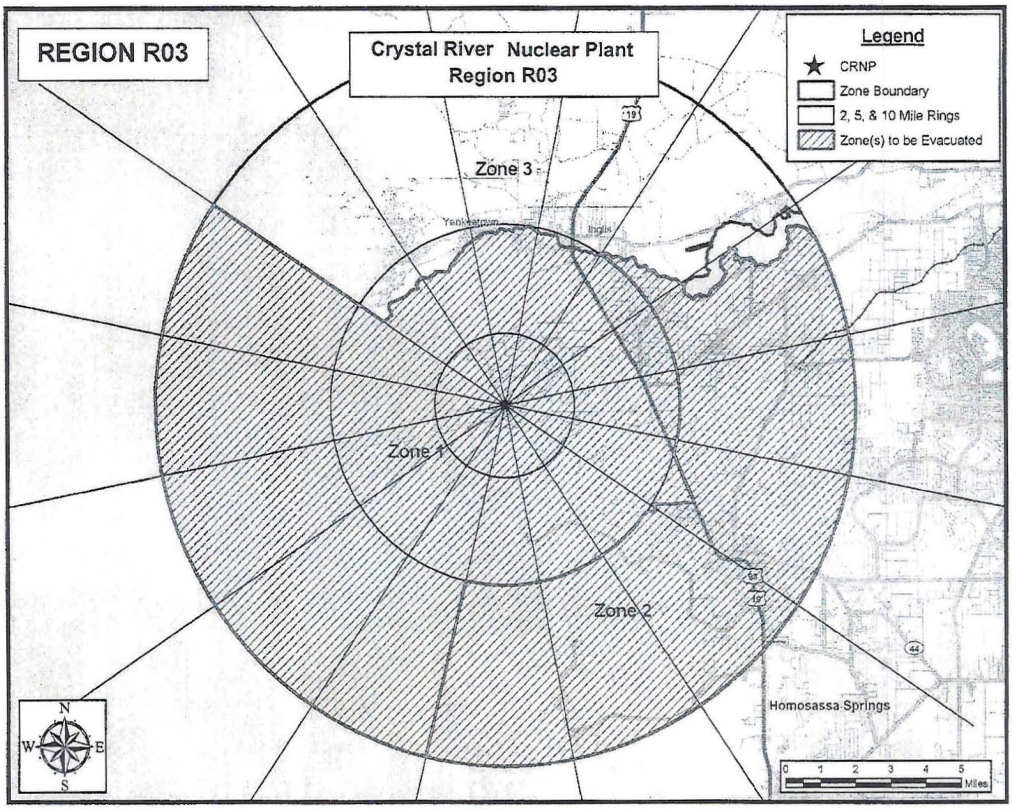
Figure 16A (continued-3)

CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



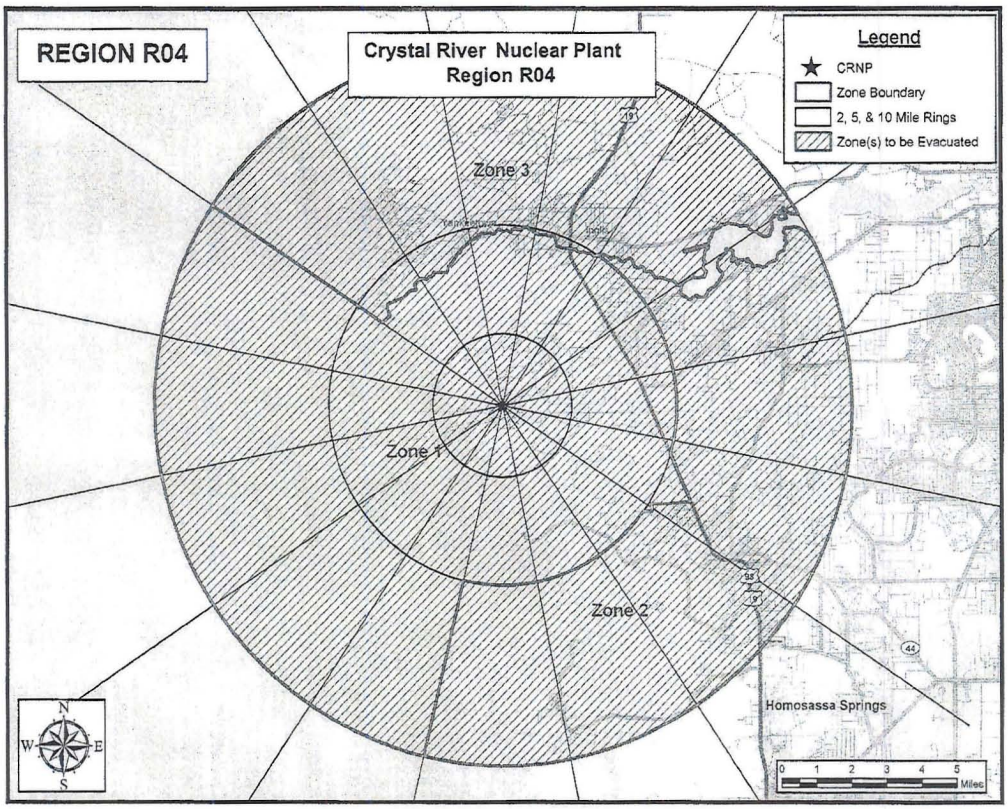


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Figure 16B

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Permanent Resident Population and Vehicles by PAZ		
PAZ	**2007 Population**	**2007 Vehicles**
C1	1,776	1,040
C3	5,476	3,214
C4	3,461	2,030
L5	3,601	2,112
L6	653	383
L7	17	11
L8	294	172
M9	7,480	4,388
TOTAL	**22,758**	**13,350**

Description of Evacuation Regions									
		PAZ							
Region	**Description**	**C1**	**C3**	**C4**	**L5**	**L6**	**L7**	**L8**	**M9**
R01	2 mile ring								
R02	5-mile ring								
R03	Full EPZ								
Evacuate 2 mile ring and 5 miles downwind									
		PAZ							
Region	**Wind Direction Towards:**	**C1**	**C3**	**C4**	**L5**	**L6**	**L7**	**L8**	**M9**
Refer to R02	WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE								
Refer to R01	SSE, S, SSW, SW, WSW, W								
Evacuate 5 mile ring and downwind to EPZ boundary									
		PAZ							
Region	**Wind Direction Towards:**	**C1**	**C3**	**C4**	**L5**	**L6**	**L7**	**L8**	**M9**
R04	N								
R05	NNE, NE								
R06	ENE, E								
R07	ESE, SE								
R08	SSE								
R09	S, SSW								
R10	SW, WSW								
R11	W								
R12	WNW								
R13	NW, NNW								

Figure 16B (continued-1)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Evacuation Scenario Definitions					
Scenarios	**Season**	**Day of Week**	**Time of Day**	**Weather**	**Special**
1	Summer	Midweek	Midday	Good	None
2	Summer	Midweek	Midday	Rain	None
3	Summer	Weekend	Midday	Good	None
4	Summer	Weekend	Midday	Rain	None
5	Summer	Midweek, Weekend	Evening	Good	None
6	Winter	Midweek	Midday	Good	None
7	Winter	Midweek	Midday	Rain	None
8	Winter	Weekend	Midday	Good	None
9	Winter	Weekend	Midday	Rain	None
10	Winter	Midweek, Weekend	Evening	Good	None
11	Winter	Weekend	Midday	Good	New Plant Construction

Note: Schools are assumed to be in session for the Winter season (midweek, midday).

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Figure 16B (continued-2)

Time To Clear The Indicated Area of 50 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midweek		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	Scenario:	(11)
Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Good Weather	Rain	Good Weather		New Plant Construction
Entire 2-Mile Region, 5-Mile Region, and EPZ													
R01 2-mile ring	1:15	1:15	1:05	1:10	1:05	R01 2-mile ring	1:15	1:15	1:05	1:10	1:05	R01 2-mile ring	1:25
R02 5-mile ring	1:15	1:20	1:05	1:10	1:05	R02 5-mile ring	1:15	1:20	1:05	1:10	1:05	R02 5-mile ring	1:15
R03 Entire EPZ	1:20	1:25	1:10	1:15	1:10	R03 Entire EPZ	1:20	1:25	1:10	1:15	1:10	R03 Entire EPZ	1:35
2-Mile Ring and Downwind to 5 Miles													
Same As R01 SSE, S, SSW, SW, WSW, W	1:15	1:15	1:05	1:10	1:05	Same As R01 SSE, S, SSW, SW, WSW, W	1:15	1:15	1:05	1:10	1:05	Same As R01 SSE, S, SSW, SW, WSW, W	1:25
Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	1:15	1:20	1:05	1:10	1:05	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	1:15	1:20	1:05	1:10	1:05	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	1:15
5-Mile Ring and Downwind to EPZ Boundary													
R04 N	1:20	1:25	1:10	1:15	1:10	R04 N	1:20	1:25	1:10	1:15	1:10	R04 N	1:25
R05 NNE, NE	1:20	1:25	1:10	1:15	1:10	R05 NNE, NE	1:20	1:25	1:10	1:15	1:10	R05 NNE, NE	1:25
R06 ENE, E	1:20	1:25	1:10	1:15	1:10	R06 ENE, E	1:20	1:25	1:10	1:15	1:10	R06 ENE, E	1:25
R07 ESE, SE	1:20	1:25	1:10	1:15	1:10	R07 ESE, SE	1:20	1:25	1:10	1:15	1:10	R07 ESE, SE	1:15
R08 SSE	1:15	1:20	1:05	1:10	1:05	R08 SSE	1:15	1:20	1:05	1:10	1:05	R08 SSE	1:25
R09 S, SSW	1:15	1:20	1:05	1:10	1:05	R09 S, SSW	1:15	1:20	1:05	1:10	1:05	R09 S, SSW	1:15
R10 SW, WSW	1:15	1:20	1:05	1:10	1:05	R10 SW, WSW	1:15	1:20	1:05	1:10	1:05	R10 SW, WSW	1:15
R11 W	1:15	1:20	1:05	1:10	1:05	R11 W	1:15	1:20	1:05	1:10	1:05	R11 W	1:15
R12 WNW	1:20	1:20	1:10	1:10	1:10	R12 WNW	1:20	1:20	1:10	1:10	1:10	R12 WNW	1:20
R13 NW,NNW	1:20	1:25	1:10	1:10	1:10	R13 NW,NNW	1:20	1:25	1:10	1:10	1:10	R13 NW,NNW	1:20

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Figure 16B (continued-3)

Time To Clear The Indicated Area of 90 Percent of the Affected Population														
	Summer		Summer		Summer		Winter		Winter		Winter		Winter	
	Midweek		Weekend		Midweek Weekend		Midweek		Weekend		Midweek Weekend		Weekend	
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	Scenario:	(11)	
Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday	
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Good Weather	Rain	Good Weather		New Plant Construction	
Entire 2-Mile Region, 5-Mile Region, and EPZ														
R01 2-mile ring	2:30	2:30	2:00	2:00	2:10	R01 2-mile ring	2:30	2:30	2:00	2:00	2:10	R01 2-mile ring	2:50	
R02 5-mile ring	2:40	2:40	2:10	2:10	2:20	R02 5-mile ring	2:40	2:40	2:10	2:10	2:20	R02 5-mile ring	2:50	
R03 Entire EPZ	2:50	2:50	2:30	2:30	2:30	R03 Entire EPZ	2:50	2:50	2:20	2:30	2:30	R03 Entire EPZ	3:00	
2-Mile Ring and Downwind to 5 Miles														
Same As R01 SSE, S, SSW, SW, WSW, W	2:30	2:30	2:00	2:00	2:10	Same As R01 SSE, S, SSW, SW, WSW, W	2:30	2:30	2:00	2:00	2:10	Same As R01 SSE, S, SSW, SW, WSW, W	2:50	
Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	2:40	2:40	2:10	2:10	2:20	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	2:40	2:40	2:10	2:10	2:20	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	2:50	
5-Mile Ring and Downwind to EPZ Boundary														
R04 N	2:50	2:50	2:20	2:20	2:30	R04 N	2:40	2:50	2:20	2:20	2:30	R04 N	2:50	
R05 NNE, NE	2:50	2:50	2:20	2:20	2:30	R05 NNE, NE	2:40	2:50	2:20	2:20	2:30	R05 NNE, NE	2:50	
R06 ENE, E	2:50	2:50	2:20	2:30	2:30	R06 ENE, E	2:50	2:50	2:20	2:20	2:30	R06 ENE, E	2:50	
R07 ESE, SE	2:50	2:50	2:30	2:30	2:30	R07 ESE, SE	2:50	2:50	2:20	2:20	2:30	R07 ESE, SE	2:50	
R08 SSE	2:40	2:40	2:10	2:10	2:20	R08 SSE	2:40	2:40	2:10	2:10	2:20	R08 SSE	2:50	
R09 S, SSW	2:40	2:40	2:10	2:10	2:20	R09 S, SSW	2:40	2:40	2:10	2:10	2:20	R09 S, SSW	2:50	
R10 SW, WSW	2:40	2:40	2:10	2:10	2:20	R10 SW, WSW	2:40	2:40	2:10	2:10	2:20	R10 SW, WSW	2:50	
R11 W	2:40	2:40	2:10	2:10	2:20	R11 W	2:40	2:40	2:10	2:10	2:20	R11 W	2:50	
R12 WNW	2:40	2:40	2:10	2:10	2:20	R12 WNW	2:40	2:40	2:10	2:10	2:20	R12 WNW	2:50	
R13 NW,NNW	2:40	2:40	2:10	2:10	2:20	R13 NW,NNW	2:40	2:40	2:10	2:10	2:20	R13 NW,NNW	2:50	

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

Figure 16B (continued-4)

Time To Clear The Indicated Area of 95 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midweek		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	Scenario:	(11)
Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Good Weather	Rain	Good Weather		New Plant Construction
Entire 2-Mile Region, 5-Mile Region, and EPZ													
R01 2-mile ring	3:20	3:20	2:50	2:50	3:00	R01 2-mile ring	3:20	3:20	2:50	2:50	3:00	R01 2-mile ring	3:20
R02 5-mile ring	3:30	3:30	2:50	2:50	3:00	R02 5-mile ring	3:30	3:30	2:50	2:50	3:00	R02 5-mile ring	3:20
R03 Entire EPZ	3:40	3:50	3:10	3:10	3:10	R03 Entire EPZ	3:40	3:40	3:10	3:10	3:10	R03 Entire EPZ	3:30
2-Mile Ring and Downwind to 5 Miles													
Same As R01 SSE, S, SSW, SW, WSW, W	3:20	3:20	2:50	2:50	3:00	Same As R01 SSE, S, SSW, SW, WSW, W	3:20	3:20	2:50	2:50	3:00	Same As R01 SSE, S, SSW, SW, WSW, W	3:20
Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	3:30	3:30	2:50	2:50	3:00	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	3:30	3:30	2:50	2:50	3:00	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	3:20
5-Mile Ring and Downwind to EPZ Boundary													
R04 N	3:40	3:40	3:10	3:10	3:10	R04 N	3:40	3:40	3:00	3:10	3:10	R04 N	3:30
R05 NNE, NE	3:40	3:40	3:10	3:10	3:10	R05 NNE, NE	3:40	3:40	3:00	3:10	3:10	R05 NNE, NE	3:30
R06 ENE, E	3:40	3:40	3:10	3:10	3:10	R06 ENE, E	3:40	3:40	3:10	3:10	3:10	R06 ENE, E	3:30
R07 ESE, SE	3:40	3:40	3:10	3:10	3:10	R07 ESE, SE	3:40	3:40	3:10	3:10	3:10	R07 ESE, SE	3:30
R08 SSE	3:30	3:30	3:00	3:00	3:00	R08 SSE	3:30	3:30	2:50	2:50	3:00	R08 SSE	3:20
R09 S, SSW	3:30	3:30	3:00	3:00	3:00	R09 S, SSW	3:30	3:30	2:50	2:50	3:00	R09 S, SSW	3:20
R10 SW, WSW	3:30	3:30	2:50	2:50	3:00	R10 SW, WSW	3:30	3:30	2:50	2:50	3:00	R10 SW, WSW	3:20
R11 W	3:30	3:30	3:00	3:00	3:00	R11 W	3:30	3:30	3:00	3:00	3:00	R11 W	3:20
R12 WNW	3:30	3:30	3:00	3:00	3:00	R12 WNW	3:30	3:30	3:00	3:00	3:00	R12 WNW	3:20
R13 NW,NNW	3:30	3:30	3:00	3:00	3:00	R13 NW,NNW	3:30	3:30	3:00	3:00	3:00	R13 NW,NNW	3:20

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

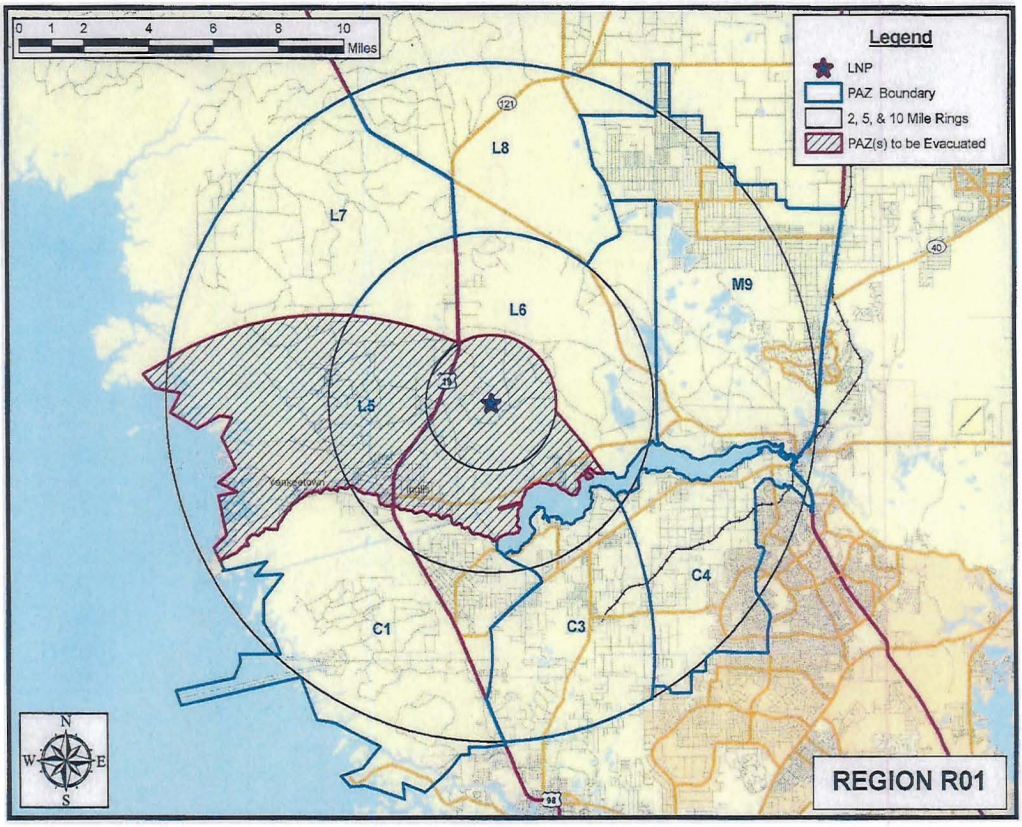
Figure 16B (continued-5)

Time To Clear The Indicated Area of 100 Percent of the Affected Population

	Summer		Summer		Summer		Winter		Winter		Winter		Winter
	Midweek		Weekend		Midweek Weekend		Midweek		Weekend		Midweek Weekend		Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	Scenario:	(11)
Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday		Midday		Evening	Region Wind Towards:	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Good Weather	Rain	Good Weather		New Plant Construction
Entire 2-Mile Region, 5-Mile Region, and EPZ													
R01 2-mile ring	5:00	5:00	5:00	5:00	5:00	R01 2-mile ring	5:00	5:00	5:00	5:00	5:00	R01 2-mile ring	5:00
R02 5-mile ring	5:10	5:10	5:00	5:10	5:10	R02 5-mile ring	5:10	5:10	5:10	5:10	5:10	R02 5-mile ring	5:10
R03 Entire EPZ	5:10	5:10	5:10	5:10	5:10	R03 Entire EPZ	5:10	5:10	5:10	5:10	5:10	R03 Entire EPZ	5:10
2-Mile Ring and Downwind to 5 Miles													
Same As R01 SSE, S, SSW, SW, WSW, W	5:00	5:00	5:00	5:00	5:00	Same As R01 SSE, S, SSW, SW, WSW, W	5:00	5:00	5:00	5:00	5:00	Same As R01 SSE, S, SSW, SW, WSW, W	5:00
Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	5:10	5:10	5:00	5:10	5:10	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	5:10	5:10	5:10	5:10	5:10	Same As R02 WNW, NW, NNW, N, NNE, NE, ENE, E, ESE, SE	5:10
5-Mile Ring and Downwind to EPZ Boundary													
R04 N	5:10	5:10	5:10	5:10	5:10	R04 N	5:10	5:10	5:10	5:10	5:10	R04 N	5:10
R05 NNE, NE	5:10	5:10	5:10	5:10	5:10	R05 NNE, NE	5:10	5:10	5:10	5:10	5:10	R05 NNE, NE	5:10
R06 ENE, E	5:10	5:10	5:10	5:10	5:10	R06 ENE, E	5:10	5:10	5:10	5:10	5:10	R06 ENE, E	5:10
R07 ESE, SE	5:10	5:10	5:10	5:10	5:10	R07 ESE, SE	5:10	5:10	5:10	5:10	5:10	R07 ESE, SE	5:10
R08 SSE	5:10	5:10	5:00	5:10	5:10	R08 SSE	5:10	5:10	5:10	5:10	5:10	R08 SSE	5:10
R09 S, SSW	5:10	5:10	5:00	5:10	5:10	R09 S, SSW	5:10	5:10	5:10	5:10	5:10	R09 S, SSW	5:10
R10 SW, WSW	5:10	5:10	5:00	5:10	5:10	R10 SW, WSW	5:10	5:10	5:10	5:10	5:10	R10 SW, WSW	5:10
R11 W	5:10	5:10	5:10	5:10	5:10	R11 W	5:10	5:10	5:10	5:10	5:10	R11 W	5:10
R12 WNW	5:10	5:10	5:10	5:10	5:10	R12 WNW	5:10	5:10	5:10	5:10	5:10	R12 WNW	5:10
R13 NW,NNW	5:10	5:10	5:10	5:10	5:10	R13 NW,NNW	5:10	5:10	5:10	5:10	5:10	R13 NW,NNW	5:10

Figure 16B (continued-6)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



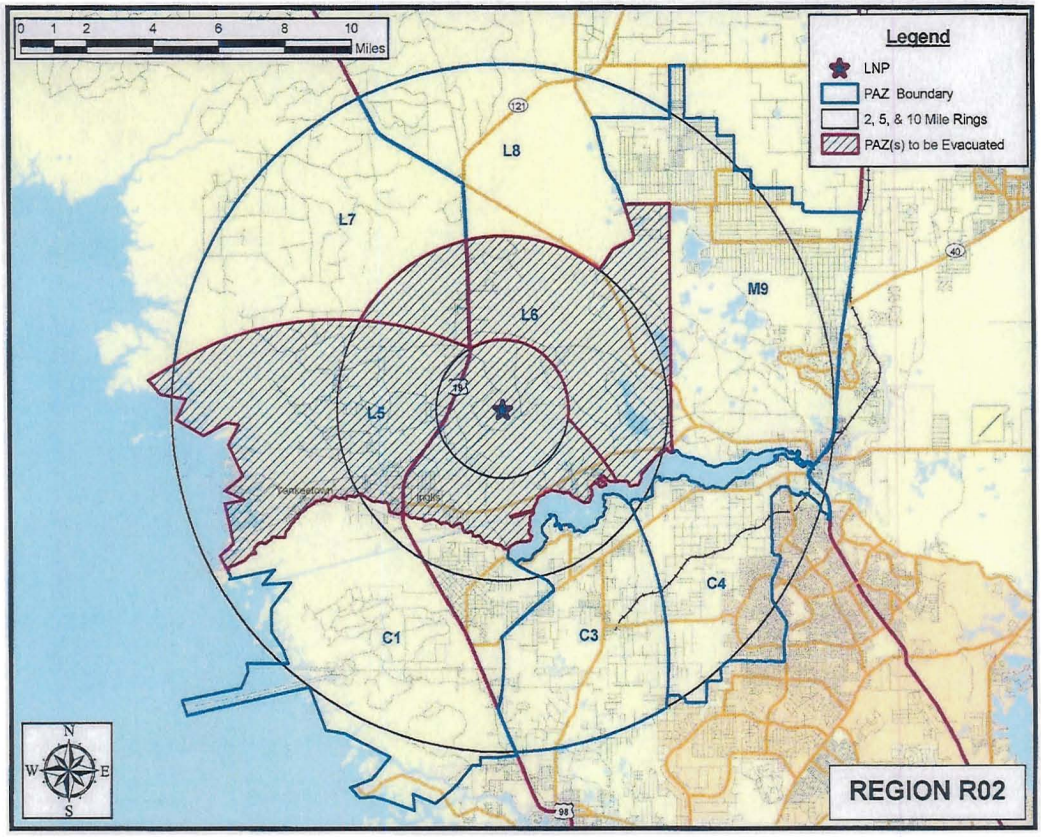
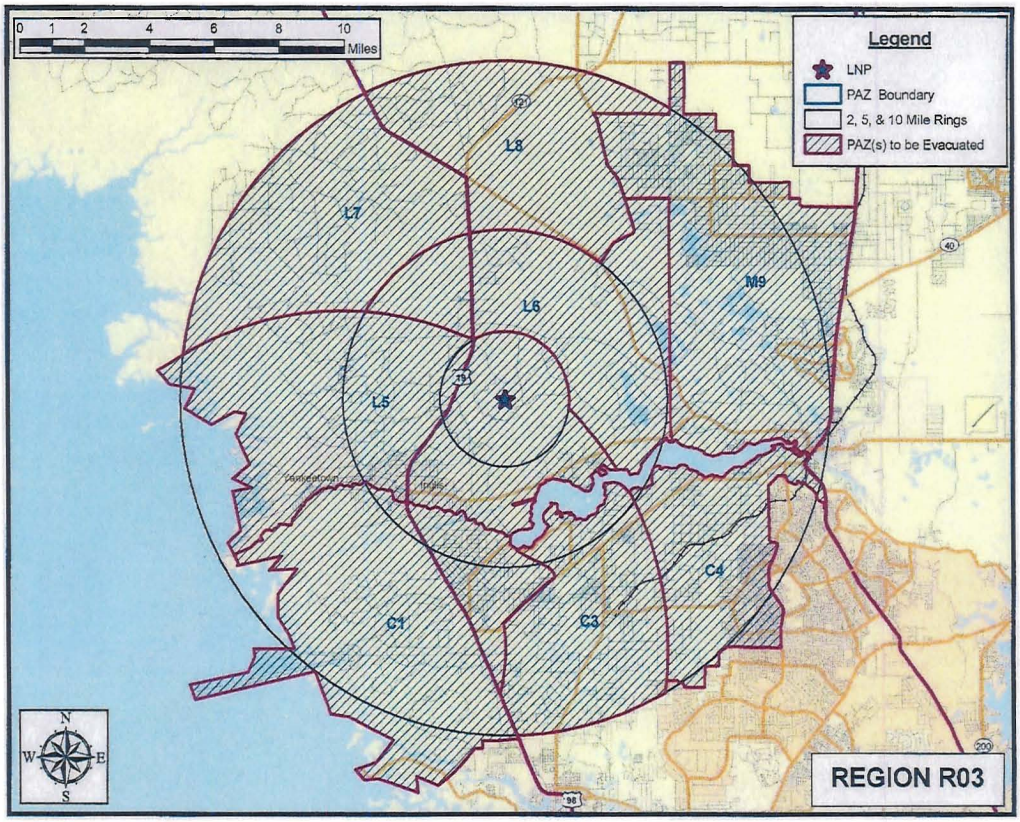


Figure 16B (continued-7)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



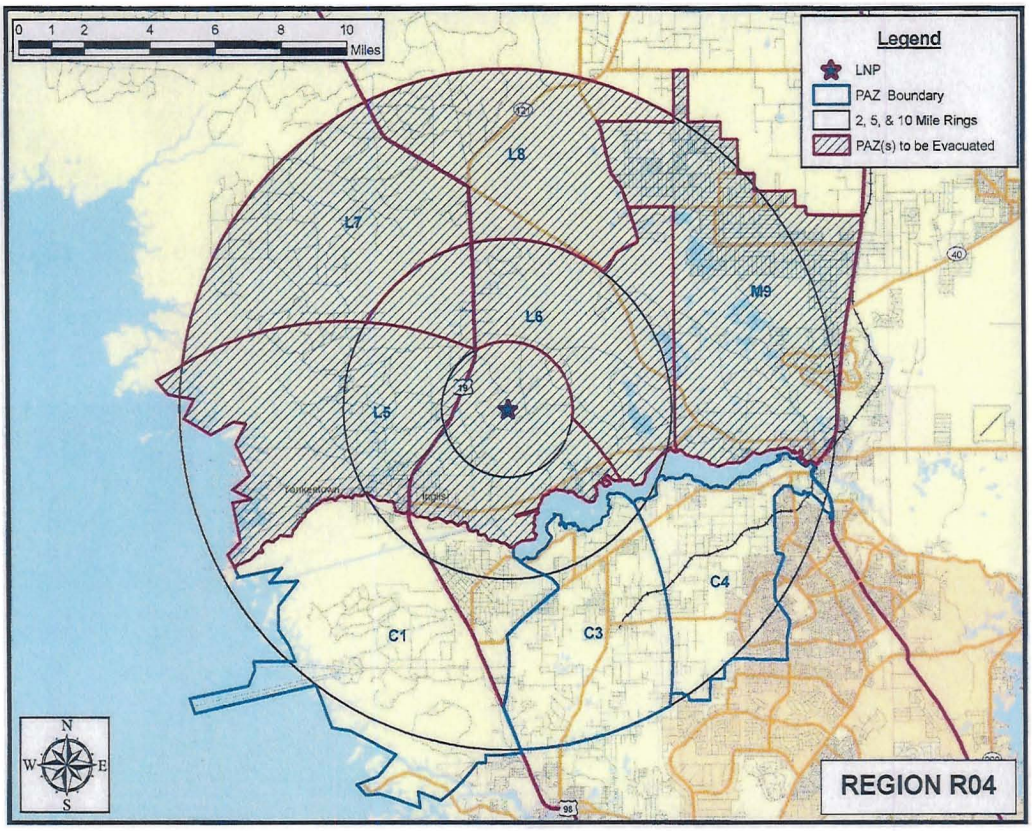
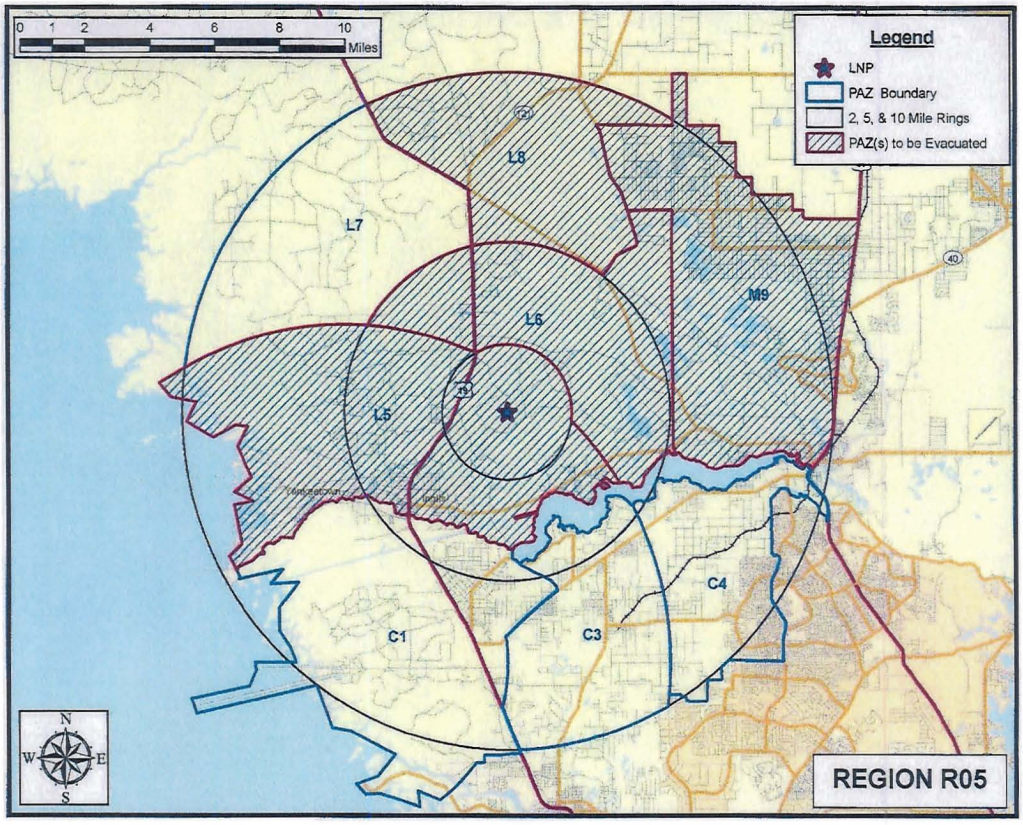


Figure 16B (continued-8)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



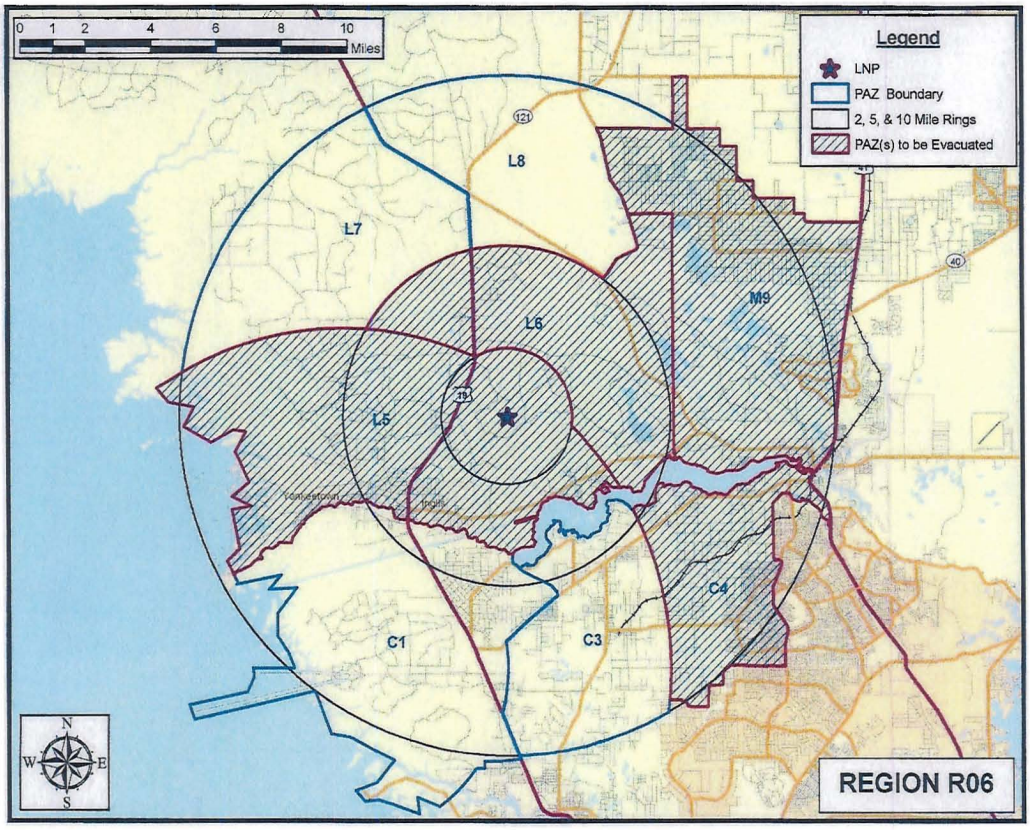
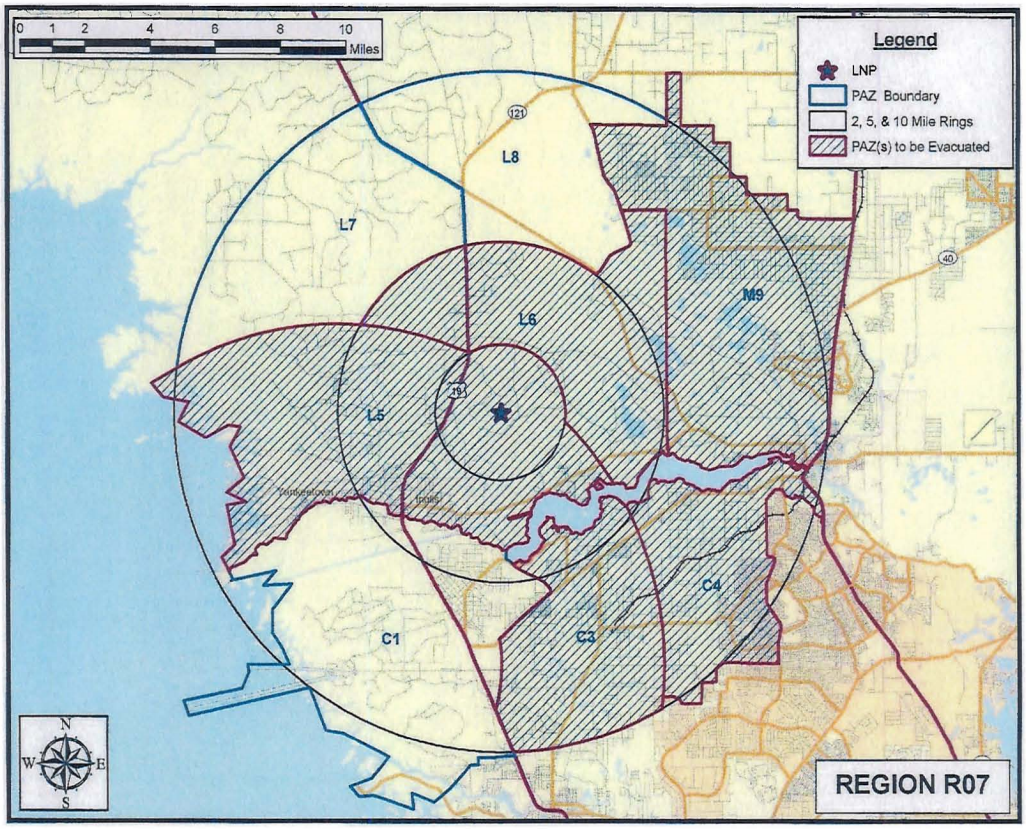


Figure 16B (continued-9)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



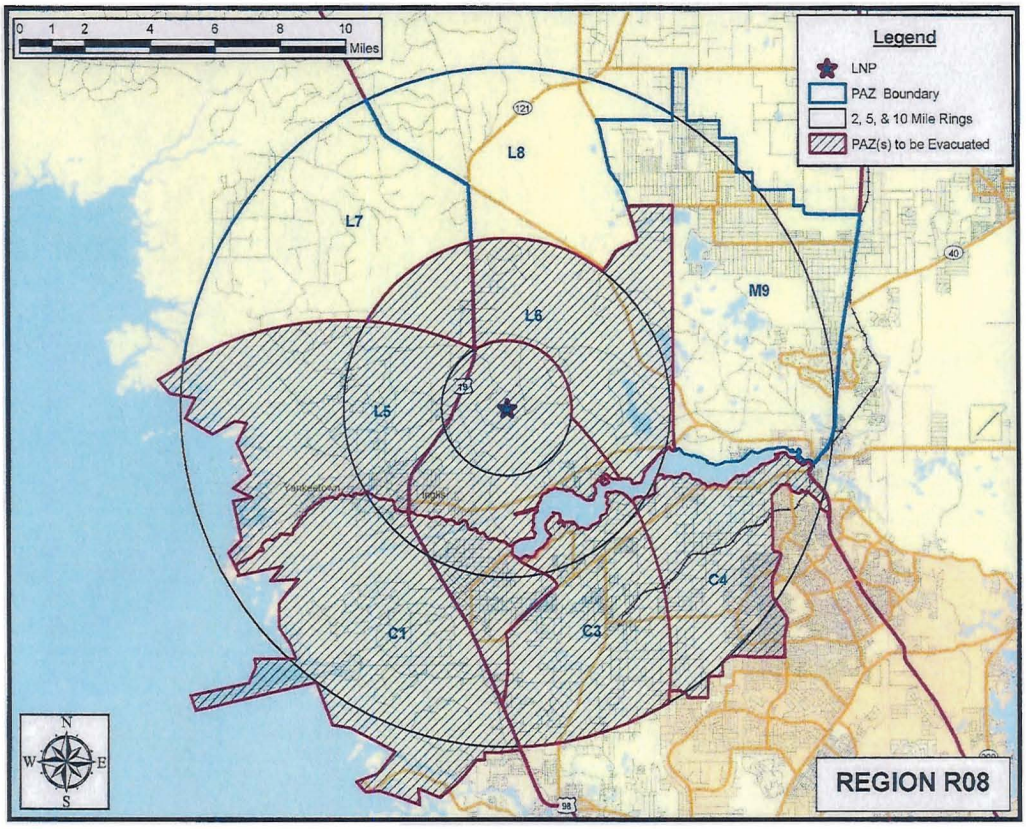
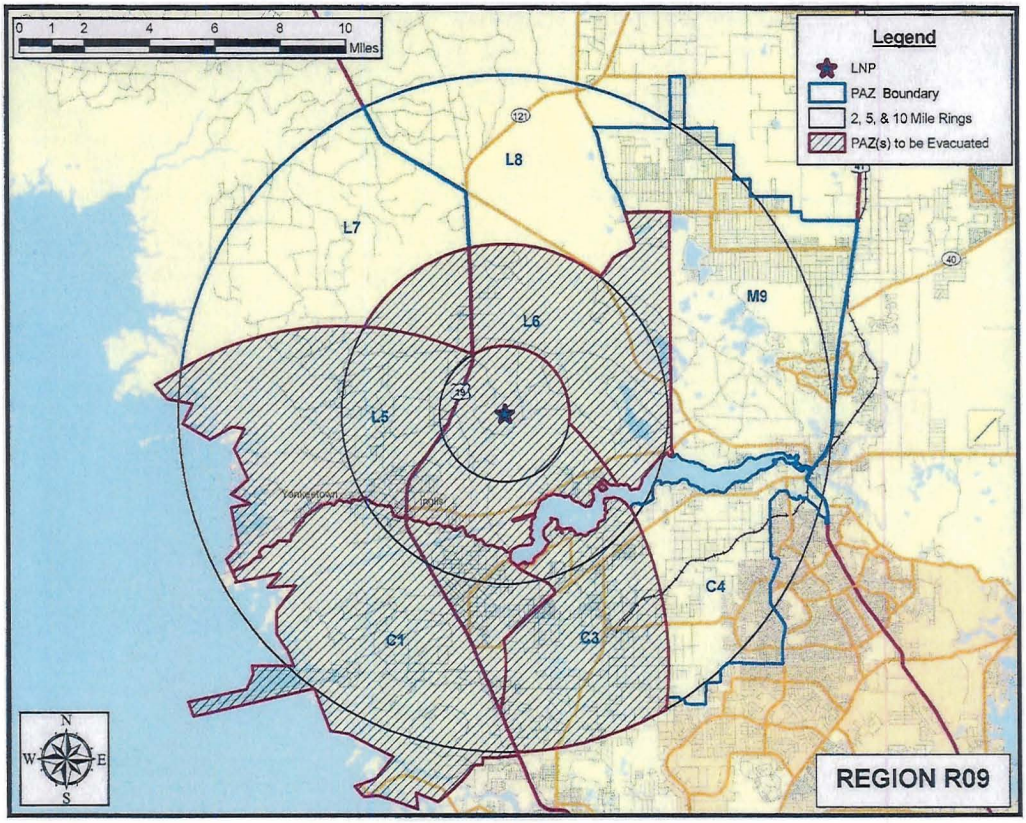


Figure 16B (continued-10)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



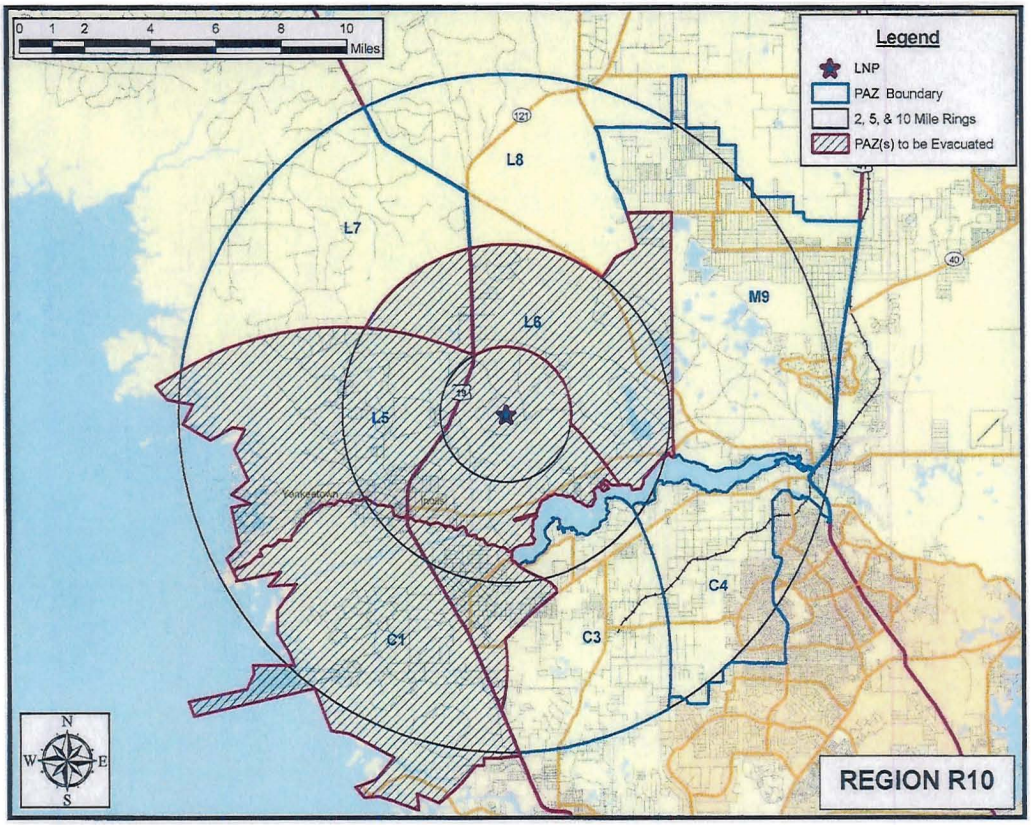
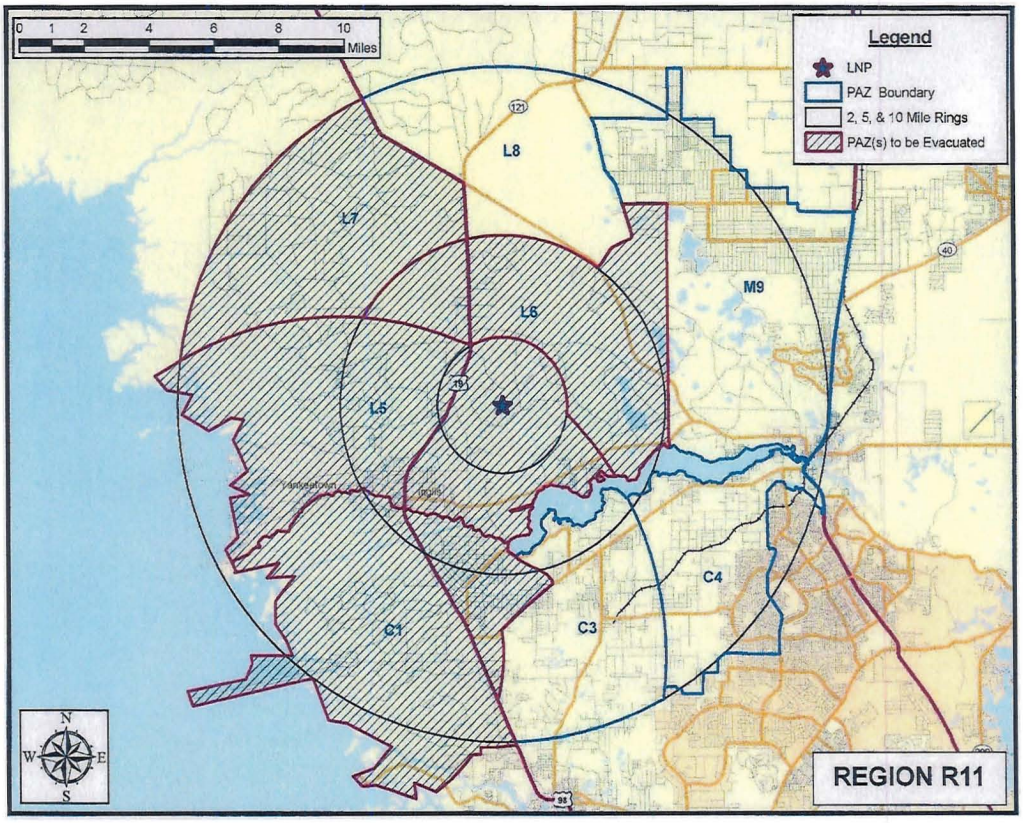


Figure 16B (continued-11)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES



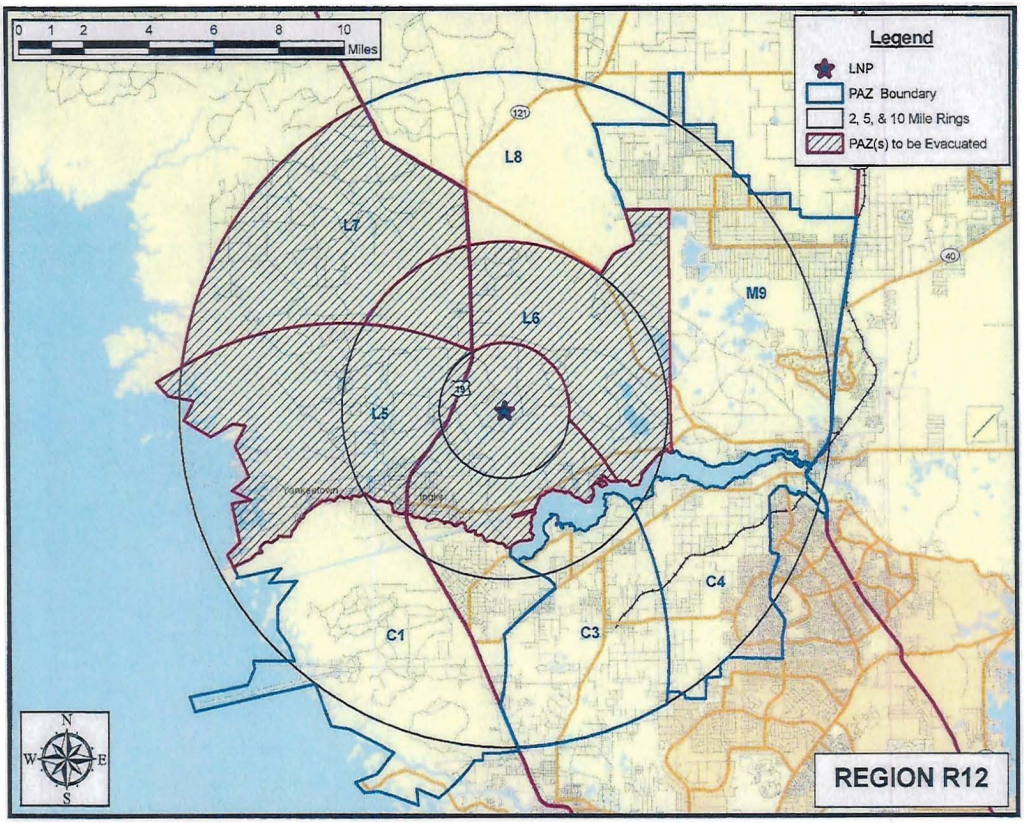


Figure 16B (continued-12)

LEVY NUCLEAR PLANT 10-MILE EPZ TRAFFIC CAPACITY DATA AND EVACUATION TIME ESTIMATES

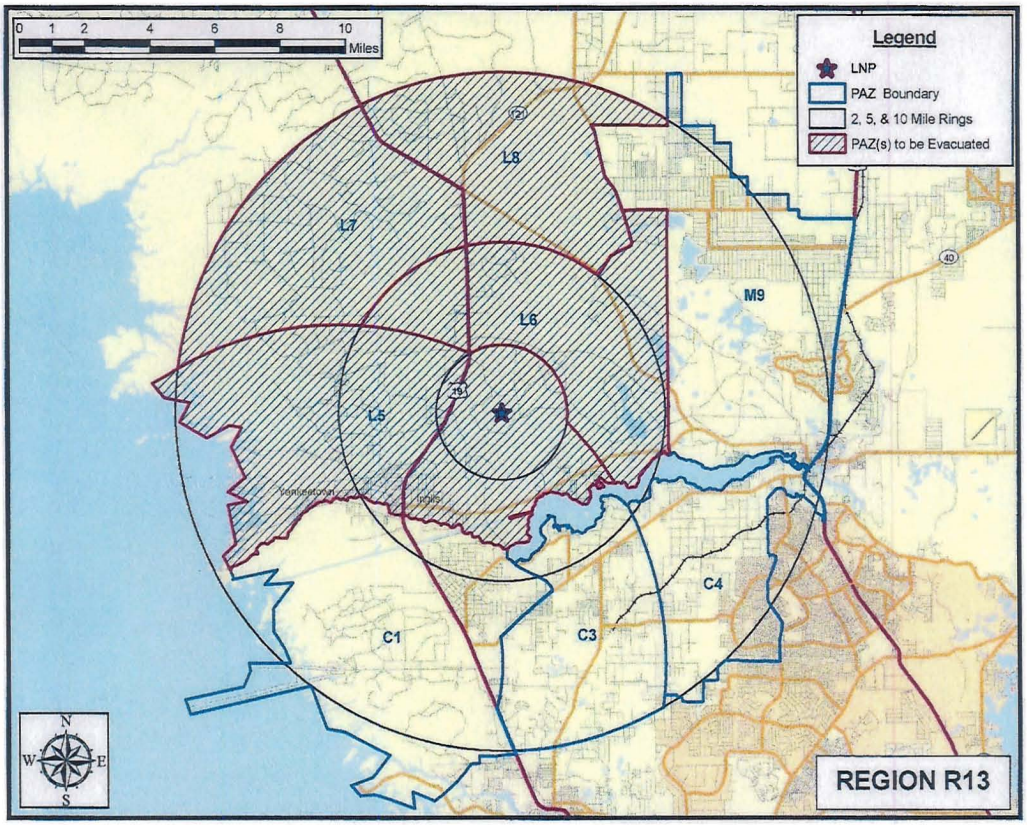


Figure 17A

Crystal River Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones

Table 1. Population by Zone

Zone	Permanent Residents	Transients	Non-EPZ Employees
1	1,526	634	600
2	17,575	2,485	197
3	3,596	95	0
TOTAL:	**22,697**	**3,214**	**797**

Table 2. Summary of Vehicles by Zone

Zone	Permanent Resident Vehicles	Transient Vehicles	Non-EPZ Employee Vehicles
1	895	467	583
2	10,311	1,613	191
3	2,109	60	0
TOTAL:	**13,315**	**2,140**	**774**

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Figure 17B

Levy Nuclear Plant 10-mile EPZ Population Distribution by Zones and Summary of Vehicles by Zones

Permanent Resident Population and Vehicles by PAZ		
PAZ	**2007 Population**	**2007 Vehicles**
C1	1,776	1,040
C3	5,476	3,214
C4	3,461	2,030
L5	3,601	2,112
L6	653	383
L7	17	11
L8	294	172
M9	7,480	4,388
TOTAL	**22,758**	**13,350**

Transient Population and Vehicles by PAZ		
PAZ	**2007 Population**	**2007 Vehicles**
C1	570	388
C3	183	154
C4	144	72
L5	313	194
L6	120	40
L7	0	0
L8	0	0
M9	86	41
TOTAL	**1,416**	**889**

Figure 18A

Crystal River Nuclear Plant 10-mile EPZ Evacuation Routes

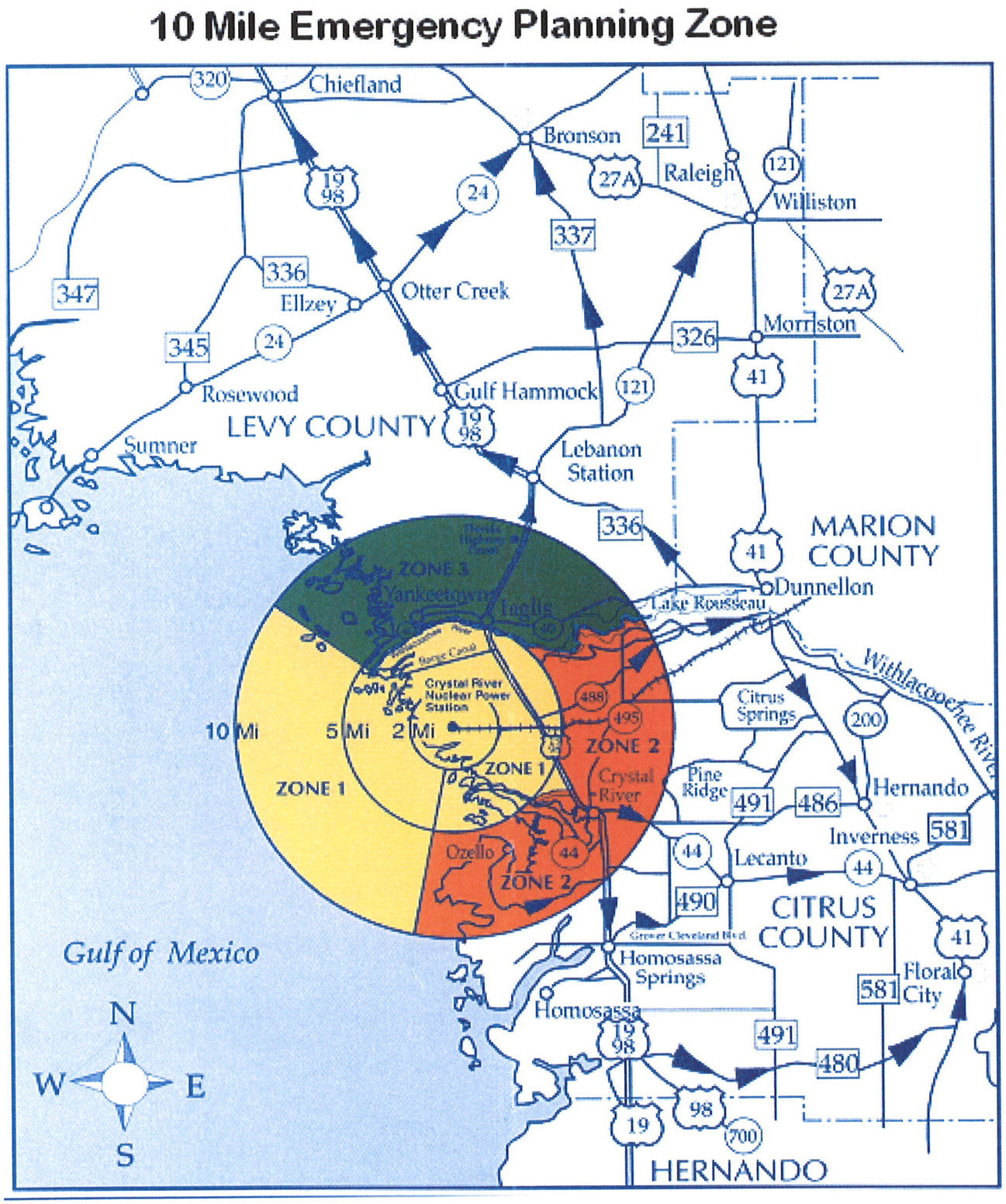

Figure 18B

CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ
POPULATION AND PROTECTIVE ACTION MAPS DATA

PAD MAPs (Refer to Section VI, Appendix 4 Pads & Maps)	EVACUATE INDICATED ZONES	IN-HOME SHELTER INDICATED ZONES	EVACUATION POPULATION	IN-HOME SHELTER Population between 5 &10 miles
1	1	None	600 Plant Site 634 Transients 1,526 Residents	
2	1	2 and 3	600 Plant Site 634 Transients 1,526 Residents	2,580 Transients 21,575 Public
3	1,2 and 3	None	600 Site 3,214 Transients 22,697 Residents	None
4	1 and 2	None	600 Plant Site 3,119 Transients 19,101 Residents	None
5	1 and 3	None	600 Plant Site 729 Transients 5,122 Residents	None
6	1	2	600 Plant Site 634 Transients 1,526 Residents	2,485 Transients 17,575 Residents
7	1	3	600 Plant Site 634 Transients 1,526 Residents	95 Transients 3,596 Residents
8	1 and 2	3	600 Plant Site 3,119 Transients 19,101 Residents	95 Transients 3,596 Residents
9	1 and 3	2	600 Plant Site 729 Transients 5,122 Residents	2,485 Transients 17,575 Residents

Zone 1 – 600 Plant Site, 1,526 Residents, 634 Transients
Zone 2 - 17,575 Residents, 2,485 Transients
Zone 3 – 3,596 Residents, 95 Transients

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Figure 18C

Levy Nuclear Plant 10-mile EPZ Evacuation Routes

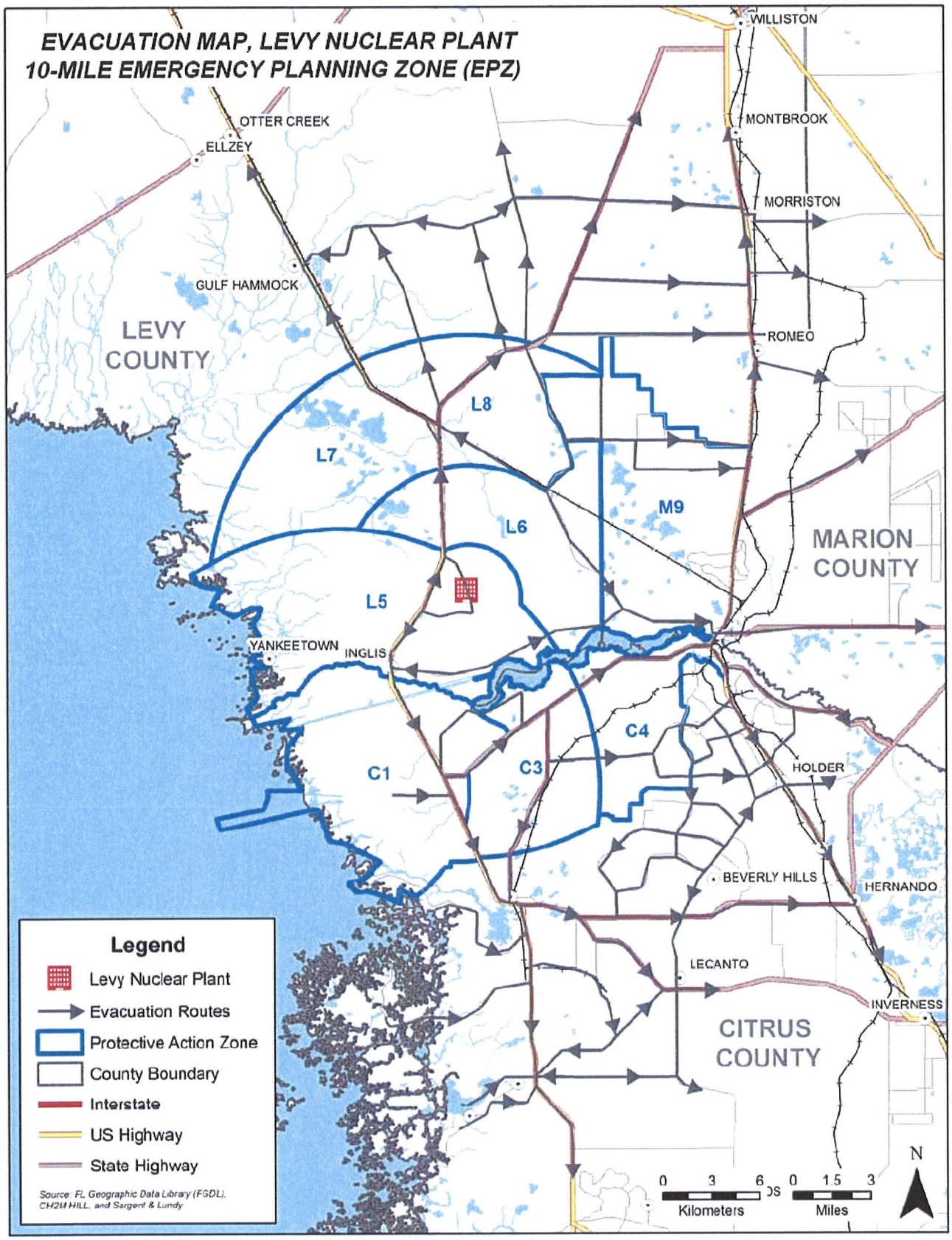

Figure 18D

LEVY NUCLEAR PLANT 10-MILE EPZ
POPULATION AND PROTECTIVE ACTION MAPS DATA

Levy Nuclear Plant Protective Action Decision Maps Data

	CITRUS		LEVY		MARION		POPULATION	
PAD	**Evacuate**	**In-Home Shelter**	**Evacuate**	**In-Home Shelter**	**Evacuate**	**In-Home Shelter**	**Evacuate**	**In-Home Shelter**
1	None	None	L5, L6	None	None	None	4,254- Residents 433- Transients	N/A
2	None	C1, C3, C4	L5, L6	L7, L8	None	M9	4,254- Residents 433- Transients	18,504- Residents 983- Transients
3	C1, C3, C4	None	L5, L6, L7, L8	None	M9	None	22,758- Residents 1,416- Transients	N/A
4	C1, C3, C4	None	L5, L6	None	M9	None	22,447- Residents 1,416- Transients	N/A
5	C1, C3, C4	None	L5, L6, L7, L8	None	None	None	15278- Residents 1,330- Transients	N/A
6	None	None	L5, L6, L7, L8	None	M9	None	12,045- Residents 519- Transients	NA
7	None	None	L5, L6	None	M9	None	11,734- Residents 519- Transients	N/A
8	C1, C3, C4	None	L5, L6	L7, L8	M9	None	22,447- Residents 1,416- Transients	311- Residents 0- Transients
9	C1, C3, C4	None	L5, L6, L7, L8	None	None	M9	15,278- Residents 1,280- Transients	7,480- Residents 86- Transients
10	None	C1, C3, C4	L5, L6, L7, L8	None	M9	None	12,045- Residents 519- Transients	10,713- Residents 847- Transients
11	C1, C3, C4	None	L5, L6	L7, L8	M9	None	22,447- Residents 1,416- Transients	311- Residents 0- Transients
12	None	C1, C3, C4	L5, L6, L7, L8	None	None	M9	4,565- Residents 433- Transients	18,193- Residents 933- Transients
13	C1, C3, C4	None	L5, L6	L7, L8	None	M9	14,967- Residents 1,330- Transients	7,791- Residents 86- Transients
14	C1, C3, C4	None	L5, L6	None	None	None	14,967- Residents 1,330- Transients	N/A
15	None	C1, C3, C4	L5, L6	L7, L8	None	None	4,254- Residents 433- Transients	11,024- Residents 897- Transients
16	None	C1, C3, C4	L5, L6	None	None	M9	4,254- Residents 433- Transients	18,193- Residents 983- Transients
17	None	None	L5, L6	L7, L8	None	M9	4,254- Residents 433- Transients	7,791- Residents 86- Transients

Figure 19A

DAY CARE AND PRESCHOOLS
WITHIN THE CRYSTAL RIVER NUCLEAR PLANT 10-MILE EPZ

Revised 2/2008

DAY CARE CENTERS	MILES FROM PLANT
1. None	
2.	
3.	
4.	
5.	
6.	
7.	
9.	
10.	
11.	
12.	
13.	

Figure 19B

DAY CARE AND PRESCHOOLS
WITHIN THE
LEVY NUCLEAR PLANT 10-MILE EPZ

Day Care Centers	Miles from Plant
1. None	
2.	
3.	